

IQSDA41

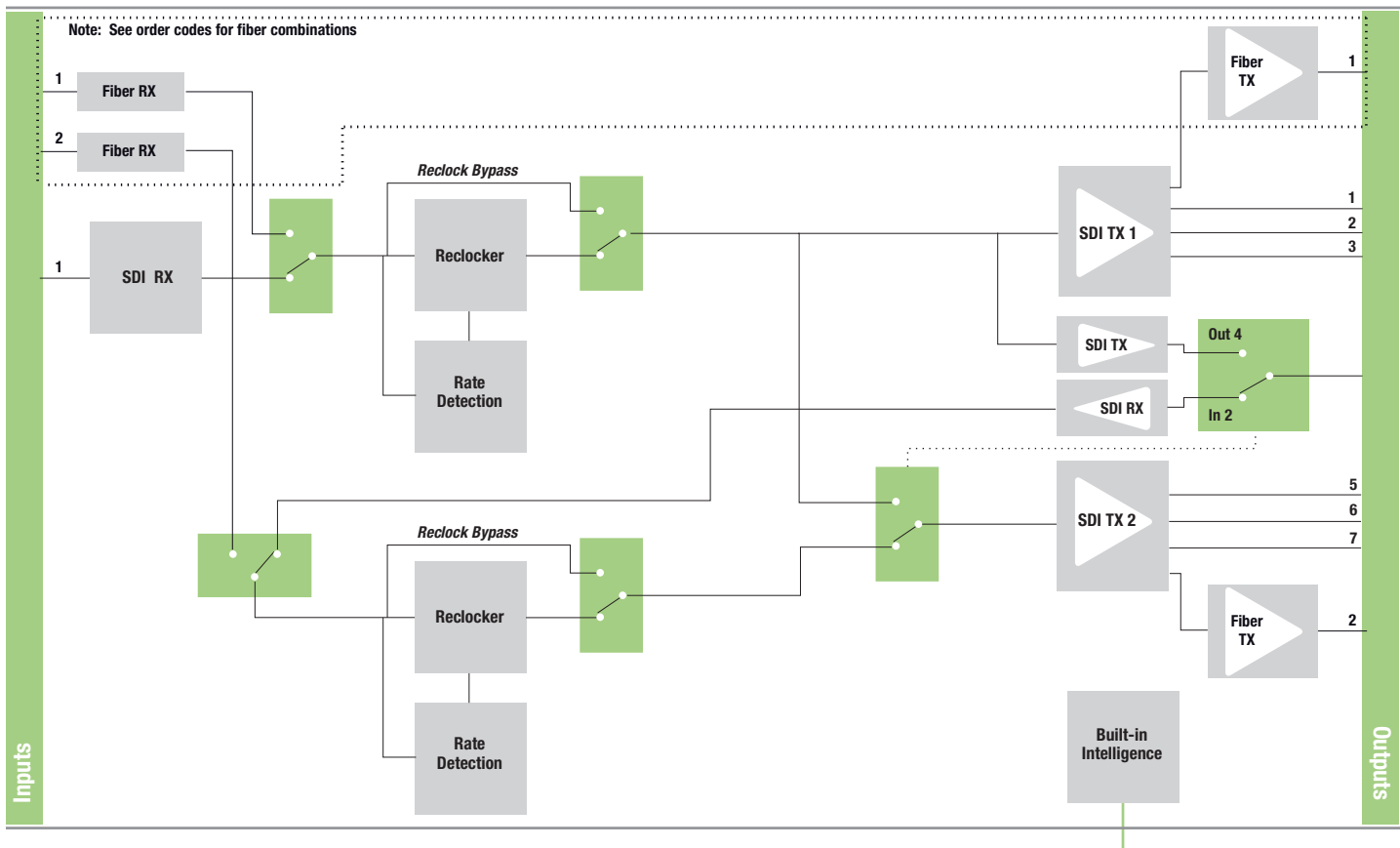
12G-SDI Reclocking Distribution Amplifier with Remote Control

Flexible configuration with fiber support that provides up to nine equalized and reclocked outputs of the input, with data rates up to 12 Gb/s for future-proof system design.

The IQSDA41 from Grass Valley is a single- or dual-channel SDI distribution amplifier for 4K UHD 12 Gb/s and 6 Gb/s, HD 3 Gb/s and 1.5 Gb/s, and SD 270 Mb/s signals providing up to nine equalized and reclocked outputs of the input in a single-width package.

Why should you choose this module?

- Space-efficient design with nine outputs of the input in single width, allowing 16 modules in 3 RU or four in 1 RU
- Useful for critical installation thanks to outstanding input equalization capability
- Operation at SMPTE ST 2082 12 Gb/s data rates allows future-proof system design
- Built-in fiber option allows increased receive and transmit distances for long reach applications



Block Diagram for IQSDA4100-1B4

Network Intelligence, Control & Monitoring

KEY FEATURES

- Intelligent 4K UHD 12 Gb/s and 6 Gb/s, HD 3 Gb/s or 1.5 Gb/s and SD-SDI reclocking distribution amplifier
- Configurable as one input to nine outputs, or two inputs with four outputs per input
- Equalizes up to 60m at 12 Gb/s, 55m at 6 Gb/s, 90m at 3 Gb/s, 175m at 270 Mb/s and 180m at 1.5 Gb/s when using Belden 1694A cable
- Standards supported:
 - 12G-SDI to SMPTE ST 2082
 - 6G-SDI to SMPTE ST 2081
 - 3G-SDI to SMPTE ST 424
 - HD-SDI to SMPTE ST 292
 - SD-SDI to SMPTE ST 259
- GV Orbit control and monitoring compatible, with standard logging and reporting features

SPECIFICATIONS

Inputs and Outputs

Signal Input

SDI input: 1/2x

Input cable length:

- Up to 60m Belden 1694A @ 12 Gb/s
- Up to 55m Belden 1694A @ 6 Gb/s
- Up to 90m Belden 1694A @ 3 Gb/s
- Up to 180m Belden 1694A @ 1.5 Gb/s
- Up to 175m Belden 1694A @ 270 Mb/s

Signal Outputs

SDI outputs: 9/4x

Controls

Indicators

Power: OK (Green)

CPU: OK (Green flashing)

Input: OK (Green), Bypass (Orange), Loss (Red)

Remote Control Functions

Configuration: 1, 2 channels

Input select:

- Auto, 12G, 6G, 3G, HD, SD
- Bypass (reclocking off)

Input status: Present, Loss/Unknown, Data Rate

Logging:

- Input Type
- Input Data Rate
- Input Present
- Input Error
- Input Loss

RollTrack controls: On/Off, Index, Source, Address, Command, Status, Sending

RollTrack outputs:

- Unused
- User Memory 1-16
- Input x OK
- Input x LOST
- Input x 12G-SDI
- Input x 6G-SDI
- Input x 3G-SDI
- Input x HD-SDI
- Input x SD-SDI
- Input x Unknown

Other Controls

User memories: Name, save and recall 16 user memories

General Specifications

Electrical:

- 12 Gb/s SDI, SMPTE ST 2082-1
- 6 Gb/s SDI, SMPTE ST 2081
- 3 Gb/s SDI, SMPTE ST 424
- 1.5 Gb/s HD-SDI, SMPTE ST 292
- 270 Mb/s SD-SDI, SMPTE ST 259

Connector/format: HD-BNC/75Ω panel jack on standard Grass Valley connector panel

Power Consumption

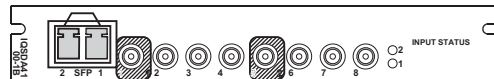
Module power consumption:

- IQSDA4100-1B4: 5.5 PR (B Frames)
- IQSDA4101-1B4: 5 PR (B Frames)

ORDERING

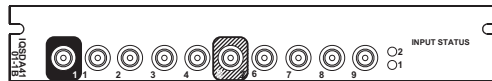
IQSDA4100-1B4

12G/6G/3G/HD/SD reclocking distribution amplifier. 1 input, 7 outputs or 2 inputs 3 outputs per input, 2 optical inputs or 2 optical outputs.



IQSDA4101-1B4

12G/6G/3G/HD/SD reclocking distribution amplifier. 1 input, 9 outputs or 2 inputs 4 outputs per input.



SFP Options

FC1-13TR-12G

Fiber transceiver 1x 12G Rx, 1x 12G Tx (1310 nm)

FC1-13T2-12G

Fiber transmitter 2x 12G Tx (1310 nm)

FC1-13R2-12G

Fiber receiver 2x 12G Rx

For more details on enclosure types please refer to the IQ Modular Enclosures datasheet.