

# IQORX80

## 3G/HD/SD-SDI Multichannel Fiber Receiver

Multichannel single-mode fiber optic receiver for long distance applications.

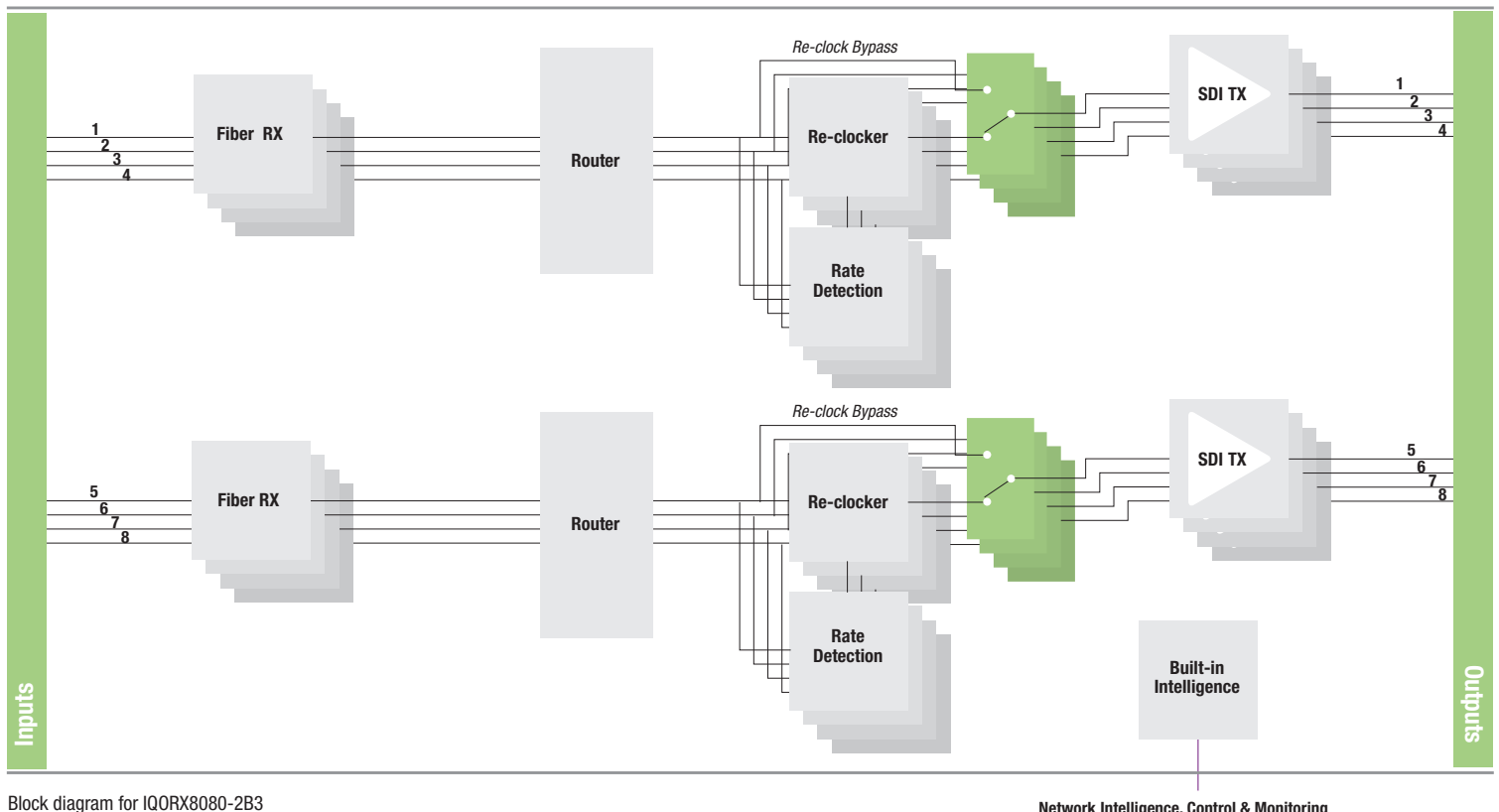
The IQORX80 from Grass Valley converts eight single-mode fiber optic signals to 3G/HD/SD-SDI signals. The unit is available in single- or dual-width versions with either HDBNC or BNC connectors with a wideband receiver suitable for CWDM applications.

### Why should you choose this module?

- Suitable for transporting 3G/HD-SDI signals over long distances either within the facility or between sites
- Lower weight and higher density compared with copper cables
- Full GV Orbit compatibility provides an all-inclusive remote configuration, control and monitoring solution
- Comprehensive SNMP support allows easy integration with third-party Network Management Systems

### KEY FEATURES

- Multichannel single-mode fiber optic receiver for 3G/HD/SD-SDI signals
- Input wavelengths from 1260 nm to 1620 nm suitable for CWDM applications



Block diagram for IQORX8080-2B3

Network Intelligence, Control & Monitoring

**SPECIFICATIONS**

**Inputs and Outputs**

**Fiber Signal Input**

Inputs: Up to 8  
 Optical: 3 Gb/s HD-SDI, 1.485 Gb/s HD-SDI or 270 Mb/s SD-SDI  
 Connector/format: LC single-mode  
 Conforms to:  
 SMPTE ST 297-2006  
 SMPTE ST 424 (HD level A/B)  
 SMPTE ST 292 (HD)  
 SMPTE ST 259-C (SD)

**Signal Outputs**

SDI outputs: 8x

**Controls**

**Indicators**

Power: OK (Green)  
 CPU: OK (Green flashing)  
 Input 1-8: 3G-OK (Blue), HD-OK (Green), SD-OK (Yellow), Bypass (Rate color flashing), Loss (Red)

**Video Controls**

Input 1 - 8 rate select: 3G, HD, SD, other  
 Reclock bypass: On/Off  
 Output 1-4 select: Input 1-4  
 Output 5-8 select: Input 5-8  
 Output mute: On/Off  
 Output mute on I/P error: On/Off  
 Input 1-4 configuration: 1, 2  
 Input 5-8 configuration: 1, 2  
 Configuration rules:  
 Primary Input OK  
 Primary Input Error  
 Secondary Input Error

**Mode:**

Use Config 1  
 Use Config 2  
 Use Rules  
 Delay for rules actions:  
 OK Timer 0-5s  
 Error Timer 0-5s

Input status: Present, Loss, Unknown, Data Rate

**Logging:**

Input 1-8 Identifier  
 Input 1-8 Name  
 Input 1-8 Type  
 Input 1-8 Data Rate  
 Input 1-8 Present  
 Input 1-8 Error  
 Input 1-8 Loss

**Optical logging:**

Input 1-8 Rx Power High Warning  
 Input 1-8 Rx Power Low Warning  
 Input 1-8 Rx Power Measurement  
 Input SFP 1-8 State

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

**RollTrack sources:**

Unused  
 Input 1-8 Present  
 Input 1-8 Rate Unknown  
 Input 1-8 Error  
 Input 1-8 Loss  
 Input 1-8 3G  
 Input 1-8 HD  
 Input 1-8 SD  
 Input 1-8 Rx Power High Warning  
 Input 1-8 Rx Power Low Warning

**Other Controls**

User memories: Name, save and recall 16 user memories

**General Specifications**

**Electrical:**

3 Gb/s SDI, SMPTE ST 424  
 1.5 Gb/s HD-SDI, SMPTE ST 292  
 270 Mb/s SDI, SMPTE ST 259-C / DVB-ASI  
 Connector/format: BNC/75Ω panel jack on standard Grass Valley connector panel

**Return loss:**

>-15 dB (270 Mb/s, 1.5 Gb/s)  
 >-10 dB (3 Gb/s)

**Output jitter:**

SD-SDI 0.2 UI (10 Hz) / 0.2 UI (1 kHz)  
 3G/HD-SDI 1.0 UI (10 Hz) / 0.2 UI (100 kHz)

**Optical Rx**

Input wavelength range: Min. 1260 nm, Max. 1620 nm  
 Input sensitivity: -21 dBm  
 Optical power input range: > -0 dBm, < -20 dBm  
 Optical return loss: -27 dB  
 Link distance:  
 Up to 30 km @ 270 Mb/s  
 Up to 21 km @ 1.5 Gb/s  
 Up to 10 km @ 3 Gb/s

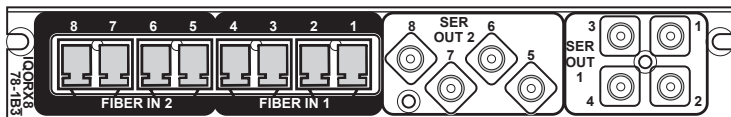
**Power Consumption**

Module power consumption: 7.5 PR (B Frames)

**ORDERING**

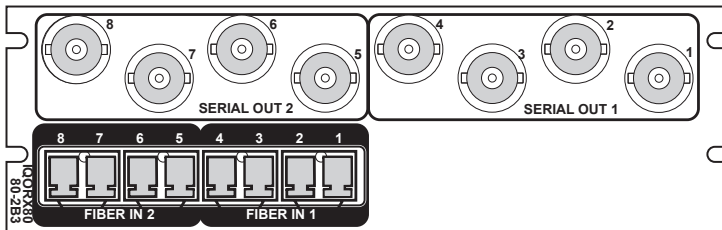
**IQORX8079-1B3**

3G/HD/SD-SDI multichannel fiber receiver. 8x optical inputs, 8x 3G/HD/SD-SDI outputs (HD-BNC).



**IQORX8080-2B3**

3G/HD/SD-SDI multichannel fiber receiver. 8x optical inputs, 8x 3G/HD/SD-SDI outputs (BNC).



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



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