

# IQSDA41

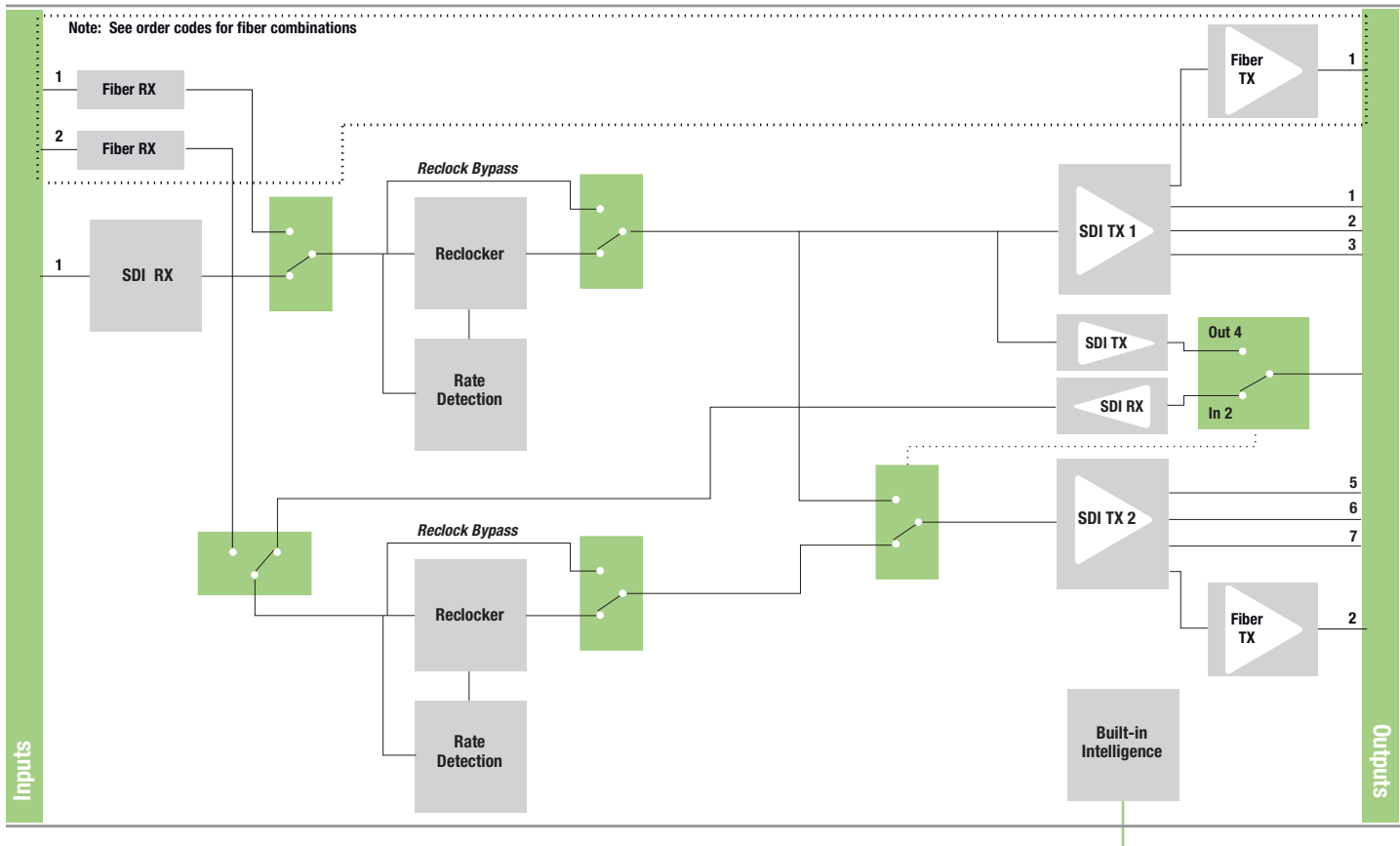
## 12G-SDI Reclocking Distribution Amplifier with RollCall

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
- RollCall monitoring allows all signal paths to be managed

## 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)

#### RollCall 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

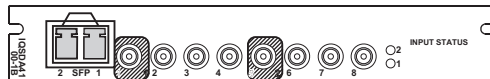
Module power consumption:

- 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.



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