

IQSDA42

Multichannel 12G-SDI Reclocking Distribution Amplifier with Remote Control

High-density, flexible configuration with fiber support for 4K UHD signal distribution making it ideal for long distance applications.

The IQSDA42 from Grass Valley is a configurable single-, dual- or quad-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 19 equalized and reclocked outputs of the input in a single-width package.

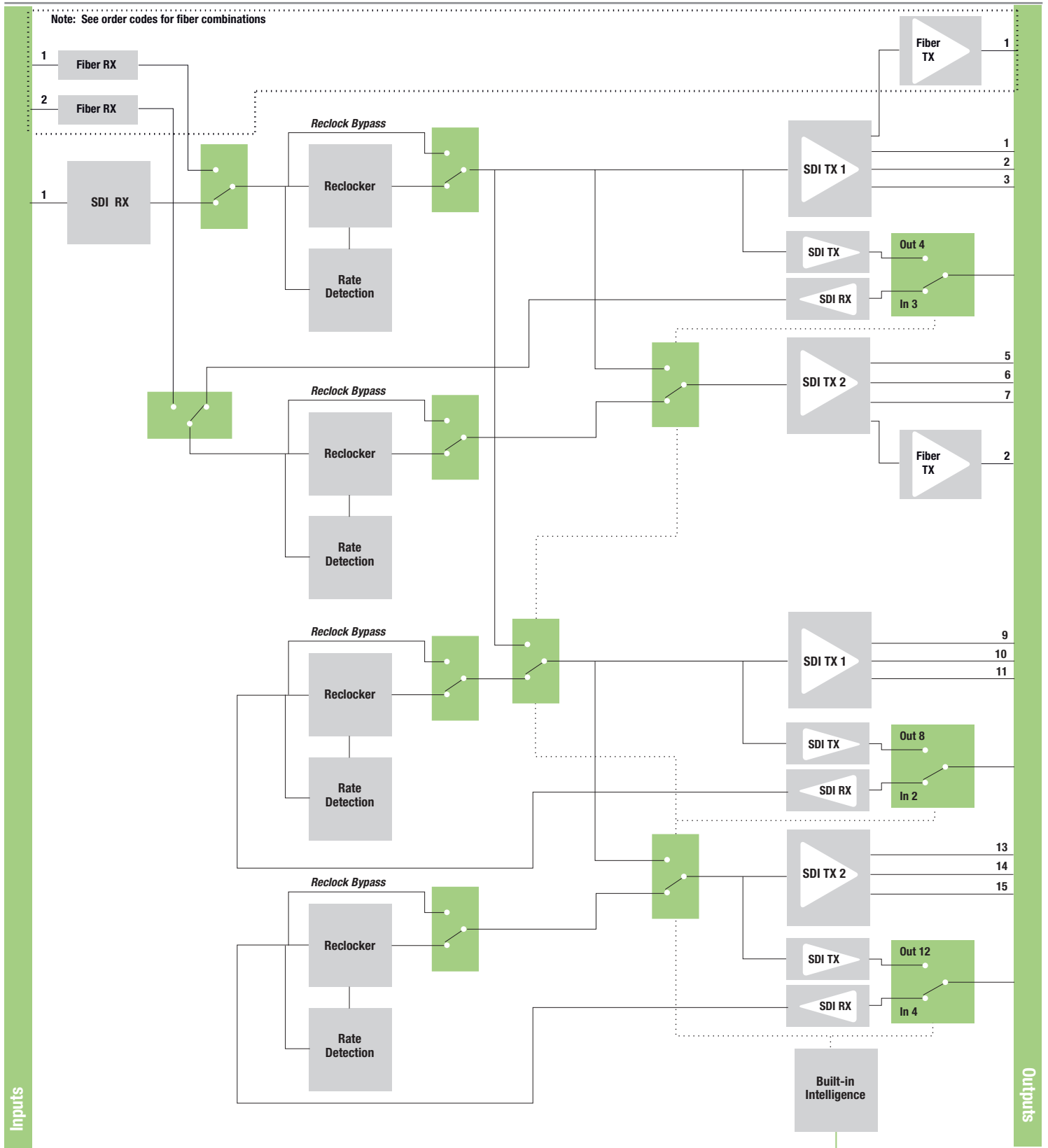
When combined with the IQH4B 4 RU IQ enclosure, IQSDA42 provides industry-leading packing density with 80 channels and 320 outputs available.

Why should you choose this module?

- Extremely space-efficient and flexible design with up to 19 outputs of a single input, or four channels of signal distribution in a single-width solution
- 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

KEY FEATURES

- Intelligent 4K UHD 12 Gb/s and 6 Gb/s, HD 3 Gb/s and 1.5 Gb/s and SD-SDI re-clocking distribution amplifier
- Configurable as one input to 19 outputs, or two inputs with nine outputs per input, or four 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



Block Diagram for IQSDA4200-1B4

Network Intelligence, Control & Monitoring

SPECIFICATIONS

Inputs and Outputs

Signal Input

SDI input: 1/2/4x

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: 19/9/4x

Controls

Indicators

- Power: OK (Green)
- CPU: OK (Green flashing)
- Input: OK (Green), Bypass (Orange)
- Loss: (Red)

Remote Control Functions

- Configuration: 1, 2, 4 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

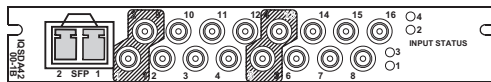
Power Consumption

- Module power consumption:
 - IQSDA4200-1B4: 9 PR (B Frames)
 - IQSDA4201-1B4: 8.5 PR (B Frames)

ORDERING

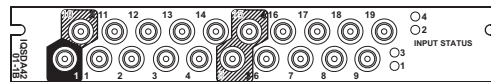
IQSDA4200-1B4

Multichannel 12G/6G/3G/HD/SD reclocking distribution amplifier. 1 input, 15 outputs, 2 inputs 7 outputs per input or 4 inputs 3 outputs per input. 1 optical input and 1 optical output.



IQSDA4201-1B4

Multichannel 12G/6G/3G/HD/SD reclocking distribution amplifier. 1 input, 19 outputs, 2 inputs 9 outputs per input or 4 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.



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