iControl

Signal and facility monitoring

Supported Device Reference Guide

(Preliminary)

M226-0900-110

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grass valley

A BELDEN BRAND

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Warranty Policies

Warranty information is available in the Support section of the Grass Valley Web site (www.miranda.com).

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Table of Contents

Supported Devices

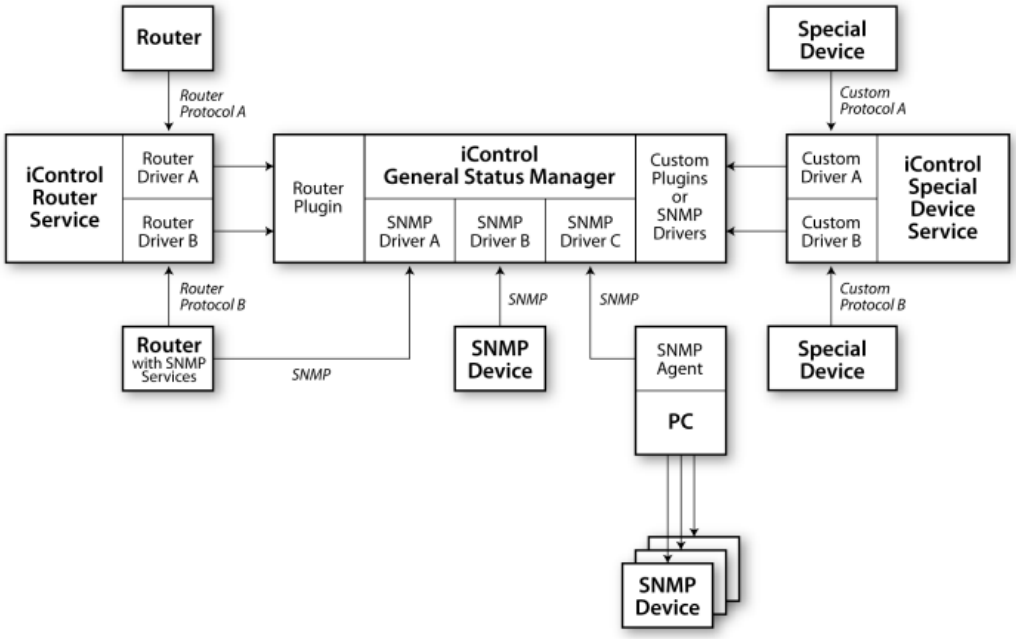
The purpose of this document is to provide an overview of the devices supported by iControl, including specific details on available alarms and their parameters.

Overview

iControl is capable of monitoring and controlling a large and growing number of devices, that fall into three categories:

- routers
- SNMP devices
- special devices

The diagram below shows how each category interfaces with iControl:



Routers

Router manufacturers implement proprietary protocols to enable control of their equipment. iControl's Router Service uses custom Grass Valley drivers to communicate with various routers using their native protocol. In addition to managing router control, the iControl Router Service is also able to publish router status and other information to the iControl GSM's router

plug-in. This plug-in ins responsible for collecting, displaying, and updating router status in the GSM.

Some routers are also SNMP-enabled, and can send alarms to the iControl GSM. A specific SNMP driver is available for each router type.

SNMP Devices

This broad category covers any hardware or software that is able to send SNMP traps. For each supported device, an SNMP driver exists that enables some or all of the available SNMP parameters to be captured and displayed in the GSM.

In some cases, iControl interfaces to a software application that itself is used to manage a distinct set of equipment. The third party software, running on a PC or other hardware controller, usually has an SNMP agent that can be configured to send status and/or alarm messages. For each such agent, an SNMP driver exists that enables some or all of the available SNMP parameters to be captured and made available via the GSM.

Special Devices

Where particularly complex devices are to be monitored by iControl, a Special Device service exists to manage the flow of information.The status and alarm information from these devices may use SNMP, HTTP or any of a number of other protocols. Custom drivers are available for these multi-protocol devices, enabling custom GUI displays to be created within iControl.

AKCP

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"sensorProbe8"	4.30	`SNMP – AKCP sensorProbe8`	`IC-SNMP-138`

sensorProbe8

The AKCP sensorProbe8 safeguards your infrastructure, resources and investment from external disaster before it happens. The sensorProbe8 is a high-speed, accurate and intelligent monitoring device and a completely embedded host with a proprietary Linux like OS which includes TCP/IP stack, a built in web-server and full Email and SNMP functionality.

Alpermann + Velte

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Rubidium Universal Video Data Processor"		`SNMP – Alpermann+Velte Rubidium`	`IC-SNMP-091`

Rubidium Universal Video Data Processor

Modular multi-format video time code and metadata processor.

APC

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AP7900-Series Power Distribution Unit"		SNMP – APC AP7900	IC-SNMP-095
"NetBotz 200 Environmental Monitor"	5.00	SNMP – APC NetBotz200	IC–SNMP–197
"APC SMART UPS 2200 VA"	4.30	SNMP – APC Smart-UPS 2200	IC-SNMP-158

AP7900-Series Power Distribution Unit

Standalone 19-inch rack-mountable data-line surge suppression for network, telecommunication and PC system protection.

NetBotz 200 Environmental Monitor

Over-the-network environmental monitor (humidity, temperature, door contact, dry contact, etc.).

APC SMART UPS 2200 VA

The APC Smart-UPS 2200 VA (tower or rack unit) protects critical data by supplying reliable, network-grade power in either traditional tower or rack- optimized convertible form factor.

Arris

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"BMR1200 Router (formerly BigBand BMR1200)"		SNMP – BigBand BMR1200	IC-SNMP-153
"EGT Dual Pass Encoders (formerly EGT Dual Pass Encoders)"	4.40	SNMP – Arris EGT Dual-Pass Encoders	IC-SNMP-194
"EGT HEMi Multi-Channel Edge Encoder (formerly EGT HEMi)"	4.40	SNMP – Arris EGT HEMI Multi-Channel Edge Encoder	IC-SNMP-193

BMR1200 Router (formerly *BigBand BMR1200*)

The Arris Broadband Multimedia-Service Router BMR1200 is a platform for network delivery of video services.

EGT Dual Pass Encoders (formerly *EGT Dual Pass Encoders*)

The Arris dual-pass encoders are two-pass encoders with analog and digital SDI inputs and simultaneous ASI and IP output.

EGT HEMi Multi-Channel Edge Encoder (formerly *EGT HEMi*)

The Arris EGT HEMi is a multi-channel encoder with IP-to-IP, and ASI-to-IP. It provides data on audio, video and program services, as well as a stream information.

ASC Signal Corporation

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"APC400 Antenna Controller Unit"		SNMP – APC400 Antenna Controller	IC-SNMP-220

APC400 Antenna Controller Unit

The APC400 Antenna Control Unit is an antenna controller that provides basic point, maintenance, and optional tracking functions for small and medium-sized earth station antennas. The APC400 provides the user with control over basic motorization kits for earth station satellites by utilizing a simple liquid crystal display (LCD) front panel interface and powerful software protocol options. The software protocols can be manipulated through remote control.

Avid

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AirSpeed5000"	5.00	SNMP – Avid Airspeed5000	IC-SNMP-221

AirSpeed5000

The AirSpeed 5000 server takes on a wide range of applications for broadcasters of any size. Building on a legacy of innovative workflow-enabling servers, AirSpeed 5000 adds cost-efficient play to air capability, slow motion playback and support for third party editing systems. Peerless Avid workflow integration, open design, and codec agility provide the ease, speed, and flexibility essential for long term broadcast success.

Axon Digital Design

The Axon frames RRS08 (version 34) and RRS18 (version 34) as well as many of Axon's family of modular interfacing and conversion cards are supported by iControl, as follows:

- **2HX10** (version 21): Dual-channel HD/SD integrity-checking probe
- **CDV29** (version 03): Analog distribution amplifier with 9 outputs and synapse reference points
- **DLA41** (version 06): 8-channel (5.1/2.0) digital audio upmixer/downmixer - with Quad Speed audio bus (based on Linear Acoustic algorithms)
- **DLA42** (version 05): 8-channel digital audio loudness control unit
- **DLA43** (version 06): 8-channel (5.1/2.0) digital audio loudness control - with Quad Speed audio bus (based on Linear Acoustic algorithms)
- **GDR26** (version 07): 3Gb/s, HD, and SD dual input distribution amplifier with 3 reclocked outputs per channel (ASI/DVB compatible)
- **HDR07** (version 04): HD/SD reclocking distribution amplifier
- **HEP10** (version 100): HD-, SD-embedded domain Dolby E-to-PCM decoder with audio shuffler (3Gb/s upgradeable)
- **HPD13** (version 100): HD-, SD-embedded domain PCM+AD to Dolby Digital (Plus) encoder with audio shuffler and audio description processor
- **HRB99** (version 080): HD/SD digital audio de-embedder, re-embedder, embedded domain shuffler with S2020 metadata insertion
- **HXT10** (versions 300, 330, 390): Dual HD input frame synchronizer, down converter, embedder, CVBS encoder
- **PBS03** (version 06): Dual channel relay-based backup switcher with signal integrity checking
- **SDN09** (version 07): SD-SDI Non-reclocking dual channel distribution amplifier (ASI/DVB compatible)
- **SDN08** (version 07): SD-SDI Non-reclocking distribution amplifier (ASI/DVB compatible)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"HXH41 HD Converter"		SNMP – Axon HXH41	IC-SNMP-147
"RRS08 — Rack Controller for SFR08"	4.30	SNMP – Axon RRS08, RRS18, PBS03, SDR08	IC-SNMP-144
"RRS18 — Rack Controller for SFR18"			
"PBS03 — Dual Channel Relay-Based Back-Up Switcher"			
"SDR08 — SD-SD Reclocking Distribution Amplifier (ASI/DVB-Compatible)"			

HXH41 HD Converter

RRS08 — Rack Controller for SFR08

RRS18 — Rack Controller for SFR18

PBS03 — Dual Channel Relay-Based Back-Up Switcher

SDR08 — SD-SD Reclocking Distribution Amplifier (ASI/DVB-Compatible)

The SDR series provide a range of distribution amplifiers with flexible input and output variations. The SDR08 reclocks the input signal. The SDR08 is a 1 to 8 distribution amplifiers compatible with ASI/DVB.

BigBand

Please see "Arris", on page 3.

Barco

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Hydra Monitor Wall"	4.30	SNMP – BARCO Hydra	IC-SNMP-140

Hydra Monitor Wall

Cisco

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"D9032 MPEG-2 Encoder"		SNMP – Cisco D9032	IC-SNMP-132
"D9036 Modular Encoding Platform"	4.40	SNMP – Cisco D9036	IC-SNMP-177

Ordering information (*Continued)*

Hardware	New in iControl version	GSM plug-in name	Order number
"D9140 Advanced Multiplexer"	6.02	SNMP – Cisco/SA D9140	IC-SNMP-249
"D9190 Conditional Access Manager"	6.02	SNMP – Cisco/SA D9190	IC-SNMP-250
"D9228 Multiple Decryption Receiver"		SNMP – Cisco D9228	IC-SNMP-171
"D9828 Multiple Decryption Receiver"		SNMP – Cisco D9828	IC-SNMP-032
"D9850 PowerVu Program Receiver"		SNMP – Cisco D9850	IC-SNMP-024
"D9854 Receiver"		SNMP – Cisco D9854	IC-SNMP-169
"D9858 Receiver Transcoder"		SNMP – Cisco D9858	IC-SNMP-126
"DCM 9900 MPEG Processor"		SNMP – Cisco DCM9900	IC-SNMP-116
"PowerVu Network Centre"	6.02	SNMP – Cisco PowerVu Network Controller	IC–SNMP–237

D9032 MPEG-2 Encoder

D9036 Modular Encoding Platform

The D9036 is a modular encoding platform, providing multi-resolution, multi-format encoding for applications requiring high levels of video quality.

D9140 Advanced Multiplexer

Cisco's PowerVu® Model D9140 Advanced Multiplexer combines signals and encrypts data with optional standards. The PowerVu Advanced Multiplexer combines up to 24 MPEG-2 transport streams, encrypts each individual service, and provides three identical MPEG-2 transport outputs to Cisco's PowerVu Model D9390 Advanced Modulator or various other modulators for cable and terrestrial applications. Transport packets are transferred from each encoder or each transport stream receiving device to the multiplexer using a DVB-ASI interface. Communication control between the multiplexer and the PowerVu Network Centre is facilitated via an Ethernet link.

D9190 Conditional Access Manager

The Cisco® PowerVu® D9190 Conditional Access Manager (PCAM) is one of the PowerVu next generation system core components. The D9190 is used for encrypting services with PowerVu CA (PCA), and is designed for use with the Digital Content Manager to provide a functional replacement for the PowerVu D9140 Advanced Multiplexer.

D9228 Multiple Decryption Receiver

The PowerVu D9228 receives, demodulates, and decrypts multiple encrypted MPEG-2/DVB digital programs delivered via satellite or DVB-ASI interface.

D9824 Advanced Multi-Decryption Receiver

The PowerVu D9828 receives, demodulates, and decrypts multiple encrypted MPEG-2/DVB digital programs from satellite or terrestrial sources, and outputs decoded composite video and balanced audio for monitoring purposes.

D9828 Multiple Decryption Receiver

The PowerVu D9828 receives, demodulates, and decrypts multiple encrypted MPEG-2/DVB digital programs from satellite or terrestrial sources, and outputs decoded composite video and balanced audio for monitoring purposes.

D9850 PowerVu Program Receiver

The PowerVu D9850 decodes 4:2:0 video for satellite content distribution applications. It can receive digitally encrypted video, audio, utility data, and Vertical Blanking Interval (VBI) data.

D9854 Receiver

D9858 Receiver Transcoder

DCM 9900 MPEG Processor

PowerVu Network Centre

The PowerVu Network Centre (PNC) control system provides a complete digital video compression solution for a wide range of implementations. The PNC application offers a comprehensive solution for network management, decoder management, security, and revenue protection. It is designed to meet the analog and digital content distribution needs of programmers, broadcasters and other network operators; users who need to control multiple encoders and multiplexers in an automatically redundant system transmitting video, audio and data securely to large decoder (receiver) populations will benefit from the PNC's robust and comprehensive feature set.

The plug-in supports the following alarms:

Alarm name	Further details
numberOfSignals	The number of signals configured in the PNC. The current PNC supports up to 4 signals. The maximum number of signals may change in future versions of the PNC.
pncAppStartTime	PNC application start time: **<year>-<month>-<day>@<hour>:<minute>:<second>** where <year> := 4 decimal digit year <month> := 2 decimal digit month 1..12 <day> := 2 decmial digit day of month 1..31 <hour> := 2 decimal digit hour 0..23 <minute> := 2 decimal digit minute 0..59 <second> := 2 decimal digit second 0..59
pncAppStatus	PNC application status: • 0: Running OK • 1: Not running • 2: Starting up • 3: Shutting down • 4: Not installed
pncAppVers	PNC application version: **<major version>.<minor version><patch level>{-<option list>}** where <major version> := decimal major version number <minor version> := 2 digit decimal minor version number <patch level> := [a..z] <option list> := <option name>... <option name> := text string name of the option (e.g. 4.00g-Bitmizer,Conditional_Access,Cue_Trigger,Disaster_Recovery,Dpi,MetroMux)
pncPlatformStatus	Result of command: prtdiag found in /usr/platform/sun4u/sbin • 0: no failures detected • 1: failures detected
pncPlatformSystemDate	Result of command: /usr/bin/date
pncPlatformVers	Result of command: /usr/bin/uname -a

(*Continued*)

Alarm name	Further details
signalActiveSecondaryDevices	A list of secondary devices that are active, and which primary devices they are recovering. **<recovery report> := <device summary><NL><device list>** where <device summary> := <# Active>' secondaries active' <# Active> := number of active secondaries <device list> := <device recovery>... <device recovery> := <secondary>' active for: '<primary> <secondary> := <device name> <primary> := <device name> Other symbols are defined as for signalMajorAlarmDevices.
signalHighlightAlarmDevices	A list of devices in the signal that are reporting highlighted alarms. Up to 9 alarms may be highlighted. The list of alarms that cause an alarm to be highlighted is configurable on the server by customer service. **<report> := <device summary><NL><device list>** where <device summary> := <# Alarms>' devices reporting highlighted alarms' <# Alarms> := number of devices with highlighted alarms <device> := <name>':'<alarm list><NL> <alarm list> := <alarm number>... Other symbols are defined as for signalMajorAlarmDevices.
signalMajorAlarmDevices	A list of devices in the signal that are reporting major alarms. **<report> := <device summary><NL><device list>** where <device summary> := <# Alarms>' devices reporting major alarms' <# Alarms> := Number of devices with a major alarm <NL> := newline <device list> := <device>... <device> := <device name>:<state><NL> <device name> := <type><signal #><role><unit #> <type> := 'MUX' | 'MOD' | 'AVS' | 'ENC' | <3 alpha chars> <signal #> := integer signal number <role> := 'P' | 'S' <unit #> := unit # of the device <state> := 'Fail' | 'Maint'
signalName	The signal name as defined in the Signal Parameters view

(Continued)

Alarm name	Further details
`signalStatusTable`	The signal status table is indexed using the signal number starting from 1. If an index greater than the number of signals is used, the standard SNMP end-of-table response is returned.
`signalSummary`	A summary status for a signal indicating whether any services are being affected. • `0`: Offline All devices are offline. No online devices found. • `1`: Active Service not affected with primary devices providing service. • `2`: Warn Services not affected but a secondary device has been switched in to recover a service. • `3`: Fail At least 1 service has been disrupted.

Communications & Power Industries

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"TL22CI TWT Compact High Power Amplifier"	6.02	`SNMP – CPI Amplifier TL22CI`	`IC-SNMP-241`

TL22CI TWT Compact High Power Amplifier

TL22CI-series TWT SuperLinear® high powered amplifiers for satellite communications provide 2250 watts of peak power (1000 watts operating) in a 9RU rack footprint. The TL22CI-series amplifiers can be used, for example, in transportable and fixed-earth station applications.

Comtech EF Data Corp.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DM240XR High-Speed Digital Modulator"	6.02	`SNMP – Radyne DM240`	`IC-SNMP-244`

DM240XR High-Speed Digital Modulator

Comtech's DM240XR family of high-speed modulators support both DVB-S and DVB-S2 specifications. The DM240XR can easily be upgraded in the field. The DM240XR unit provides a comprehensive set of advanced S2 features, and extends its dominance in broadcast applications through increased data rate capability and the addition of 16APSK and 32APSK support. Proven performance operating near Shannon's limit offers results with 30% better bandwidth efficiencies and carrier to noise figures below the noise floor.

The plug-in supports three types of alarms: Health alarms, Text alarms, or Bitfield alarms, as follows:

Health monitoring and text alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- Health monitoring alarms ---				
Device Communication	Status/health	`sysUpTime` (RFC1213)	Poller	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	Status/health	`sysUpTime` (RFC1213)	Poller	Raise a minor condition based on the value of `sysUpTime` read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	Text/health	`sysUpTime` (RFC1213)	Poller	System up time alarm, this is a default health monitoring alarm when you use the `generic.js` to create a new custom driver
--- Text alarms ---				
(+) 5V Monitor	Text/health	`radPlus5Volts`	Fast poller	+5V monitor with implied decimal point. For example, a value of 51 represents +5.1 Volts.
(+) 12V Monitor	Text/health	`radPlus12Volts`	Fast poller	+12V monitor with implied decimal point. For example, a value of 119 represents +11.9 Volts.
(-) 12V Monitor	Text/health	`radMinus12Volts`	Fast poller	-12V monitor with implied decimal point. For example, a value of -122 represents -12.2 Volts.
Active input of the RF Port	Text/health	`radRfSwitchActiveSide`	Fast poller	Indicates the active input of the RF switch
Active PIIC Slot	Text/health	`radActivePiicSlot`	Fast poller	Indicates the active PIIC slot
Connected Rf Switch Side	Text/health	`radRfSwitchConnectorSide`	Fast poller	Indicates the side of the RF switch to which the modulator is connected.

Health monitoring and text alarms (*Continued)*

Alarm name	Type	MIB point	Polling or trap?	Further details
Current Rate Precedence	Text/health	radLastRateStatus	Fast poller	Shows the current rate precedence.
Ethernet Card Backup Data Activity	Status and Text / health	radTerrEthActBackup	Fast poller	Shows the backup data activity of the Gig Ethernet card.
Ethernet Card Backup Data Activity (C)	Text/health	radTerrEthActBackupCol	Fast poller	Shows the backup data activity of the Gig Ethernet card.
Ethernet Card Backup Data Activity (R)	Text/health	radTerrEthActBackupRow	Fast poller	Shows the backup data activity of the Gig Ethernet card.
Ethernet Card Corrected Packet Count	Text/health	radTerrEthCorrPkts	Fast poller	Corrected packet count for the Gig Ethernet card.
Ethernet Card Data Activity	Text/health	radTerrEthActPrime	Fast poller	Shows the data activity of the Gig Ethernet card.
Ethernet Card Data Activity (C)	Text/health	radTerrEthActPrimeCol	Fast poller	Shows the data activity of the Gig Ethernet card (column).
Ethernet Card Data Activity (R)	Text/health	radTerrEthActPrimeRow	Fast poller	Shows the data activity of the Gig Ethernet card (row).
Ethernet Card Fill of Jitter (%)	Text/health	radTerrEthJitterFill	Fast poller	Percent fill of jitter buffer for the Gig Ethernet card.
Ethernet Card Link Status	Text/health	radTerrEthPortStatus	Fast poller	Shows the link status of the active Gig Ethernet card.
Ethernet Card Null Packet Count	Text/health	radTerrEthNullPkts	Fast poller	Null packet count for the Gig Ethernet card.
Ethernet Card Reordered Packet Count	Text/health	radTerrEthReorPkts	Fast poller	Reordered packet count for the Gig Ethernet card.
Fault Status	Text/health	radRfSwitchDistantSideFault	Fast poller	Indicates the fault status of the modulator at the distant side of the RF switch.
Firmware Part and Revision Number	Text/health	radFirmwarePartRev	Fast poller	Provides the system firmware part and revision number.
M&C Revision Number	Text/health	radRevisionNumber	Fast poller	M&C Revision number.
Temperature	Text/health	radTemperature	Fast poller	Temperature monitor with implied decimal point. For example, a value of 490 represents 49.0 C

Bitfield alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- ***Common alarms mask*** ---				
Common Alarms Mask	Text	`radCommonAlarmMask`	Fast poller	Common Alarm mask: A bit field. 0 = MASKED, 1 = UNMASKED
(-) 12V alarm	status		Fast poller	Bit 0
(+) 12V alarm	status		Fast poller	Bit 1
(+) 5V alarm	status		Fast poller	Bit 2
--- ***Common alarms status*** ---				
Common Alarms Status	Text	`radCommonAlarmStatus`	Fast poller	Common Alarm status: A bit field. 0 = PASS, 1 = FAIL
(-) 12V alarm	status		Fast poller	Bit 0
(+) 12V alarm	status		Fast poller	Bit 1
(+) 5V alarm	status		Fast poller	Bit 2
--- ***Major alarms mask*** ---				
Major Alarms Mask	Text	`radMajorAlarmMask`	Fast poller	Major Alarm mask: A bit field. 0 = MASKED, 1 = UNMASKED
Over Sample Clock PLL Lock	status		Fast poller	Bit 1
FPGA Configuration Error	status		Fast poller	Bit 2
Synthesis ClockPL LLock	status		Fast poller	Bit 3
External Reference PL LLock	status		Fast poller	Bit 4
Composite PLL Lock	status		Fast poller	Bit 5
Symbol PLL Lock	status		Fast poller	Bit 6
Invalid Terrestrial Interface	status		Fast poller	Bit 7
--- ***Major alarms status*** ---				
Major Alarms Status	Text	`radMajorAlarmStatus`	Fast poller	Major Alarm status: A bit field. 0 = PASS, 1 = FAIL
Over Sample Clock PLL Lock	status		Fast poller	Bit 1
FPPGAConfigurationError	status		Fast poller	Bit 2
Synthesis ClockPL LLock	status		Fast poller	Bit 3

Bitfield alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
External Reference PL LLock	status		Fast poller	Bit 4
Composite PLL Lock	status		Fast poller	Bit 5
Symbol PLL Lock	status		Fast poller	Bit 6
Invalid Terrestrial Interface	status		Fast poller	Bit 7
--- ***Minor alarms mask*** ---				
Minor Alarms Mask	Text	`radMinorAlarmMask`	Fast poller	Minor Alarm mask: A bit field. 0 = MASKED, 1 = UNMASKED
Terrestrial Ethernet Data Activity Detect	status		Fast poller	Bit 0
Terrestrial Clock Activity Detect	status		Fast poller	Bit 1
Tx Data Activity Detect	status		Fast poller	Bit 2
FIFO Overflow/Underflow Error	status		Fast poller	Bit 3
Output Level	status		Fast poller	Bit 4
Loss of Frame Synchronization	status		Fast poller	Bit 5
Terrestrial Ethernet Jitter Buffer Underflow	status		Fast poller	Bit 6
Terrestrial Ethernet Jitter Buffer Overflow	status		Fast poller	Bit 7
--- ***Minor alarms status*** ---				
Minor Alarms Status	Text	`radMinorAlarmStatus`	Fast poller	Common Alarm status: A bit field. 0 = PASS, 1 = FAIL
Terrestrial Ethernet Data Activity Detect	status		Fast poller	Bit 0
Terrestrial Clock Activity Detect	status		Fast poller	Bit 1
Tx Data Activity Detect	status		Fast poller	Bit 2
FIFO Overflow/Underflow Error	status		Fast poller	Bit 3
Output Level	status		Fast poller	Bit 4

Bitfield alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
Loss of Frame Synchronization	status		Fast poller	Bit 5
Terrestrial Ethernet Jitter Buffer Underflow	status		Fast poller	Bit 6
Terrestrial Ethernet Jitter Buffer Overflow	status		Fast poller	Bit 7

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`pollInterval`	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
`retries`	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request.
`uniqueID`	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
`readCommunity`	SNMP read community string. Use for SNMP polling.

Crystal Solutions

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"CrystalVision 2000"		`SNMP – CrystalVision 2000`	`IC-SNMP-021`

CrystalVision 2000

Network Management and Control System for INSP integrated devices; provides a centralized monitoring capability for uplink and downlink equipment (satellite monitoring).

Dantel

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"PointMaster"	5.00	SNMP – Dantel PointMaster	IC-SNMP-218
"Webmon Edge/Matrix"	5.00	SNMP – Dantel Webmon Edge / Matrix	IC-SNMP-219

PointMaster

Webmon Edge/Matrix

Davicom

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Davicom MAC PLUS"		SNMP – Davicom MAC Plus	IC-SNMP-001

Davicom MAC PLUS

Standalone monitoring and control unit able to interface with virtually any type of remote site equipment and sensors.

EGT

Please see "Arris", on page 3.

Dothill

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SAN Controller"	5.00	SNMP – Dothill SAN Controller	IC-SNMP-198

SAN Controller

DVB Control

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DVBMonitor"			IC-SNMP-222

DVBMonitor

EMC

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"NAS Network Attached Storage (formerly Isilon NAS Network Attached Storage)"		SNMP – Isilon NAS	IC-SNMP-142

NAS Network Attached Storage (formerly *Isilon NAS Network Attached Storage*)

EMC Isilon scale-out NAS storage consolidates and manages enterprise data and applications.

Ensemble Designs

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Avenue Modular Interfaces"		SNMP – Ensemble Design Avenue	IC-SNMP-087

Avenue Modular Interfaces

Modular video and audio interfaces; expandable, modular tray based signal integration system. Provides signal processing, infrastructure and control.

Envivio

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"4Caster C4 Encoder"		SNMP – Envivio 4Caster C4	IC–SNMP–133
"4Manager"	5.00	SNMP – Envivio 4Manager	IC–SNMP–217

4Caster C4 Encoder

Envivio 4Caster C4 is an encoding/transcoding appliance.

4Manager

Ericsson

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"nCompass Control"		SNMP – Ericsson/Tandberg nCompass	IC-SNMP-081
"RX1290 Receiver/Decoder"		SNMP – Ericsson/Tandberg RX1290	IC-SNMP-121
"RX8200-Series Advanced Modular Receiver"	4.30	SNMP – Ericsson/Tandberg RX8200	IC-SNMP-151
"TT1260 Integrated Receiver Decoder"		SNMP – Ericsson TT1260	IC-SNMP-005
"TT4130 Transport Stream Analyzer"		SNMP – Ericsson TT4130	IC-SNMP-122
"Ericsson iPlex (formerly SkyStream iPlex)"		SNMP – Ericsson/Tandberg iPlex	IC-SNMP-172
"Ericsson MediaPlex (formerly SkyStream MediaPlex)"		SNMP – Ericsson/Tandberg MediaPlex	IC-SNMP-173

RX8200-Series Advanced Modular Receiver

The RX8200 Advanced Modular Receiver decodes video and offers connectivity for a wide range of transmission media.

nCompass Control

nCompass Control offers service providers a means to manage Ericsson's full range of video headend systems and broadcast products.

RX1290 Receiver/Decoder

The RX1290 is a multi-format SD/HD integrated receiver/decoder, capable of decoding all video formats. The RX1290 is compatible with MPEG-2, MPEG-4 AVC, SD, and HD and can decode both 4:2:0 and 4:2:2 video.

TT1260 Integrated Receiver Decoder

The TT1260 is a professional grade IRD able to decode MPEG-2 SD 4:2:2 video. The TT1260 has dual SDI output, dual analog BNC outputs, remote control via SNMP or Web page, and CAM menu browsing via Web browser.

TT4130 Transport Stream Analyzer

The TT4130 Transport Stream Analyzer combines advanced error detection and monitoring via a Web interface in a 3RU multi-channel unit for MPEG-2 and MPEG-4 AVC transport streams.

The TT4130 offers a compact multi-channel transport stream analyzer with a wide range of input interface options making it suitable for use in a range of markets: cable, satellite, terrestrial, mobile, distribution and contribution.

Ericsson iPlex (*formerly SkyStream iPlex*)

The iPlex is a high density, multi-functional video processing platform designed for telco, cable and satellite operators delivering IPTV over DSL infrastructure.

Ericsson MediaPlex (*formerly SkyStream MediaPlex*)

The Mediaplex-20 video processing platform is a multi-function, carrier-grade IPTV headend.

Evertz

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"500-Series Frame"	4.03	SNMP – Evertz 500	IC-SNMP-128
"500FC, 500DA"		SNMP – Evertz 500 (FC + DA)	IC-SNMP-129
"FC3405 Frame Controllers and Power Converters"	6.02	SNMP – Evertz 3000	IC-SNMP-130
"5600 ACO2 Automatic Changeover"	4.30	SNMP – Evertz MSC5600 ACO2	IC-SNMP-136
"5600MSC Master Sync and Clock Generator"	4.30	SNMP – Evertz MSC5600	IC-SNMP-189
"7867VIPA-DUO"	6.02	SNMP – Evertz 7867VIPA-DUO	IC-SNMP-235
"7×00-Series Modular Interface"		SNMP – Evertz 7700	IC-SNMP-042

Ordering information (*Continued*)

Hardware	New in iControl version	GSM plug-in name	Order number
"Keyer"	5.00	SNMP – Evertz Keyer	IC-SNMP-212
"Xenon Routing Switcher"		SNMP – Evertz Xenon	IC-SNMP-090

500-Series Frame

The Evertz 500FR Compact Distribution Frame is a 3RU front-loading frame designed to house up to 16 single slot modules.

500FC, 500DA

The 500FC VistaLINK® Frame Controller card enables communication with VistaLINK® 500-series modules via a 10/100BASE-TX Ethernet port. The 500FC handles all SNMP communications between a frame and a network management system, and serves as a gateway to individual cards in the frame.

FC3405 Frame Controllers and Power Converters

Evertz® 3405FR-XLINK frame

The Evertz® 3405FC frame controller is the control interface for the family of rack-mounted Evertz SFP frames that include the 3405FR-BNC, 3405FR-DIN, and 3405FR-XLINK frames.

The plug-in supports five categories of alarms, as follows:

- Health alarms
- Monitor alarms
- TX alarms
- RX alarms

- Notify alarms

Health monitoring alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- ***Health monitoring alarms*** ---				
Device Communication	status/health	`sysUpTime` (RFC1213)	Polling	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	status/health	`sysUpTime` (RFC1213)	Polling	Raise a minor condition based on the value of `sysUpTime` read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	status/health	`sysUpTime` (RFC1213)	Polling	System up time alarm, this is a default health monitoring alarm when you use the `generic.js` to create a new custom driver
--- ***Monitor alarms*** --- *The device has sixteen SFP ports. The information on alarms will be displayed for each valid SFP on the device.*				
Version	Text		Polling	Version number for the SFP module
Upgrade Support	Status		Polling	Indicates whether the SFP firmware can be upgraded using the second stage bootloader
Serial number	Text		Polling	Serial number for SFP module
Id	Text		Polling	Describe the specific type of SFP
Class	Text	`FC3405-MIB`	Polling	Describe the base class of SFPs
--- ***TX alarms*** --- *TX data are on two cannons Laser A and Laser B, the information displayed is done for both tables of index : laserA (1) , laserB (2)*				
txBiasCurrent	Text	`FC3405-MIB`	Polling and trap	Displays bias current on laser in units of 0.01 mA
txLaserEn	Text		Polling and trap	Tells about SFPTX laser status
txLaserStatus	Text		Polling and trap	Tells about wavelength supported by SFPTX's lasers
txReclock	Text		polling and trap	displays the reclocker status
txWavelength	Text		polling and trap	tells about SFP TX laser status

Health monitoring alarms (*Continued)*

Alarm name	Type	MIB point	Polling or trap?	Further details
--- ***RX alarms*** --- *RX data are on two cannons Laser A and Laser B, the information displayed is done for both. table of indexes : laserA (1) , laserB (2)*				
rxLaserPowr	Text	FC3405-MIB	polling and trap	tells about SFP RX received power status
rxReclock	Text		polling and trap	displays the reclocker status
--- ***Notify alarms*** --- *This status are displayed for each index of this table. Table of indexes : txCarrier1 (1) , txCarrier2 (2) , rxLoss1 (3) , rxLoss2 (4) , rxOptPwrHigh1 (5) , rxOptPwrHigh2 (6) , rxOptPwrLow1 (7) , rxOptPwrLow2 (8) , noInputDetected1 (9) , noInputDetected2 (10) , reclockerLoss1 (11) , reclockerLoss2 (12) , txLaserFault1 (13) , txLaserFault2 (14) , sfpCommunicationLoss (15)*				
mgmtFaultPresent	Status		polling and trap	Check the status of fault(s
SendMgntTrap	Status	FC3405-MIB	polling and trap	Used to Turn Traps On and Off
trapValid	Status		polling and trap	Indicate if a particular trap is applicable to current SFP instance
--- ***Coax alarms*** --- *All the following are elements related to signal output with type ASI. Coax signals are on two cannons Channel A and Channel B, the information displayed is done for both. Tables of index : ChannelA (1) , ChannelB (2)*				
SignalRate	Text		polling and trap	Indicates the signal rate detected by the reclocker
SignalPresence	Status	FC3405-MIB	polling and trap	Indicates the signal presence on the indexed channel
SignalLock	Status		polling and trap	Indicates the status of the signal lock of the reclocker
CableEqualization	Text		polling and trap	Indicates the percentage of cable equalization of the indexed channel

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
pollInterval	Fast poller interval in seconds.
retries	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
timeout	Delay in seconds before declaring a timeout in the current SNMP request.
uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of URI.
readCommunity	SNMP read community string. Use for SNMP polling.

5600 ACO2 Automatic Changeover

5600MSC Master Sync and Clock Generator

7867VIPA-DUO

The 7867VIP Advanced is a multi-image display processor.

7×00-Series Modular Interface

The Evertz 7×00-Series multiframes enable video and audio processing and distribution of HDTV, SDTV and analog signals.

Keyer

Xenon Routing Switcher

Multi-format video routing switchers

EVS

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"XT/XS-Series Video Servers"		SNMP – EVS X-Series	IC-SNMP-185

XT/XS-Series Video Servers

XT- and XS-series video servers are production servers designed with advanced security features such as RAID technology, redundant and hot-swappable power supplies to guarantee no operational failures during production.

Global Caché

GC-100 Network Adapter

The GC-100 Network Adapter connects a network utilizing TCP/IP to infrared (IR), serial, relay and sensor inputs that can interrupt or be polled by another network device.

Grass Valley

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Trinix"		SNMP – Grass Valley Trinix	IC-SNMP-092

Trinix

Routing switchers.

Harmonic

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"CID-3100 Decryptor"		SNMP – Harmonic CID-3100	IC-SNMP-105
"Electra"	5.00	SNMP – Harmonic Electra	IC-SNMP-211
"MaxLINK HOA 8030"		SNMP – Harmonic EDFA HOA8030	IC-SNMP-100
"Media Server Systems"		SNMP – Harmonic Media Server	IC-SNMP-026
"ProView 2900 Receiver/Decoder"		SNMP – Harmonic ProView 2900	IC-SNMP-119
"ProView 7000/7100 Integrated Receiver-Decoder and Stream Processor"	6.02	SNMP – Harmonic ProView 7000/7100	IC-SNMP-119

CID-3100 Decryptor

Electra

MaxLINK HOA 8030

The Harmonic MAXLink™ HOA 8030 is a Video Optical Amplifier designed to provide optical amplification of 1550 nm RF video signals in FSAN compliant passive optical networks.

Media Server Systems

ProView 2900 Receiver/Decoder

ProView 7000/7100 Integrated Receiver-Decoder and Stream Processor

ProView 7000 (top) and ProView 7100 (bottom)

Harmonic's ProView™ 7000 and 7100 are single-rack-unit, scalable, multi-format integrated receiver-decoders (IRD), transcoders and MPEG stream processors. The ProView 7000/7100 offers broadcast-quality SD/HD MPEG-2 and MPEG-4 AVC decoding and video transcoding.

The plug-in supports three types of alarms: Health alarms, MPEG alarms, or RF alarms, as follows:

Alarm name	Type	Optional?	Further details
--- Health monitoring alarms ---			
Hardware failure	Text/Status	No	
Fan failure	Text/Status	No	
Fan failure	Text/Status	No	
Ethernet link down	Text/Status	No	

(*Continued*)

Alarm name	Type	Optional?	Further details
Critical high temperature detected	Text/Status	No	
Backup port activated	Text/Status	No	
Ethernet backup port active	Text/Status	No	
Ethernet Gbe Port fail	Text/Status	No	
High temperature warning	Text/Status	Yes	
Critical Software card error	Text/Status	Yes	
Ethernet AutoNegotiation failed	Text/Status	Yes	
Firmware download failure	Text/Status	Yes	
Firmware upgrade failure	Text/Status	Yes	
Voltage error	Text/health	Yes	
Communication Status	Status	No	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status	No	Raise a minor condition based on the value of sysUpTime read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	Text/Status	No	
--- MPEG alarms ---			
MPEG Sync loss	Text/Status	No	
Output overflow	Text/Status	No	
Program Decoding failure	Text/Status	No	
DSR sync loss	Text/Status	No	
Continuity error on primary port	Text/Status	No	
Input overflow	Text/Status	No	
Program decoding Failure PCR err	Text/Status	Yes	
Program decoding failure unsupported	Text/Status	Yes	
Framrate mismatch	Text/Status	Yes	
Low delay stream in normal mode	Text/health	Yes	
AC gen lock not synched	Text/Status	Yes	
AC Eth dejitter fail	Text/Status	Yes	
Pid Conflict	Text/health	Yes	
MPEG synch loss on backup port	Text/Status	Yes	
Continuity error on backup port	Text/Status	Yes	

(*Continued*)

Alarm name	Type	Optional?	Further details
Pid missing on primary port	Text/Status	Yes	
Pid missing error on backup port	Text/Status	Yes	
xcoder engine failure	Text/Status	Yes	
xcoding unsupported content	Text/Status	Yes	
xcoding Scrambled input	Text/Status	Yes	
xcoding DTS PTS errors	Text/Status	Yes	
xcoding PCR error	Text/Status	Yes	
xcoding pid missing	Text/Status	Yes	
xcoding input errors	Text/Status	Yes	
xcoding Resolution Mismatch	Text/Status	Yes	
xcoding Codec Mismatch	Text/Status	Yes	
ac Dec Resolution Mismatch	Text/Status	Yes	
ac Vmx Descr Over Provision	Text/Status	Yes	
ac Vmx Descr Init Failure	Text/Status	Yes	
ac Dr Activated	Text/Status	Yes	
ac Dr Scanning	Text/Status	Yes	
ac Dr Alt Uplink Active	Text/Status	Yes	
ac Mux In Dejitter Failure	Text/Status	Yes	
ac Mux In Dejitter Failure Backup	Text/health	Yes	
ac T2mi Pid Missing On Primary Port	Text/Status	Yes	
ac T2mi Pid Missing On Backup Port	Text/Status	Yes	
ac T2mi Not Detected On Primary Port	Text/Status	Yes	
ac T2mi Not Detected On Backup Port	Text/Status	Yes	
ac T2mi Plp Missing On Primary Port	Text/Status	Yes	
ac T2mi Plp Missing On Backup Port	Text/Status	Yes	
--- *RF alarms* ---			
cam Missing	Text/Status	No	
carrier Not Detected	Text/Status	No	
demodulation Failure	Text/Status	No	
input Failure	Text/Status	No	
satellite Ber TooHigh	Text/Status	Yes	
satellite Ebn Too Low	Text/Status	Yes	

(*Continued*)

Alarm name	Type	Optional?	Further details
program Xc Not Descrambled	Text/Status	Yes	
cam Packet Loss	Text/Status	Yes	
cam Zero Bitrate	Text/Status	Yes	
cam Descrambling Failure	Text/Status	Yes	
satellite Per Too High	Text/Status	Yes	
cam Input Overflow	Text/Status	Yes	
embedded Descrambler Input Overflow	Text/Status	Yes	
input Bitrate Overflow	Text/Status	Yes	

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
alarmPath	Force a Path where to create the plugin alarms
pollInterval	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
retries	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
timeout	Delay in seconds before declaring a timeout in the current SNMP request.
uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
readCommunity	SNMP read community string. Use for SNMP polling.
lightweightDriver	Set the plugin to monitor only criticals alarms. Default is false.
signalForcedSeverity	Text indicating the forced severity for service alarms. Possible values: CRITICAL, MAJOR, MINOR
healthForcedSeverity	Text indicating the forced severity for health alarms. Possible values: CRITICAL, MAJOR, MINOR

Harris (Leitch)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"IconStatus Channel Branding"	4.30	SNMP – Harris IconStation	IC-SNMP-148
"NetPlus M400 Integrated Receiver/Decoder"	4.30	SNMP – Harris NetPlus M400	IC-SNMP-156
"NetVX Contribution Encoder"		SNMP – Harris NetVx Frame	IC-SNMP-157
"Panacea Routing Switcher"		SNMP – Harris Panacea	IC-SNMP-096

IconStatus Channel Branding

IconStation is an on-air advanced channel branding system that simplifies the creation, display and maintenance of a consistent brand.

NetPlus M400 Integrated Receiver/Decoder

The NetPlus™ M400 is a broadcast-grade, satellite integrated receiver/decoder (IRD) that supports a wide range of global standards for video and audio compression. It includes DVB-S/S2 demodulation capabilities and inputs for DVB-ASI and IP. Additionally, the NetPlus M400 supports MPEG-2 and H.264 video compression — from the 4:2:2 format to SD and HD formats — as well as MPEG, Dolby® Digital AAC and SMPTE 302 audio systems.

NetVX Contribution Encoder

Panacea Routing Switcher

Hewlett Packard

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"P2000 SAN Storage"		SNMP – HP P2000 SAN Storage	IC–SNMP–199
"ProLiant DL-Series Enterprise Servers"	5.00	SNMP – HP DL Series	IC–SNMP–214

P2000 SAN Storage

ProLiant DL-Series Enterprise Servers

Huawei

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"iManager I2000 NMS System"		SNMP – Huawei I2000 NMS system	IC–SNMP–228

iManager I2000 NMS System

Huawei's iManager I2000 NMS System provides network management solutions covering several fields including voice, data, operational support, and 3G and IMS-integrated service, as well as northern interfaces, to support operators as they construct integrated network management.

Hy-gain

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DCU-1"	4.10	SERIAL – Hygain DCU1	

DCU-1

The Hygain DCU1 Pathfinder digital control unit is used to control and steer the HAM-V antenna rotator system.

IETF

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"HOST-RESOURCES MIB"		SNMP Host Resource MIB	IC-SNMP-148
"Internet Control Message Protocol (ICMP)"			
"MIB-II (RFC 1213)"		SNMP RFC1213	
"RMON (RFC 2819)"		SNMP RMON	IC-SNMP-002

HOST-RESOURCES MIB

The HOST-RESOURCES MIB, developed by the Internet Engineering Task Force (IETF), is for use in managing host systems. The term *host* is construed to mean any computer that communicates with other similar computers attached to the internet and that is directly used by one or more human beings. Although this MIB does not necessarily apply to devices whose primary function is communications services (e.g., terminal servers, routers, bridges, monitoring equipment), such relevance is not explicitly precluded. This MIB instruments attributes common to all internet hosts including, for example, both personal computers and systems that run variants of Unix.

Internet Control Message Protocol (ICMP)

The Internet Control Message Protocol (ICMP), developed by the Internet Engineering Task Force (IETF), is used by a gateway or destination host to communicate with a source host, for example, to report an error in datagram processing.

MIB-II (RFC 1213)

RFC 1213, developed by the SNMP Working Group of the Internet Engineering Task Force (IETF), defines the second version of the Management Information Base (MIB-II) for use with network management protocols in TCP/IP-based internets. In particular, together with its companion memos which describe the structure of management information (RFC 1155) along with the network management protocol (RFC 1157) for TCP/IP-based internets, these documents provide a simple, workable architecture and system for managing TCP/IP-based internets and in particular the Internet community.

RMON (RFC 2819)

Remote Monitoring (RMON) is an Internet Engineering Task Force (IETF) standard that enables various network monitors and console systems to exchange monitoring data. It is used in telecommunications equipment, such as routers, that implement a MIB (Management Information Base) which supports remote monitoring. RMON uses an agent running on the device being monitored to supply information over SNMP to a monitoring/control system (e.g. iControl).

IneoQuest

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"IVMS Video Management System"	4.40	SNMP – IneoQuest IVMS	IC-INEOQUEST-IVMS
"Singulus G1-T"		SNMP – IneoQuest Singulus	IC-SNMP-085

IVMS Video Management System

The IVMS video management system is a real-time, end-to-end performance monitoring system of video distribution networks.

Singulus G1-T

The Singulus G1-T is an advanced network development & analysis system for media-over-IP enabled networks. The Grass Valley driver supports the Singulus G1-T video-over-IP probe.

Infortrend

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SAN Storage"		SNMP – Infortrend SAN Storage	IC–SNMP–200

SAN Storage

Infortrend's storage systems for SAN environments are designed to meet the needs of SMBs and mid-range and large enterprises. Infortrend's SAN storage solutions provide a comprehensive set of data services, including virtualized SAN storage solutions, local and remote replication, and thin provisioning.

Intel

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SR-Series Server Systems"		SNMP – Intel SR-Series Server Systems	IC–SNMP–201

SR-Series Server Systems

The Intel SR-series server systems are rack-optimized, highly integrated server systems for high-density, energy-efficient applications. This family of server systems have as target applications, high-performance computing, video server, virtualization platform, and general purpose data center building blocks.

International Datacasting Corp.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"IPE-4000"	6.02	SNMP – Logic Innovations IPE-4000	IC–SNMP–242
"RS-1100"	6.02	SNMP – Logic Innovations RS-1100	IC–SNMP–243

IPE-4000

The Logic Innovation IPE-4000 is a Linux-based IP Encapsulator. The IPE-4000 provides the necessary link between IP networks and broadband DVB or ATSC networks.

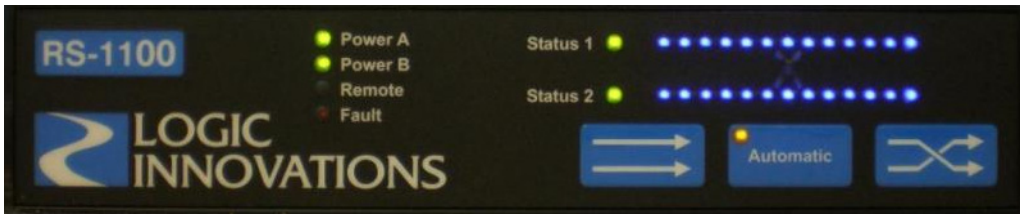
The plug-in supports the following alarms:

Alarm name	MIB point	Further details
Firmware	`aboutFirmware`	
Uptime	`aboutUptime`	
system Clock	`systemClock`	
system Temp Processor	`systemTempProcessor`	
system Temp System	`systemTempSystem`	
system Temp Dimm	`systemTempDimm`	
system Fan Speed 1	`systemFanSpeed1`	
system Fan Speed 2	`systemFanSpeed2`	
system Fan Speed 3	`systemFanSpeed3`	
system Fan Speed 4	`systemFanSpeed4`	
system Voltage In 0	`systemVoltageIn0`	
system Voltage In 1	`systemVoltageIn1`	
system Voltage In 2	`systemVoltageIn2`	
system Voltage In 3	`systemVoltageIn3`	
system Voltage In 4	`systemVoltageIn4`	
Data Speed	`networkDataSpeed`	
Data Duplex	`networkDataDuplex`	
Data Rx Packets	`networkDataRxPackets`	
Data Rx Bytes	`networkDataRxBytes`	
Data Rx Errors	`networkDataRxErrors`	
Data Rx Drops	`networkDataRxDrops`	
Data Tx Packets	`networkDataTxPackets`	

(*Continued*)

Alarm name	MIB point	Further details
Data Tx Bytes	`networkDataTxBytes`	
Data Tx Errors	`networkDataTxErrors`	
Data Tx Drops	`networkDataTxDrops`	
Mnc Speed	`networkMncSpeed`	
Mnc Duplex	`networkMncDuplex`	
Mnc Rx Packets	`networkMncRxPackets`	
Mnc Rx Bytes	`networkMncRxBytes`	
Mnc Rx Errors	`networkMncRxErrors`	
Mnc Rx Drops	`networkMncRxDrops`	
Mnc Tx Packets	`networkMncTxPackets`	
Mnc Tx Bytes	`networkMncTxBytes`	
Mnc Tx Errors	`networkMncTxErrors`	
Mnc Tx Drops	`networkMncTxDrops`	
buffer overrun	`bufferOverrunAlarmStatus`	Notification sent out when the buffer overrun alarm changes status

RS-1100



International Datacasting's RS-1100 is a 75-ohm broadband transfer switch that offers broadcasters and teleport operators the ability to obtain higher signal reliability in an efficient 1-RU, half width device. In the case of a fault, the RS-1100 performs a switch to keep a system on the air.

The plug-in supports two types of alarms: Health alarms and Signal alarms, as follows:

Alarm name	Type	Polling or trap?	MIB point	Further details
--- Health monitoring alarms ---				
Device Communication	Status/health	Poller	`sysUpTime` (RFC1213)	Device communication alarm set by receiving a successful/failed event in the poller

(*Continued*)

Alarm name	Type	Polling or trap?	MIB point	Further details
Device Restart	Status/health	Poller	`sysUpTime` (RFC1213)	Raise a minor condition based on the value of `sysUpTime` read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	text/health	Poller	`sysUpTime` (RFC1213)	System up time alarm, this is a default health monitoring alarm when you use the `generic.js` to create a new custom driver
--- *Signal alarms* ---				
hw_revision	Text	Fast poller	`hw_revision`	
sw_version	Text	Fast poller	`sw_version`	
serial_number	Text	Fast poller	`serial_number`	
fault input 1	Status	Fast poller	`fault_input_1`	
fault input 2	Status	Fast poller	`fault_input_2`	
power A	Status	Fast poller	`power_A_status`	
power B	Status	Fast poller	`power_B_status`	
control_source	Text	Fast poller	`control_source`	
fp_force_mode	Text	Fast poller	`fp_force_mode`	
contact closure	Status	Fast poller	`input_contact_closure`	
switch mode	Text	Fast poller	`switch_mode`	
switch state	Text	Fast poller	`switch_state`	
fault output	Status	Fast poller	`fault_output`	

IRTrans

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"LAN Controller XL Infrared Control System"		`SNMP – IRTrans LAN Controller XL`	`IC–DR–016`

LAN Controller XL Infrared Control System

The IRTrans LAN Controller XL is an infrared LAN controller with eight IR outputs, an RS232 interface, 2 inputs for external receivers, 4 relay outputs, and a 10/100 Mb Ethernet connection.

Isilon

Please see "EMC", on page 18.

JDSU

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MVP-200 MPEG Video Probe"		SNMP – JDSU MVP-200	IC-SNMP-162
"VSA API v2"	6.02		IC-SNMP-255

MVP-200 MPEG Video Probe

VSA API v2

The VSA is an MPEG-2 Video Probe. The VSA typically supports a 4-port Napatech Gigabit card and can run MPEG-2 analysis on each port simultaneously.

The plug-in supports three types of alarms: Health alarms, Streams alarms, and Programs alarms, as follows:

Alarm name	Type	Further details
--- Health monitoring alarms ---		
Communication	Status/health	Raise a critical condition if the device does not respond to HTTP request or does not respond with HTTP code 200.
Notification ready	Status/health	Set to critical condition at start. The status is cleared as soon as a notification is received.
Board [X] Status	StatusText	There is an alarm for each board seen by the plugin. State can be normal / "monitoring", or critical / "idle".
AlarmCount	Text	Shows the number of "statefull" alarms that are read from "nmap" query. If lightweight_driver is set, then this alarm should show 0.
API version	Text	Show the VSA API version of the device
--- Streams alarms ---		
Overall	Status	Virtual alarm for status and detailed alarms.
Status	Status	Overall alarm given by the VSA for the stream.
--- Programs alarms ---		

Lawo

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Nova73 Digital Audio Matrix"		SNMP – Lawo Nova73	IC-SNMP-089

Nova73 Digital Audio Matrix

Audio router/encoder.

Leitch

Please see "Harris (Leitch)", on page 29.

Please see "International Datacasting Corp.", on page 33.

Met One Instruments

50.5 Wind Sensor

Automatic Weather System (AWS) wind sensor.

Microsoft

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Interactive Program Guide"		SNMP – Microsoft IPG Server	IC-SNMP-106
"Windows 7"		SNMP Host Resource MIB	IC-SNMP-135
"Windows® SNMP Agent"			

Interactive Program Guide

Windows 7

Windows® SNMP Agent

The HostResources driver can be used to measure the amount of storage space remaining on a host running Windows. The SNMP Agent component must be enabled first. The alarms are repeated per storage device on the host computer.

Grass Valley

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"iTx HP DL370 G6 Server"		SNMP – Miranda iTX HP DL Series	
"Kaleido-Alto/Quad"		Kaleido-Alto	
"Kaleido-K2"		Kaleido-K2	
"Kaleido-X"		Kaleido-X	
"NVision NV9000 System Controller"		SNMP – nVision NV9000	
"Vertigo XG"	4.40	SNMP – Miranda Vertigo XG (Supermicro)	
"vFlex Multi-purpose HD Video Data Inserter (formerly mfg'd by Softel)"	6.02		IC-SNMP-254

iTx HP DL370 G6 Server

Server for iTx's IT-based playout of linear and on-demand television.

Kaleido-Alto/Quad

High-resolution Kaleido-Alto/Quad multi-image display processors.

Kaleido-K2

High-resolution Kaleido-K2: multi-image display processor.

Kaleido-X

High-resolution Kaleido-X multi-image display processor.

NVision NV9000 System Controller

Router control system.

Vertigo XG

Advanced HD/SD graphics processor.

vFlex Multi-purpose HD Video Data Inserter *(formerly mfg'd by Softel)*

vFlex is a multi-purpose ancillary data processor that can insert a range of video data in the transport stream.

Presented as a single-unit to save rack space, vFlex performs a large variety of data processing including, ancillary data encoding and decoding, opt cuing, ad insertion, wide screen signaling as well as graphic insertion for all HD and SD environments.

The plug-in supports several alarms some of which are informational, holding device information. Only one alarm is both a true alarm and consistently present in all variations of this plug-in's runtime: the `Device Communication` alarm (in the **Health Monitoring** sub-folder). The remaining alarms belong to individual modules.

Note:

Alarm name	Type	MIB point	Further details
--- Informational alarms about the device ---			
OS Platform	Text/info	`osPlatform`	OS platform
OS version	Text/info	`osVersion`	OS version
Process ID	Text/info	`processID`	Process ID
Process Name	Text/info	`processName`	Process Name
Process Started	Text/info	`processStarted`	Process Started
Process Priority	Text/info	`processPriority`	Process Priority
Process affinity	Text/info	`processProcAffinity`	Process affinity
Process time	Text/info	`processProcTime`	Process time
Process user time	Text/info	`processUserProcTime`	Process user time
Process handle count	Text/info	`processHandles`	Process handle count
Process thread count	Text/info	`processThreads`	Process thread count
--- Health monitoring alarms ---			
`Device Communication`	Status/health		Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
--- Module alarms ---			
<module-specific status alarm>	Status Text/health		Module status.

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`retries`	If an SNMP request timeout, this defines the number of retries to be performed. Default: `3`
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request. Default: `10`
`uniqueID`	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plug-in of the same type. The `uniqueID` should be part of URI.
`readCommunity`	SNMP read community string. Use for SNMP polling. Default value: `public`
`pollInterval`	Poller interval in seconds. Overwrite the default interval of 15 seconds.

Plug-in Notes

- This plug-in uses the `generic.js` script.
- Traps are not supported.
- The RFC1213 MIB is not supported.
- OIDs with OS or process information are static. Alarm OIDs, however, are in arrays, and consequently can be dynamic. The poller performs an SNMP `GET` command on each OID of the array. Multiple `varbind` requests are not used since some issues have been seen during real device test.
- The Vflex MIB was created to be highly generic. It defines modules. Each modules can have a list of parameters (`moduleValue`). Each parameter has different properties:
  - `name`—used for GSM alarm name
  - `value`—used to fill GSM alarm text
  - `condition`—used to set GSM alarm status.
- Currently, handled conditions are:
  - ok, normal—sets status to `NORMAL`
  - warning—sets status to `MINOR`
  - error—sets status to `CRITICAL`
  - unknown—sets status to `NORMAL`
- If a condition string is not handled, the default behavior is to set status to `NORMAL`.
- The consequence of this generic MIB and this implementation is that alarms are not known before starting the plug-in, possibly making integration more difficult.
- Alarms are dynamic, so in every refresh period (default is 5 minutes), arrays are reconstructed.

IMPORTANT: Although OIDs in arrays probably will not change during the device runtime, this should not be assumed to be the case; some cards **MAY** be hot-plugged or else software modules disconnected, which could change the available OIDs.

MIBs Used

- `SOFTEL-VFLEX-MIB`
- `SOFTEL-GROUP-MIB`

Miteq Inc.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Modulator 172138"	6.02	`SNMP – Miteq modulator`	`IC-SNMP-247`
"NSU1 160061"	6.02	`SNMP – Miteq NSU1 Switchover`	`IC-SNMP-246`

Modulator 172138

A modulator commonly varies some aspect (amplitude, phase or frequency) of an RF carrier (f', in proportion to a much lower frequency video or digital input signal (fm). In general, the input frequency components of the modulation typically extend from DC to 100 MHz, except for fast data links.

In order to preserve the information content superimposed on the RF carrier, one must insure that the output system bandwidth is adequate to pass both upper and lower sidebands (i.e. fo + fm) without distortion. In fact, system amplifier and channel distortion often will add residual AM or PM modulation to an otherwise clean transmitter.

The plug-in supports the following alarms:

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms --- *Theses alarms are created by **generic.js***			
Device Communication	Status/health	`sysUpTime` (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status/health	`sysUpTime` (RFC1213)	Raise a minor condition based on the value of `sysUpTime` read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.

(*Continued*)

Alarm name	Type	MIB point	Further details
--- Info alarms --- *Theses alarms are created by the plug-in itself*			
Transfer Switch Mode	Status/health	`xferSwflt`	Transfer Switch Indicator switch fault status
Summary Alarm	Status/health	Summary Alarm	Summary (overall) Alarm status
+15V Supply rail	StatusText/health	`pos15rail`	+15.3V Supply rail. Alarm is set to `CRITICAL` when the measured voltage is under the parameter pos15vThresh.
+5V Supply rail A	StatusText/health	`pos5Arail`	+5V Supply rail A. Alarm is set to `CRITICAL` when the measured voltage is under the parameter pos5vThresh.
+5V Supply rail B	StatusText/health	`pos5Brail`	+5V Supply rail B. Alarm is set to `CRITICAL` when the measured voltage is under the parameter pos5vThresh.
-15V Supply rail	StatusText/health	`neg15rail`	-15V Supply rail. Alarm is set to `CRITICAL` when the measured voltage is above the parameter `neg15vThresh`.
Temperature	Text/health	`temperature`	Temperature in degrees C
Local Oscillator Lock Alarm	Status/health	`moreStatus`	Local Oscillator Lock Alarm
Power supply Alarm	Status/health	`moreStatus`	Power Supply Alarm
Local Oscillator Level Alarm	Status/health	`moreStatus`	Local Oscillator Level Alarm (Optional)
Amplifier Current Alarm	Status/health	`moreStatus`	Amplifier Current Alarm (Optional)
External Alarm	Status/health	`moreStatus`	External Alarm
Temperature Alarm	Status/health	`moreStatus`	Temperature Alarm (Optional)
Module communications Alarm	Status/health	`moreStatus`	Module communications Alarm (Optional)
--- Status path alarms ---			
frequency	Text/health	`moreStatus`	Frequency in Hz
attenuation	Text/health	`moreStatus`	attenuation
attenuation 2	Text/health	`moreStatus`	optional second attenuation
attenuation 3	Text/health	`moreStatus`	optional third attenuation
control	Text/health	`moreStatus`	local or remote
intermediate freq	Text/health	`moreStatus`	intermediate frequency
mute	Text/health	`moreStatus`	muted or not

(*Continued*)

Alarm name	Type	MIB point	Further details
reference	Text/health	`moreStatus`	internal/external reference
polarization	Text/health	`moreStatus`	polarization (none, horizontal, vertical)
setup title	Text/health	`moreStatus`	Setup Title
slope	Text/health	`moreStatus`	Slope in dB
impedance	Text/health	`moreStatus`	50 ohm or 75 ohm

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`AlarmPath`	Used to set the Alarm prefix. Default: `PBI`. Could be replaced by `IRD` so as to have legacy plug-ins tree look-like.
`pollInterval`	Poller interval in seconds. Overwrite the default interval of 20 seconds.
`retries`	If an SNMP request times out, this defines the number of retries to be performed. Default: `1`.
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request.
`uniqueID`	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The `uniqueID` should be part of the URI.
`readCommunity`	SNMP read community string. Use for SNMP polling. Default: `public`
`pos15vThresh`	Threshold for +15V voltage supervisor. Default: `5V` The alarm ***+15V Supply rail*** becomes critical when the measured voltage is under the threshold.
`pos5vThresh`	Threshold for ***+5V voltage supervisor***. Default: `2V` The alarms ***+5V Supply rail A*** and ***+5V Supply rail B*** become critical when the measured voltage is under the threshold.
`neg15vThresh`	Threshold for -15V voltage supervisor. Default: `5V` The alarm ***-15V Supply rail*** becomes critical when the measured voltage is above the threshold.

Plug-in Notes

- This plug-in is based on `generic.js`.
- All MIB points are static.

- There are two types of alarms, global alarms for the whole unit and specific converter alarms. Global alarms are provided by:
  - MIB point `moreStatus` gives several different alarms and status
  - MIB point `sumAlrm` gives an overall Alarm
  - MIB points `pos15rail`, `pos5Arail`, `pos5Brail` and `neg15rail` give a voltage supervisor alarm
- All alarms can be considered as health monitoring.

> **Note:** In accordance with the MIB, some entries are optional. Consequently, if data is not provided for a GSM alarm, the alarms status will remain `UNKNOWN` forever and no text will be associated. Regular expressions are used to parse data from SNMP `varbind`.

MIBs Used

The plug-in is currently compliant with the MIB called `MITEQ-172138`. We use the RFC1213 MIB point `sysUpTime` to detect device reboot and loss of communication.

NSU1 160061

The Miteq 1:N New Switchover Unit (NSU) is designed to provide improved reliability for advanced satellite communications systems. The NSU consists of a Control Unit, Switch Modules and frequency converters. The Control Unit monitors the status of up to twelve primary frequency converters and one backup frequency converter. When a fault is detected on a primary frequency converter, the defective converter is automatically placed into standby and the backup converter is placed on line in place of the defective converter using the Switch Modules. The frequency converters can be prioritized so that critical communication channels have access to the backup converter on a prioritized basis.

Switchover from a defective primary converter to the backup converter is achieved by connecting the converters to a switch matrix. The defective converter is replaced by physically removing its input/output signal lines and connecting them to the backup converter via the switch matrix. This ensures continuous operation while the fault is corrected, or allows for routine maintenance without disrupting signal transmission.

The plug-in supports the following alarms:

Alarm name	Type	MIB point	Further details
--- *Converter alarms*[1] --- `cvalr` *MIB point gives* ***Local oscillator*** *alarm and* ***Power supply*** *alarm.* `mute` *and* `pol` *are text alarms that only provide information* `acvstat` *MIB point gives informations for* ***Redundancy Chain status*** *alarms and* ***serial link status converter*** *alarm.*			
Local Oscillator Alarm	Status/health	`cvalr`	Local Oscillator Alarm[2] This alarm may occur if the specified converter is not installed. It also may happen if the converter cannot be selected with an SNMP set.
Power Supply Alarm	Status/health	`cvalr`	Power Supply Alarm[2] This alarm may occur if the specified converter is not installed. It also may occur if the converter cannot be selected with an SNMP set.
Mute	Text/health	`mute`	Mute converter output for the converter selected by the most recent `cvsel` setting.[3]
Polarization	Text/health	`pol`	Polarization setting for the converter selected by the most recent `cvsel` setting. [3] Allowable settings: • 0 - N/A • 1 - None • 2 - Horizontal • 3 - Vertical
Serial Link Status converter	StatusText/health	`acvstat`	Converter serial link status indicator • 0 = No Fault - NSU-Converter Serial Link enabled and communicating • 1 = Fault - NSU-Converter Serial Link enabled and not communicating • 2 = No Fault - NSU-Converter Serial Link disabled • - = No Fault - Chain position inactive
Redundancy chain status	StatusText/health	`acvstat`	Redundancy chain status indicator • 0 = No Fault - chain position active • 1 = Fault -chain position active (Fault reported normally) • 2 = Fault - chain position active both contacts open • 3 = Fault - chain position active both contacts closed • - = chain position inactive disconnected from redundancy chain • + = chain position inactive connected to redundancy chain

(*Continued*)

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms --- *These alarms are created by* ***generic.js***			
Device Communication	Status/health	`sysUpTime` (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status/health	`sysUpTime` (RFC1213)	Raise a minor condition based on the value of `sysUpTime` read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
--- Status alarms ---			
Control Mode	Text/health	`status`	Control mode • 0 = Local control • 1 = Remote control
Redundancy Mode	Status/health	`status`	Redundancy mode • 0 = Manual • 1 = Automatic
Redundancy Chain Position	Text/health	`status`	Chain position in standby • 00 = Backup converter • 01 = Primary converter 1 • 12 = Primary converter 12
Polarization	Text/health	`status`	Polarization switch position • 0 = None • 1 = Horizontal • 2 = Vertical
Power Supply A	Status/health	`status`	Power Supply 'A' Alarm
Power Supply B	Status/health	`status`	Power Supply 'B' Alarm
Converter bus fault	Status/health	`status`	Converter bus fault
Converter Contact fault	Status/health	`status`	Converter Contact fault
Switch Module fault	Status/health	`status`	Switch Module fault
Switch Module Bus fault	Status/health	`status`	Switch Module Bus fault
write community	Status/health	`writeCommunity`	Check the write community defined in the device correspond to the configured one. This is important as the plug-in performs SNMP SET operations.

1. The switchover can monitor up to 12 converters + 1 backup.
2. This alarm can be set to `UNKNOWN` if `cvalr` data does not match the pattern ?abcdef.
3. This alarm can be set to `UNKNOWN` if converter cannot be selected with an SNMP set.

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`AlarmPath`	Used to set the Alarm prefix. Default value: `PBI` Could be replaced by `IRD` to have legacy plug-ins tree look-like.
`pollInterval`	Poller interval in seconds. Overwrite the default interval of 20 seconds.
`retries`	If an SNMP request times out, this defines the number of retries to be performed. Default: `1`
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request.
`uniqueID`	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The `uniqueID` should be part of the URI.
`readCommunity`	SNMP read community string. Use for SNMP polling. Default value: `public`
`writeCommunity`	SNMP write community string. Use to set SNMP variable. Default value: `private`
`nbConverter`	Number of converter to monitor. By default, monitor all converters (12 + 1 backup)
`cvSelWaitTime`	Defines the number of milliseconds to wait after the converter selection. Default: `200 ms`

MIBs Used

The plug-in is currently compliant with the MIB `MITEQ-160061`. The RFC1213 MIB point `sysUpTime` is used to detect device reboot and loss of communication.

Motorola

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"APEX 1000"		`SNMP – Motorola APEX`	`IC-SNMP-123`
"CAP-1000"	4.30	`SNMP – Motorola CAP-1000`	`IC-SNMP-134`
"CP7600 (formerly Terayon CP7600)"			
"DM6400 CherryPicker (formerly Terayon DM6400)"		`SNMP – Motorola DM 6400`	`IC-SNMP-175`
"DSR-4410"		`SNMP – Motorola DSR-4410`	`IC-SNMP-165`
"DSR-4440"	6.02	`SNMP – Motorola DSR-4440`	`IC-SNMP-238`
"DSR-4460"	4.30	`SNMP – Motorola DSR-4460`	`IC-SNMP-152`

Ordering information (*Continued)*

Hardware	New in iControl version	GSM plug-in name	Order number
"DSR-4500X"		SNMP – Motorola DSR-4500X	IC-SNMP-022
"DSR-4520X"		SNMP – Motorola DSR-4520X	IC-SNMP-017
"DSR-4530"		SNMP – Motorola DSR-4530	IC-SNMP-166
"DSR-4550"	4.40	SNMP – Motorola DSR-4550	IC-SNMP-196
"DSR-6000"		SNMP – Motorola DSR-6000	IC-SNMP-167
"DSR-6050"		SNMP – Motorola DSR-6050	IC-SNMP-117
"DSR-6100"	4.30	SNMP – Motorola DSR-6100	IC-SNMP-131
"DSR-6300"		SNMP – Motorola DSR-6300	IC-SNMP-168
"MBT 5000 System"		SNMP – Motorola MBT5000	IC-SNMP-008
"NE-Series AVC Network Encoder"		SNMP – Motorola NE Encoder	IC-SNMP-160
"NE-2000 Network Encryptor"	4.10	SNMP – Motorola NE2000	IC-SNMP-160
"SE-6000"	4.11	SNMP – Motorola DSR-4530	IC-SNMP-084
"OM-1000 Modulator"		SNMP – Motorola DSR-4530	IC-SNMP-043
"SE-Encoder"		SNMP – Motorola DSR-4530	IC-SNMP-006
"SE-2000 Encoder"		SNMP – Motorola DSR-4530	IC-SNMP-006
"SE-4000/4010"		SNMP – Motorola DSR-4530	IC-SNMP-084
"SE-5000/5010"		SNMP – Motorola DSR-4530	IC-SNMP-084
"SmartStream Encryptor/Modulator (SEM)"		SNMP – Motorola DSR-4530	IC-SNMP-009
"SmartStream Transport Multiplexer (TMX 2010)"		SNMP – Motorola DSR-4530	IC-SNMP-007

APEX 1000

CAP-1000

The Motorola CAP-1000 CherryPicker Application Platform is an advanced IP-centric multiplexer and encoder used to multiplex several SD/HD services encoded in MPEG-2 and MPEG-4 formats.

CP7600 (*formerly Terayon CP7600*)

Multichannel decoder.

DM6400 CherryPicker (*formerly Terayon DM6400*)

The DM6400 is part of the Motorola CherryPicker® line of digital video processing systems for networking, distributing and processing both standard definition (SD) and high definition (HD) services. It provides various digital video applications including grooming of custom channel lineups, rate shaping and statistical remultiplexing, and localized digital ad insertion.

DSR-4410

The Motorola DSR-4410 is a 1RU commercial satellite receiver that can output either NTSC or PAL video formats, automatically matching a programmer's video format. Variable front-end and bypass capabilities make it suited for network conversion from analog to digital. Full VBI reinsertion on lines 10 - 22 for SID/AMOL I & II and NABTS is standard on the DSR-4410, which is equipped with DVB-ASI input and output.

DSR-4440

This device is a Commercial Integrated Receiver/Decoder (IRD). It is a Multi-Format Digital Satellite Receiver for Cable Programmers and Operators.

The plug-in supports three types of alarms: Health alarms, Text alarms, or Bitfield alarms, as follows:

Health monitoring alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
DC Board Status	Status	`dcBoardStatus` (DSR4440)	Poller	Indicates the status of DC board i.e. Active or Not Responding
Device Communication	Status	`sysUpTime` (RFC1213)	Poller	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	Status	`sysUpTime` (RFC1213)	Poller	Device power cycle alarm. Status determined comparing subsequent polling of the system up time variable
Flash Available	Status/Text	`flashAvail` (DSR4440)	Poller	Gives the size of the free Flash left, expressed in B(Bytes) that is available for the operating system, the threshold is defined based on the 20% of the total size of the flash

Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
Flash Total	Text	`flashTotal` (DSR4440)	Poller	Gives the total size of the Flash expressed in B(Bytes) that is available for the operating system
Memory Available	Status/Text	`memAvail` (DSR4440)	Poller	Gives the size of the free heap memory left, expressed in B(Bytes) that is available for the operating system, the threshold is defined based on the 20% of the total size of the memory
Memory Total	Text	`memTotal` (DSR4440)	Poller	Gives the total size of the heap memory expressed in B(Bytes) that is available for the operating system
System Uptime	Text	`sysUpTime` (RFC1213)	Poller	System up time alarm, this is a default health monitoring alarm when you use the generic.js to create a new custom driver

Service alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- ***LED status alarms*** ---				
Authorized	Status/Text	`authorizedLED`	Fast poller	The Authorized LED is on (illuminated) when the Signal LED is on and the programmer has transmitted the access messages to allow the unit to decrypt the signal
Relay 1	Status/Text	`relay1LED`	Fast poller	The relay1 LED is on (illuminated) when relay1 is closed
Relay 2	Status/Text	`relay2LED`	Fast poller	The relay2 LED is on (illuminated) when relay2 is closed
Relay 3	Status/Text	`relay3LED`	Fast poller	The relay3 LED is on (illuminated) when relay3 is closed
Signal	Status	`signalLED`	Fast poller	The Signal LED is on (illuminated) when the unit recognizes the signal as a DigiCipher II signal
--- ***Signal lock alarms*** ---				
Primary Audio Lock	Status	`primaryAudioLock`	Fast poller	Verifies if the Primary Audio is locked
Secondary Audio Lock	Status	`secondaryAudioLock`	Fast poller	Verifies if the Secondary Audio is locked
video Lock	Status	`videoLock`	Fast poller	Verifies if the Video is locked

Service alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
--- ***Signal status alarms*** ---				
Acquisition State	Status/Text	`acquisitionState`	Fast poller	Displays the acquisition state for the active signal
Authorization State	Status/Text	`authorizationState`	Fast poller	Displays the authorization state for viewing the current signal (31 states)
Encryption Mode	Status/Text	`encryptionMode`	Fast poller	Displays the encryption mode of the current signal (5 modes)
Signal Quality	Status/Text	`signalQuality`	Fast poller	Displays the RF quality level of the current signal, the threshold is currently set to 30 which can also be passed as a parameter
Signal Power	Status/Text	`signalPower`	Fast poller	Displays the RF power level of the current signal, the threshold is currently set to -45 which can also be passed as a parameter
Signal to Noise Ratio	Status/Text	`ebNo`	Fast poller	Displays the signal to noise ratio of the current signal, the threshold is currently set to 10 which can also be passed as a parameter

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`pollInterval`	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
`retries`	If an SNMP request times out, this defines the number of retries to be performed. Default is **1**.
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request.
`uniqueID`	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The `uniqueID` should be part of the URI.
`readCommunity`	SNMP read community string. Use for SNMP polling.
`sqTrsh`	By setting this parameter we can define the Signal Quality threshold value.
`spTrsh`	By setting this parameter we can define the Signal Power threshold value.
`snrTrsh`	By setting this parameter we can define the Signal to Noise Ratio threshold value.
`trshLevelFla`	By setting this parameter we can define the threshold level for the available flash (a number from 0 to 1).
`trshLevelMem`	By setting this parameter we can define the threshold level for the available memory (a number from 0 to 1).

(*Continued)*

Parameter	Description
`signalForcedSeverityText`	Text indicating the forced severity for service alarms. Possible values: **CRITICAL, MAJOR, MINOR**
`healthForcedSeverityText`	Text indicating the forced severity for health alarms. Possible values: **CRITICAL, MAJOR, MINOR**

DSR-4460

The DSR-4460 decodes an MPEG-2 or MPEG-4, HD or SD service and delivers superior video and audio performance via HD/SD-SDI output or analog/composite video output.

DSR-4500X

The Motorola DSR-4500X is an advanced commercial integrated receiver/decoder (IRD). Along with standard audio and video ports, this professional satellite receiver has connections to deliver data services, MPEG-2 transport streams and headend signaling.

DSR-4520X

DigiCipher® II integrated receiver/decoder (IRD) — digital satellite receiver.

DSR-4530

DSR-4550

DigiCipher® II commercial integrated receiver/decoder (IRD) — digital satellite receiver for cable programmers and operators.

DSR-6000

DSR-6050

DSR-6100

DSR-6100 integrated receiver/decoder (IRD) — digital satellite receiver, decoder. The DSR-6100 is used to receive several HD services that are compressed using MPEG-2 and MPEG-4 encoding.

DSR-6300

MBT 5000 System

NE-Series AVC Network Encoder

NE-2000 Network Encryptor

The Motorola NE2000 is a *Network Encryptor* used for MediaCipher encryption of MPEG-2 MPTS or SPTS.

SE-6000

The SE-6000 encoder, designed to meet future 1080p resolutions, accepts baseband SD and HD video, as well as pre-compressed MPEG-4 and MPEG-2 streams to act as both a high performance encoder and transcoder for satellite, cable and Internet Protocol Television (IPTV) applications.

OM-1000 Modulator

The Motorola OM-1000 is an MPEG-2/digital out-of-band multiplexer modulator used to transmit MPEG-2 data streams to cable terminals.

SE-Encoder

SE-2000 Encoder

The Motorola SE-2000 digital video encoder provides video compression technology in a compact chassis for cable headend, small broadcast and high bandwidth contribution applications. The SE-2000 accepts either analog composite or digital CCIR-601 video and performs MPEG-2 compression.

SE-1010/2000/2000IP

The Motorola SE-1010 digital video encoder provides video compression technology in a compact chassis for cable headend and small broadcast applications. The SE-1010 digital encoder accepts either analog composite or digital CCIR-601 video and performs MPEG-2 compression and stream splicing. The video compression data rate can be controlled through the Ethernet port via SNMP.

The Motorola SE-2000 digital video encoder provides video compression technology in a compact chassis for cable headend, small broadcast and high bandwidth contribution applications. The SE-2000 accepts either analog composite or digital CCIR-601 video and performs MPEG-2 compression.

SE-4000/4010

The SE-4000 SD video encoder delivers AVC compressed MPEG-4 content via existing MPEG-2 transport streams using IP or optional ASI. This encoder is the result of a partnership between Motorola and Modulus Video Inc.

SE-5000/5010

The SE-5000 HD video encoder delivers AVC compressed MPEG-4 content via existing MPEG-2 transport streams using IP or optional ASI. This encoder is the result of a partnership between Motorola and Modulus Video Inc.

SmartStream Encryptor/Modulator (SEM)

The Motorola SmartStream interactive digital cable system consists of an integrated set of high performance stream-processing elements for the deployment of advanced services like VOD and digital ad insertion. The SmartStream system adds functionality to existing digital cable systems with four product families: SmartStream Encryptor/Modulator (SEM), SmartStream Resource Manger (SRM), SmartStream Device Manager (SDM) and SmartStream Transcoder Multiplexer (TMX).

SmartStream Encryptor/Modulator provides the ability to encrypt a large number of services across 8 separate 64 or 256 QAM cable channels. The SEM supports both GigE and ASI transport technology, and can deliver hundreds of individual streams directly to subscribers. SEM encryption is part of Motorola's MediaCipher™ conditional access system.

SmartStream Transport Multiplexer (TMX 2010)

The SmartStream interactive digital cable system consists of an integrated set of high performance stream-processing elements necessary for the successful deployment of advanced services like VOD and digital ad insertion. The SmartStream system adds functionality to existing digital cable systems and adds four new product families: SmartStream Encryptor/Modulator (SEM), SmartStream Resource Manger (SRM), SmartStream Device Manager (SDM) and SmartStream Transcoder Multiplexer (TMX).

The TMX 2010 Transport Multiplexer provides MPEG-2 service multiplexing, grooming, video bitrate transcoding, video splicing, IP data encapsulation, and encoder management for digital broadcast, satellite and cable distribution.

Net Insight

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Nimbra680 Network Adaptor"		SNMP – Net Insight Nimbra 6800	IC-SNMP-163

Nimbra680 Network Adaptor

The Nimbra 600 series of Media Switch Routers includes an array of carrier-class network switches with integrated media adapters and codecs for transport and processing of professional video, audio and data, with guaranteed quality of service regardless of network load or topology.

Network Electronics Inc.

Please see "Nevion (Network Electronics Inc.)", on page 56.

Nevion (Network Electronics Inc.)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"GYDA-SC Multi-frame System Controller"		SNMP – Nevion GYDA	IC-SNMP-099
"Multicon Nwork"		SNMP – Nevion	IC-SNMP-164

GYDA-SC Multi-frame System Controller

The GYDA System Controller is an advanced control and monitoring card for the Network Electronics flashlink® system. The card can control and monitor up to 8 flashlink frames (79 modules). It has a standard 10BASE-T Ethernet port, and supports SNMP. The controller module has four GPI inputs and a GPI open collector output.

Multicon Nwork

Multicon is the second generation system controller from Nevion replacing existing GYDA-SC, ETH-CON and Syscon products. Multicon is based on an open and distributed architecture and provides one platform to monitor and control both Flashlink and VikinX products. These features and a powerful third party plug-in interface allow for full control of the entire video transport chain.

PESA Switching Systems (QuStream Group)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Cheetah, Tiger, Jaguar, Cougar, Ocelot, Bobcat, and TDM3000 (SNM 35V3)"		SNMP – PESA SNM 35V3	IC-SNMP-086

Cheetah, Tiger, Jaguar, Cougar, Ocelot, Bobcat, and TDM3000 (SNM 35V3)

HD digital routing switchers and multi-rate routers, serial digital routing switchers, analog routing switchers, and large scale Time Division Multiplex (TDM) audio switchers.

Phoenix Broadband Technologies (PBT)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"ContactAgent GPI"		GPI PBT ContactAgent	IC-SNMP-056

ContactAgent GPI

The Phoenix Broadband Technologies PBT-CA1 is a general purpose status monitoring agent intended to monitor and control equipment that has “contact closure” interface points.

The PBT-CA1 has a general purpose I/O interface consisting of 8 digital inputs that can be monitored for external contact closures, 2 controllable relay contact outputs that can be used to remotely control external equipment, and an RS-485 port that can programmed to interface with proprietary serial interfaces.

Pinnacle Data Systems Inc. (PDSI)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DS130"		SNMP – Pinnacle	IC-SNMP-003

DS130

The DS130 data storage system is an entry-level, carrier-grade data backup solution that provides a single, direct-cable connection to each fixed, internal peripheral.

Pro Broadband, Inc. (PBI)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DCH-4000P MPEG-2 SD IRD and Processor"	6.02	SNMP – PBI DCH4000P Receiver	IC-SNMP-240

DCH-4000P MPEG-2 SD IRD and Processor

The DCH-4000P is a professional IRD with a variety of input combinations (including DVB over ASI, IP, QPSK, QAM, COFDM and DS3) and output (CVBS, SDI, ASI, DS3 and IP). An appropriate IP port equipped as an option supports DVB over IP applications. LAN control and monitoring are achieved with TCP/IP, SNMP and HDMS.

The plug-in supports three types of alarms: Health alarms, Text alarms, or Bitfield alarms, as follows:

Health monitoring alarms

Alarm name	Type	MIB point	Further details
--- ***Health monitoring alarms*** ---			
Device Communication	Status/health	`sysUpTime` (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status/health	`sysUpTime` (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
--- ***Input DVBS alarms*** --- *All the following are elements related to signal input with type tuner DVBS. All those elements are displayed in a subfolder named 'Input DVBS2.'*			
Lock	Status/Signal	`tunerLock`	Tuner Lock
Packet Length	Text/Signal	`tunerPacketLen`	packet length: 188 or 204
Total Bitrate	Text/Signal	`tunerTotalBitrate`	total bit Rate size: from 0 to 100Mbps
Valid Bitrate	Text/Signal	`tunerValidBitrate`	valid Bit rate: from 0 to 100Mbps
Quality	Text/Signal	`tunerQuality`	tuner quality signal monitoring
Strength	Text/Signal	`tunerStrength`	tuner signal strength
Signal BER	Text/Signal	`tunerBER`	tuner signal BER
Carrier noise	Text/Signal	`tunerCN`	tuner carrier noise
Eb/No	Text/Signal	`tunerEbNo`	tuner Eb/No
Lnb Frequency	Text/Signal	`lnbFrequency`	LNB frequency
sat Frequency	Text/Signal	`satFrequency`	Tuner frequency or centre_frequency for the transmission expressed in MHz, its value range: from 950 MHz to 2150 MHz
symbol Rate	Text/Signal	`symbolRate`	Tuner symbol rate in symbols per second,its value range: from 0kb/s to 45000kb/s

Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Further details
lnb Voltage	Text/Signal	`lnbVoltage`	Tuner power, Option: 0v,13v,18v
lnb 22KHz	Text/Signal	`lnb22KHz`	Tuner 22 KHz, option: off or on
Tuner type selected	Text/Signal	`typeSel`	tuner type
--- ***Input ASI alarms*** --- *All the following are elements related to signal input with type ASI. All those elements are displayed in a subfolder named 'Input ASI'.*			
Lock	Status/Signal	`asiLock`	ASI Lock
Packet Length	Text/Signal	`asiPacketLen`	packet length: 188 or 204
Total Bitrate	Text/Signal	`asiTotalBitrate`	total bit Rate size: from 0 to 100Mbps
Valid Bitrate	Text/Signal	`asiValidBitrate`	valid Bit rate: from 0 to 100Mbps
--- ***Input IP alarms*** --- *All the following are elements related to signal input with type IP. All those elements are displayed in a subfolder named 'Input IP'.*			
Lock	Status/Signal	`ethernetInLock`	Ethernet Lock
Packet Length	Text/Signal	`ethernetInPacketLen`	packet length: 188 or 204
Total Bitrate	Text/Signal	`ethernetInTotalBitrate`	total bit Rate size: from 0 to 100Mbps
linkStatus	StatusText/Signal	`linkStatus`	Ethernet link status (none, 10M, 100M). Status is set to `NORMAL` if link is 10M or 100M. If none, or unknown, status is set to `CRITICAL`.
--- ***Output ASI alarms: Out 1*** --- *All the following are elements related to signal output with type ASI. There are two output ports. The following is the set of alarms for **Port 1**. Subfolder: Output ASI/Out 1*			
Source	Text/Signal	`sourceSel1`	select source, qpsk:0, asi:1, ds3:2
Package Length	Text/Signal	`packageLength1`	package length, 188 or 204
--- ***Output ASI alarms: Out 2*** --- *All the following are elements related to signal output with type ASI. There are two output ports. The following is the set of alarms for **Port 2**. Subfolder: Output ASI/Out 2*			
Source	Text/Signal	`sourceSel2`	select source, qpsk:0, asi:1, ds3:2
Package Length	Text/Signal	`packageLength2`	package length, 188 or 204
--- ***Output IP alarms*** --- *There is only one IP output port.*			
IP address	Text/Signal	`ipAddress`	Ethernet output ip address
Stream UDP port	Text/Signal	`streamUDPPort`	ethernet output stream UDP port

Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Further details
Multicast IP address	Text/Signal	`multicastIPAddress`	ethernet output multicast IP address
TS packets per UDP	Text/Signal	`tsPacketPerUDP`	ethernet output TS packets per UDP
TTL	Text/Signal	`ttl`	ethernet output ttl
External board netmask	Text/Signal	`sourceNetmask`	External board netmask
External board gateway	Text/Signal	`sourceGateway`	External board gateway
External board mac	Text/Signal	`sourceMac`	External board mac
Multicast port	Text/Signal	`multiUDPPort`	Multicast port
Protocol	Text/Signal	`protocol`	Protocol : udp or trp
Type service	Text/Signal	`typeService`	normal, min delay, max throughput, max reliability, min monetary cost
Source	StatusText/Signal	`source`	Text can be asi, tuner, ds3, CI. Status is NORMAL if source value correspond to the parameter "inputType". If source is unlnown or does not match, status is set to `CRITICAL`.
Mode	Text/Signal	`mode`	`DVB`, `IPTV`
Max Channel	Text/Signal	`maxChannel`	when mode is IPTV, hardware sustain max channel
Current MaxChannel	Text/Signal	`curMaxChannel`	when mode is IPTV, device can output channel number most currently
Channel Input	Text/Signal	`channelInput`	when mode is IPTV, input channel number currently
MulticastValues	Text/Signal	`multicastValues`	when mode is IPTV, the value of multicast
Gateway Mac address	Text/Signal	`gatewayMac`	gateway mac address
HighTargetMac	Text/Signal	`highTargetMac`	when mode is IPTV, it denote all multicast channel's target mac, only save high 32bit, one channel occupy 4 bytes
LowTargetMac	Text/Signal	`lowTargetMac`	when mode is IPTV, it denote all multicast channel's target mac, only save target mac's low 16bit, one channel occupy 4 bytes, latter 2 bytes is effective
TargetMac4Dvb	Text/Signal	`targetMac4Dvb`	when mode is DVB, the target mac address

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`AlarmPath`	Used to set the Alarm prefix. Default value: `PBI` Could be replaced by `IRD` so as to have legacy plug-ins tree look-like.
`pollInterval`	Poller interval in seconds. Overwrite the default interval of 20 seconds.

(*Continued*)

Parameter	Description
`retries`	If an SNMP request timeout, this defines the number of retries to be performed. Default value: `1`.
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request.
`uniqueID`	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plugin of the same type. The `uniqueID` should be part of uri.
`readCommunity`	SNMP read community string. Use for SNMP polling. Default value: `public`
`inputType`	Defines the signal input type. Value can be `DVB_S`, `ASI` or `IP` Default value: `DVB_S`
`outputType`	Defines the signal output type. Value can be `ASI` or `IP` Default value: `IP`

QLogic

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SAN Fiber Channel Switches"		`SNMP – QLogic SAN Fiber Channel Switches`	`IC-SNMP-202`

SAN Fiber Channel Switches

The QLogic SAN Fiber Channel Switch family comprise a series of Fibre Channel (FC) protocol switches for use as the backbone of storage area networks (SANs).

Quest Controls Inc.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"TELSEC RM/WM-Series Controller"		`SNMP – Quest Telsec WM`	`IC-SNMP-149`

TELSEC RM/WM-Series Controller

The TELSEC RM/WM-series controller is used to monitor/control environmental and access control functions as well as equipment alarming at a remote site.

RGB Networks

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"BNP Broadcast Network Processor"	4.40	SNMP – RGB Networks Broadcast Network Processor	IC-SNMP-191
"MMC Modular Media Converter"	4.40	SNMP – RGB Networks Modular Media Converter	IC-SNMP-192
"SEP 48 Simulcast Edge Processor"		SNMP – RGB SEP 48	IC-SNMP-095

BNP Broadcast Network Processor

The BNP broadcast network processor family of devices perform video processing including grooming, statistical multiplexing, transrating, digital program insertion, emergency alert and operator messaging services, as well as digital graphic overlays.

MMC Modular Media Converter

The MMC modular media converter performs high-density ASI-to-Gigabit Ethernet conversion, thereby facilitating the transition to Gigabit networks.

SEP 48 Simulcast Edge Processor

The SEP 48 Simulcast Edge Processor performs MPEG decoding, NTSC modulation and upconversion of multiple video streams for digital simulcast applications.

Riedel

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Artist Intercom System"		SNMP – Riedel Artist	IC-SNMP-088

Artist Intercom System

Artist is a matrix platform for intercom and the distribution of analogue and digital audio and TCP/IP data signals. The system consists of a fibre-based network backbone providing a distributed masterless system architecture for live audio and intercom applications.

Rohde & Schwarz

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AEM100 Emission Multiplexer"	4.40	SNMP – Rohde and Schwarz Aem100	IC-SNMP-187
"Exciter"	4.40	SNMP – Rohde and Schwarz Exciter	IC-SNMP-186

AEM100 Emission Multiplexer

The AEM100 multiplexer enables network operators to expand existing ATSC transmitter networks for ATSC Mobile DTV.

Exciter

Exciter is a multistandard TV exciter, able to process digital and analog signals when operating in ATSC mode.

Ross Video Production Technology

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"openGear Frame and Modules"	4.40	SNMP – Ross OpenGear	IC-SNMP-184

openGear Frame and Modules

openGear Frames, and their modules, are industry standard openGear terminal equipment.

Samsung

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"ME-B Series Commercial Display Monitors"		SNMP – Samsung ME-B Series Monitor	IC-DR-015

ME-B Series Commercial Display Monitors

Samsung's ME-B series of display monitors delivers a high-resolution display and integrated TV tuner for content versatility and control through RS232C and RJ45 ports.

Screen Subtitling Systems Ltd.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Polistream Subtitling Product Family"		SNMP – Screen Subtitling	IC-SNMP-137

Polistream Subtitling Product Family

The *Polistream* family of products offers a full range of subtitling solutions including transmission and transcoding, branding and timeshifting, and monitoring and logging. The Polistream product range simplifies the control and management of subtitle and caption delivery by employing modular software and flexible processing platforms. Polistream manages the transmission for any mix of DVB, Teletext, closed caption, Imitext and open subtitles as well as other data including graphics.

SeaChange

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MediaServer 1200 Multi-Channel SD/HD Video Server"		SNMP – Seachange MSV 1200 Media Server	IC-SNMP-203
"SPOT Ad Insertion System"		SNMP – Seachange SPOT	IC-SNMP-150

MediaServer 1200 Multi-Channel SD/HD Video Server

SPOT Ad Insertion System

The SeaChange Spot System is an automated solution for reliable advertising insertion at the lowest operational expense and highest quality. Using spots loaded through an encoding station and schedules provided from an ad traffic and billing system, the Spot System completes every task necessary for fulfillment without operator intervention.

BML Servers

Please see "XOR Media (formerly SeaChange [Broadcast Division])", on page 76.

MCL Codec Servers

Please see "XOR Media (formerly SeaChange [Broadcast Division])", on page 76.

VOD Server

Please see "XOR Media (formerly SeaChange [Broadcast Division])", on page 76.

Sencore

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MRD 3187B Receiver/Decoder"		SNMP – Sencore MRD3187B	IC-SNMP-118

MRD 3187B Receiver/Decoder

The MRD 3187B is a modular, configurable receiver/decoder solution, consisting of a system base with a software package. The MRD 3187B supports applications by combining dual-channel processing capability with MPEG2, H.264, 4:2:0, 4:2:2, SD, and HD video decoding. The MRD 3187B also supports features such as DVB-CI and SCTE35/104 messaging support.

ServerTech

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Switched CDU"			

Switched CDU

SkyStream

Please see "Ericsson", on page 19.

Snell

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Snell Routers"		SNMP – Snell Router	IC-SNMP-027
"Snell IQ Modular Interfaces"		SNMP – Snell IQ	IC-SNMP-028

Snell Routers

A router control system supporting a variety of hardware and software control elements.

Snell IQ Modular Interfaces

The IQ Modular product line includes routers for HD/SD digital video and AES/EBU digital audio that can be controlled from a dedicated RCP, a card edge, a front panel or a PC running RollCall network management software. The routers can be interfaced to an external RCP using a GPI module.

RollCall is a PC application enabling remote configuration and control functionality for RollCall-enabled infrastructure hardware.

Softel

Please see "Grass Valley", on page 39.

Sony

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"CART+"			
"9-pin VTR Control (serial control)"			

CART+

9-pin VTR Control (serial control)

Routers that enable control over a remotely controllable VCR or DDR with Sony protocol RS-422. Any 9-pin video device can be controlled by this interface. From your Visual Basic application it also can be used in Visual C, HTML or any other compiler.

SpectraLogic

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"BOA over T380 Enterprise Tape Library"	6.02	`SNMP – SpectraLogic BOA`	`IC-SNMP-245`

BOA over T380 Enterprise Tape Library

The SpectraLink T380 Tape Library is a tape-based enterprise-level data storage system. Grass Valley supports BOA on the T380.

Statmon

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Axess Remote Control (RC) System"	4.30	SNMP – Statmon Axess	IC-SNMP-141

Axess Remote Control (RC) System

Statmon's Axess software is designed to manage NOCs, remote sites and wide ranges of devices regardless of brand or technology. The Axess RC system is a network-based application that remotely monitors devices, networks and systems where automatic control and response is required.

Studer

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Studer Route 6000"		SNMP – Studer Route 6000 Audio Routing System	IC-SNMP-204

Studer Route 6000

The Studer Route 6000 is a routing and signal processing system based on the SCore Live DSP core and comprehensive D21m I/O system. The Route 6000 system can accommodate up to 1728x1728 inputs and outputs.

Sumavision Technologies, Inc.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"EMR-D8020"	6.02	SNMP – Sumavision_EMRD8020 IRD	IC-SNMP-239

EMR-D8020

The EMR-D8020 is a stand-alone device, designed to fulfill the market demands of decoding head-end programs and receiving satellites. The EMR-D8020 supports stream inputs including DVB-S/S2, ASI, IP and so on, and output support ASI and TS over IP. In addition the decoding output option has HD-SDI, CVBS, YPbPr, HDMI, Analog Audio,AES/EBU Audio and the decoding input function supports FRAME_SYNC.

The plug-in supports nine types of alarms, as follows:

- Health alarms
- Input DVB2 alarms
- Input ASI alarms
- Input IP alarms
- Output ASI alarms (Port 1)
- Output ASI alarms (Port 2)
- Output IP alarms (Global Ethernet)
- Output IP alarms (Port 1)
- Output IP alarms (Port 2)

Health monitoring alarms

Alarm name	Type	MIB point	Further details
--- ***Health monitoring alarms*** ---			
Device Communication	Status/health	`sysUpTime` (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status/health	`sysUpTime` (RFC1213)	Raise a minor condition based on the value of `sysUpTime` read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
--- ***Input DVBS2 alarms*** --- *All the following are elements related to signal input with type tuner DVBS2. All those elements are display in a subfolder named 'Input DVBS2'.*			
LockStatus	StatusText/Signal	`dvbs2InLockStatus`	DVB-S/S2 Input Status. "unlock" (Critical error) or "lock" (nominal case)

Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Further details
System Bitrate	Text/Signal	systemBitrate	System Bitrate Of DVBS/S2
Valid Bitrate	Text/Signal	validBitrate	Valid Bitrate Of DVBS/S2
Packet Length	Text/Signal	packetLength	Packet Length Of DVBS/S2
Signal Strength	Statustext/Signal	signalStrength	Strength Of Signal. If signal strength is inferior than LBandLevelThreshold param, or unknown, then the status is set to CRITICAL.
ber	Text/Signal	ber	BER Of Signal
snr	Text/Signal	snr	SNR Of Signal
DownLink Frequency	Text/Signal	downlinkFreq	DownLink Freq Of Signal. Range (0..100000)
Local Frequency	Text/Signal	localFreq	Local Freq Of Signal. Range (0..100000)
Symbol Rate	Text/Signal	symbolRate	Symbol Rate Of Signal. Range (1..999999)
Standard	Text/Signal	standard	Mode Of DVBS/S2. Can be "dvb-s" or "dvb-s2"
Polarize	Text/Signal	polarize	Polarize Of Signal. Can be "horizontal", "vertical" or "off"
lnb 22khz	Statustext/Signal	lnb22khz	LNB 22kHz Of Signal. "on" or "off".
Signal Status	Statustext/Signal	signalStatusOutput	"Print Choose Of Output Status""on" or "off".
Signal Monitor	Statustext/Signal	signalMonitor	Signal Monitor. "on" or "off".
Block Stream	Statustext/Signal	blockStream	Block Stream. "on" or "off".
Signal Level Threshold	Text/Signal	sigalLevelThreshold	SignalLevel Threshold. Range (1..10)
Alarm Enable	Statustext/Signal	alarmEnable	DVBS/S2 alarm OnOff. "on" or "off".
--- ***Input ASI alarms*** --- *All the following are elements related to signal input with type ASI. All those elements are display in a subfolder named 'Input ASI'.*			
LockStatus	StatusText/Signal	asiInLockStatus	ASI Input Status. "unlock" (Critical error) or "lock" (nominal case).
System Bitrate	Text/Signal	asiInSystemBitrate	System Bitrate
Valid Bitrate	Text/Signal	asiInValidBitrate	Valid Bitrate
Packet Length	Text/Signal	asiInPacketLength	Packet Length. "packet188" or "packet204"
Input Enable	StatusText/Signal	asiInEnable	Input OnOff. "on" or "off".
Input alarm enable	StatusText/Signal	asiInAlarmEnable	Alarm OnOff. "on" or "off".

Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Further details
--- ***Input IP alarms*** --- *All the following are elements related to signal input with type IP. All those elements are displayed in a subfolder named 'Input IP'.*			
LockStatus	StatusText/Signal	`gbeInLockStatus`	IP Input Status. "unlock" (Critical error) or "lock" (nominal case).
System Bitrate	Text/Signal	`gbeInSystemBitrate`	GBE System Bitrate
Valid Bitrate	Text/Signal	`gbeInValidBitrate`	GBE Valid Bitrate
Packet Length	Text/Signal	`gbeInPacketLength`	GBE Packet Length. "packet188" or "packet204"
Input IP	Text/Signal	`gbeInIP`	Receive Ip
Input Port	Text/Signal	`gbeInPort`	Receive Port.(0~65535)
Reference Bitrate Enable	StatusText/Signal	`gbeInRefBitrateEnable`	Reference bitrate enable. "on" or "off".
Reference Bitrate	Text/Signal	`gbeInRefBitrate`	Reference bitrate value.(0~200000000)
Alarm Enable	StatusText/Signal	`gbeInAlarmEnable`	Alarm OnOff of GBE input. "on" or "off".
Protocol	Text/Signal	`gbeInProtocol`	Protocol of GBE receive. "udp" or "rtp".
--- ***Output ASI alarms: Out 1*** --- *All the following are elements related to signal output with type ASI. There are two output ports. The following is the set of alarms for **Port 1**. Subfolder: Output ASI/Out 1*			
System Bitrate	Text/Signal	`asiOut1SystemBitrate`	ASI port1 out System Bitrate
Valid Bitrate	Text/Signal	`asiOut1ValidBitrate`	ASI port1 Valid Bitrate
Stream source	Text/Signal	`asiOut1Source`	Stream source of ASI por1 out. Can be "asi", "dvb-s-s2", "ds3", "gbe", "descrambled"
alarm OnOff	Statustext/Signal	`asiOut1AlarmEnable`	ASI port1 out alarm OnOff. "on" or "off".
--- ***Output ASI alarms: Out 2*** --- *All the following are elements related to signal output with type ASI. There are two output ports. The following is the set of alarms for **Port 2**. Subfolder: Output ASI/Out 2*			
System Bitrate	Text/Signal	`asiOut2SystemBitrate`	ASI port2 out System Bitrate
Valid Bitrate	Text/Signal	`asiOut2ValidBitrate`	ASI port2 Valid Bitrate
Stream source	Text/Signal	`asiOut2Source`	Stream source of ASI por2 out. Can be "asi", "dvb-s-s2", "ds3", "gbe", "descrambled"
alarm OnOff	Statustext/Signal	`asiOut2AlarmEnable`	ASI port2 out alarm OnOff. "on" or "off".
--- ***Output IP: Global Ethernet alarms*** ---			
Ethernet Link Status	status/Signal	`gbeLinkStatus`	Link Status. Set to `NORMAL` if variable equals "Link up".

Health monitoring alarms (*Continued)*

Alarm name	Type	MIB point	Further details
Speed Duplex	Text/Signal	`gbeStatusSpeedDuplex`	Status Of Speed Duplex
--- ***Output IP: Output port 1 alarms*** ---			
System Bitrate	Text/Signal	`gbeOut1SystemBitrate`	GBE port1 out System Bitrate
Valid Bitrate	Text/Signal	`gbeOut1ValidBitrate`	GBE port1 Valid Bitrate
Stream source	Text/Signal	`gbeOut1Source`	Stream source of GBE por1 out. Can be "asi", "dvb-s-s2", "ds3", "gbe", "descrambled"
Dest IP	Text/Signal	`gbeOut1DestIP`	Dest IP of GBE port1 out.
Dest port	Text/Signal	`gbeOut1DestPort`	Destport of GBE port1 out.(0~65535)
TTL	Text/Signal	`gbeOut1TTL`	TTL Of GBE out port1 out.(1~255)
alarm OnOff	Statustext/Signal	`gbeOut1AlarmEnable`	Alarm OnOff of GBE port1 out. "on" or "off".
--- ***Output IP: Output port 2 alarms*** ---			
System Bitrate	Text/Signal	`gbeOut2SystemBitrate`	GBE port2 out System Bitrate
Valid Bitrate	Text/Signal	`gbeOut2ValidBitrate`	GBE port2 Valid Bitrate
Stream source	Text/Signal	`gbeOut2Source`	Stream source of GBE port2 out. Can be "asi", "dvb-s-s2", "ds3", "gbe", "descrambled"
Dest IP	Text/Signal	`gbeOut2DestIP`	Dest IP of GBE port2 out.
Dest port	Text/Signal	`gbeOut2DestPort`	Destport of GBE port2 out.(0~65535)
TTL	Text/Signal	`gbeOut2TTL`	TTL Of GBE out port2 out.(1~255)
alarm OnOff	Statustext/Signal	`gbeOut2AlarmEnable`	Alarm OnOff of GBE port2 out. "on" or "off".

Certain parameters may be passed to the plug-in, as follows:

Parameter	Description
`alarmPath`	Used to set the Alarm prefix. Default value: `Sumavision` Could be replaced by `IRD` so as to have legacy plug-ins tree look-like.
`pollInterval`	Poller interval in seconds. Overwrites the default interval of 20 seconds.
`retries`	If an SNMP request times out, this defines the number of retries to be performed. Default: `1`
`timeout`	Delay in seconds before declaring a timeout in the current SNMP request.
`uniqueID`	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The `uniqueID` should be part of URI.
`readCommunity`	SNMP read community string. Use for SNMP polling. Default value: `public`

(*Continued*)

Parameter	Description
`inputType`	Defines the signal input type. Value can be `DVB_S2`, `ASI` or `IP` Default value is `DVB_S2`
`outputType`	Defines the signal output type. Value can be `ASI` or `IP` Default value: `IP`
`LBandLevelThreshold`	Defines the threshold for the signal strength to be declared in alarm or OK. Default value: `-45db`

Tampa Microwave

Please see "Thales Defense & Security, Inc.", on page 73.

Tandberg Television

Please see "Ericsson", on page 19.

Tektronix

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Medius Application Manager"		`SNMP – Tektronix Medius`	`IC-TEKTRONIX-MEDIUS`
"Sentry Video Quality Monitor"		`SNMP – Tektronix Sentry`	`IC-TEKTRONIX-PROBE`
"MTM400 MPEG TS Monitor"		`SNMP – Tektronix MTM400`	`IC–SNMP–093`
"WFM 7200 Waveform Monitor"		`SNMP – Tektronix WFM 7200`	`IC–SNMP–181`
"WVR-Series Waveform Rasterizer"		`SNMP – Tektronix WVR611`	`IC-SNMP-020`
		`SNMP – Tektronix WVR7200`	

Medius Application Manager

Medius offers an advanced reporting package that used to capture detailed QoE information that quickly highlights the top offending programs and/or locations. The reporting capabilities allow each user to generate customized reports that provide as much or as little detail as required, from monthly high-level reports for executive staff to immediate notices for technicians as incidents occur.

MTM400 MPEG TS Monitor

The MTM400 is a real-time MPEG Transport Stream monitor. The MTM400 provides a complete solution for transmission monitoring of MPEG Transport Streams over RF, IP, and ASI interfaces.

Sentry Video Quality Monitor

Tektronix Sentry is a comprehensive video and audio quality monitoring solution for advanced video networks. It enables video service providers to deliver high-quality services while reducing operational expenditures.

WFM 7200 Waveform Monitor

The Tektronix WFM 7200 waveform monitor provides a wide variety of video format support and can also include support for Analog, Digital and Dolby audio formats. The monitoring and measurement capabilities of the WFM7200 provide a comprehensive suite of options and configurations to suit a variety of applications. Within a studio or on-location within a truck, match and balance up to four cameras to insure the look of the production from camera to camera, and scene to scene. For 3D Stereoscopic Monitoring, a variety of different 3D monitoring modes are available to assist you in determining the difference between the *Left Eye* and *Right Eye* views.

WVR-Series Waveform Rasterizer

The Tektronix WVR-series of waveform rasterizers help video content producers verify content quality and make precision content adjustments. In video delivery systems, they help operations staff verify content quality and system reliability, and help engineering staff qualify, install, and maintain video systems. Design and manufacturing engineers developing new video equipment use the waveform monitor for design troubleshooting, functional verification, and manufacturing test.

Terayon

Please see "Motorola", on page 48.

Thales Defense & Security, Inc.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"VC1800 Carrier Monitoring System"		SNMP – Tampa Microwave VC 1800	IC-SNMP-120

VC1800 Carrier Monitoring System

(Formerly Tampa Microwave VC1800 Carrier Monitoring System)

The VC1800 Remote Satcom Carrier Monitoring System is an integrated spectrum monitoring solution that indicates when a carrier problem occurs, and provides tools to restore the link. The VC1800 monitors parameters such as signal power, bandwidth and C/No. The system also detects when an interfering signal is present. It can automatically watch carriers and generate an audible alarm or SNMP alert.

TSL (Television Systems Ltd.)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MDU Mains Distribution Unit"		SNMP – TSL MDU12	IC-SNMP-094

MDU Mains Distribution Unit

Main Distribution Unit that provides automatic Set Top Box (STB) power cycling. Works with SC-11 Under Monitor Display System Controller. MDU-12-B provides 12-way fused mains distribution from a single input. MDU-12-3E provides remote monitoring of any number of MDUs for input and output status via an Ethernet connection. The unit can be monitored using an SNM interface.

T-VIPS

Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"TVG-Series Gateways/CP-Series Processors"	4.40	SNMP – T-VIPS TVG-Series Gateways/CP-Series Processors	IC-SNMP-195

TVG-Series Gateways/CP-Series Processors

CP505 — ATSC Processor

The CP505 ATSC Processor offers flexible ASI, SMPTE 310 and IP network adaptation and advanced Transport Stream processing in a user-friendly and compact 1RU solution.

The CP505 provides an powerful solution for adaptation of MPEG Transport Streams to ATSC broadcast and other transport stream processing applications. The CP505 is offered in two different variants.

The basic model provides format conversion between SMPTE-310M, ASI, transport stream over IP using RJ45 Electrical connections as well as SFP Optical interfaces, SDH and PDH interfaces.

The advanced model offers the basic features plus powerful PID and program filtering with PSIP rebranding and PSI/SI processing.

TVG425 — Transport Stream Gateway

The TVG425 is a transport stream gateway offering real-time contribution and distribution of compressed video over IP networks. It provides transparent handling of up to 8 independent MPEG Transport Streams (TS), flexible interfacing with support for ASI, Ethernet and SONET/SDH, as well as output diversity and input switching capabilities.

Videoframe Inc.

Ordering information

Hardware	New in iControl version	GSM plug-in name	Plug-in order number
"VF0037 GPI VNODE"		GPI VNODE	

VF0037 GPI VNODE

A VNODE™ is a small-scale signal monitoring system used where there are few monitoring points, where the monitoring points are distributed over a wide area, or where centralized monitoring is not a requirement. There are six different models.

The VF0037 GPI VNODE contains relay output GPI capability for generating local alarm responses. It can report defects to an SNMP manager, or respond to defects by setting its own GPI relays.

Wegener Communications

Ordering information

Hardware	New in iControl version	GSM plug-in name	Plug-in order number
"DTV720 Transport Stream Multiplexer"		SNMP – Wegener DTV720	IC-SNMP-097

DTV720 Transport Stream Multiplexer

The Wegener DTV720 provides multiplexing options for small cable operators, allowing them to repackage off-air 8VSB and local ASI streams into their headends.

XOR Media (formerly *SeaChange [Broadcast Division]*)

Ordering information

Hardware	New in iControl version	GSM plug-in name	Plug-in order number
"BML Servers"		SNMP – Seachange BML	IC-SNMP-011.1
"MCL Codec Servers"		SNMP – Seachange MCL	
"VOD Server"		SNMP – Seachange VOD	

BML Servers

XOR Media's Broadcast Media Library (BML)-series of servers is a high-capacity, low cost, scalable, and fault-resilient digital media library.

MCL Codec Servers

XOR Media's MediaClient 6300 (MCL 6300) is a modular and multi-format video server codec that is fully compatible with the XOR Broadcast MediaLibrary 24000ex and the12000ex systems using the latest hardware platform. With its real-time broadcast-grade software codec architecture, an MCL 6300 purchased today for standard definition (SD) services can be easily repurposed for future high definition (HD) use.

XOR Media's MediaClient 8200 is the latest in the series of broadcast-quality modular codecs that offer multi-resolution and multi-format operations, with the best channel density in the market.

VOD Server

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