

The IQOTX30 is a single mode fiber optic transmitter for 3G/HD/SD-SDI signals. The unit is available in 1310 or 1550 nm wavelengths, and single or dual channel versions handling up to two 3G/HD/SD-SDI sources. Single channel versions have additional flexibility with one or two optical outputs and four re-clocked electrical outputs. Suitable for applications where 3G/HD-SDI signals need to be transported over long distances within a facility or between sites, optical links remove the distance constraints of copper cabling at high frequency data rates such as 3Gbit/s.

IQOTX30-35

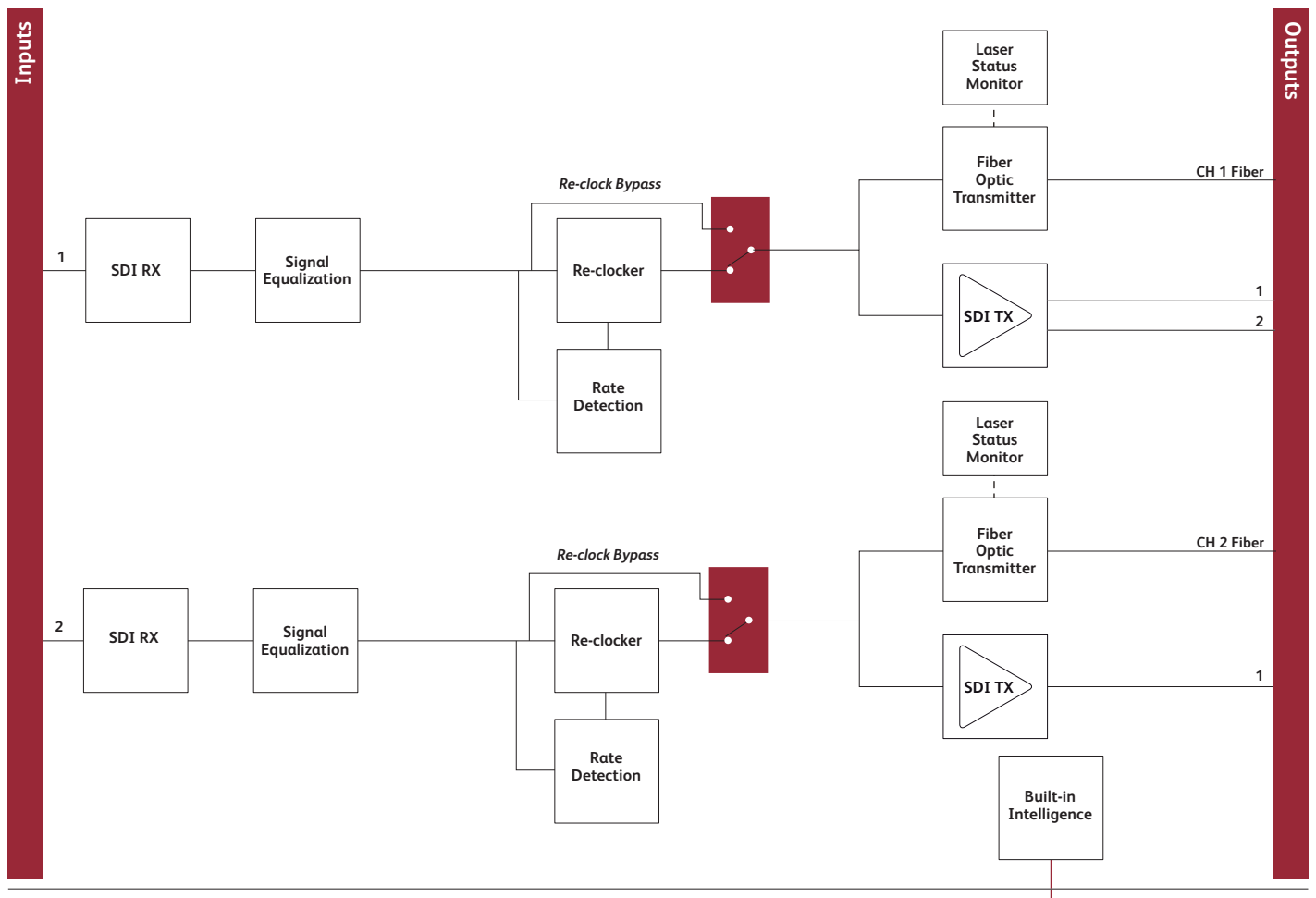
Single Mode Fiber Optic Transmitter for 3G/HD/SD-SDI Signals

Does this module suit your application?

- Single mode fiber optic Transmitter for 3G/HD/SD-SDI and DVB ASI Signals
- Output wavelengths of 1310 nm and 1550 nm available
- Active loop-through 3G/HD/SD-SDI outputs for each input in accordance with SMPTE424M, SMPTE292M, SMPTE259M and DVB ASI
- Re-clocking for 3 Gbit/s, 1.5 Gbit/s HD-SDI and 270 Mbit/s SDI signals, or asynchronous operation for other frequencies (input range 50 Mbit/s to 3 Gbit/s)
- Single or dual channel versions available

Why should you choose this module?

- Suitable for transporting 3G/HD-SDI signals over long distances either within the facility or between sites
- Freedom from electromagnetic interference
- Freedom from crosstalk
- Complete electrical isolation
- Absence of ground loops
- Increased bandwidth and lower losses than coaxial cables
- Lower weight and higher density compared with copper cables



Block Diagram for IQOTX3033-1A

Order codes for IQH3A/1A enclosures

IQOTX3033-1A(3)

Dual Channel 1310 nm Single mode fiber optic transmitter for (3G)HD/SD-SDI. 2 x (3G)HD/SD-SDI inputs, 1 x 2, 1 x 1 HD/SD-SDI outputs, 1 x optical output per channel.

IQOTX30-3G

Upgrade for IQOTX30 HD/SD-SDI Dual Channel Single mode fiber optic transmitter to operate with 3Gbps signals.

IQOTX3433-1A(3)

Dual Channel 1550 nm Single mode fiber optic transmitter for (3G)HD/SD-SDI. 2 x (3G)HD/SD-SDI inputs, 1 x 2, 1 x 1 HD/SD-SDI outputs, 1 x optical output per channel.

IQOTX34-3G

Upgrade for IQOTX34 HD/SD-SDI Dual Channel Single mode fiber optic transmitter to operate with 3Gbps signals.

IQOTX3133-1A(3)

1310 nm Single mode fiber optic transmitter for (3G)HD/SD-SDI. 1 x (3G)HD/SD-SDI input, 4 x (3G)HD/SD-SDI outputs, 2 x optical output.

IQOTX31-3G

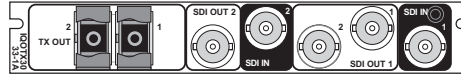
Upgrade for IQOTX31 Single mode fiber optic transmitter to operate with 3Gbps signals.

IQOTX3257-1A(3)

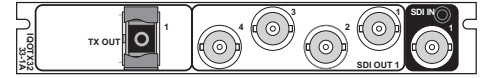
1310 nm Single mode fiber optic transmitter for (3G)HD/SD-SDI. 1 x (3G)HD/SD-SDI input, 4 x (3G)HD/SD-SDI outputs, 1 x optical output.

IQOTX32-3G

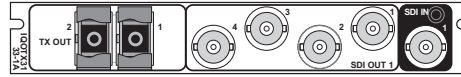
Upgrade for IQOTX32 Single mode fiber optic transmitter to operate with 3Gbps signals.



IQOTX3033-1A, IQOTX3033-1A3, IQOTX3433-1A,
IQOTX3433-1A3



IQOTX3257-1A, IQOTX3257-1A3, IQOTX3557-1A,
IQOTX3557-1A3



IQOTX3133-1A, IQOTX3133-1A3, IQOTX3333-1A,

Technical Specification

Inputs and Outputs

Signal Inputs

Electrical	3 GBit/s HD-SDI, 1.485 GBit/s HD-SDI or 270 Mbit/s SD-SDI (asynchronous operation available at other frequencies)
Connector / format	BNC / 75 ohm panel jack
Conforms to:	SMPTE 424M (HD level A) SMPTE 292M (HD) SMPTE 259M-C (SD)
Inputs	Up to 2
Input cable length	Up to 80m Belden 1694A @ 3 Gbit/s Up to 180m Belden 1694A @ 1.5 Gbit/s Up to 350m Belden 1694A @ 270 Mbit/s

Signal Outputs

Optical	3 GBit/s HD-SDI, 1.485 Gbit/s HD-SDI or 270 Mbit/s SD-SDI (asynchronous operation available at other frequencies)
Connector / format	SC/PC singlemode panel uniter
Conforms to	SMPTE 297-2006
Outputs	1 per Channel
Electrical	3 GBit/s HD-SDI, 1.485Gbit/s HD-SDI or 270 Mbit/s SD-SDI (asynchronous operation available at other frequencies)
Connector / format	BNC / 75 ohm panel jack (Reclocked active loop through)
Outputs	2 reclocked active loop through for CH1 SDI Input 1 reclocked active loop through for CH2 SDI Input
Conforms to	SMPTE 424M (HD level A) SMPTE 292M (HD) SMPTE 259M-C (SD)

Controls

Functions Available via RollCall Only

Mode	Auto, 3G, HD, SD
Re-clocker	On/Off
Laser disable	On/Off

Logging

Input 1 (2) Type	Input 1 (2) Data Rate
Input 1 (2) Present	Input 1 (2) Error
Input 1 (2) Loss	Input 1 (2) Tx Laser Bias High Warning
Input 1 (2) Tx Power Low	Warning
Input 1 (2) Tx Power High	Warning
Input 1 (2) Laser Wavelength	On/Off, Index, Source, Address, Command, Status, Sending
RollTrack controls	Unused
RollTrack outputs	Input 1 (2) Present
	Input 1 (2) Rate Unknown
	Input 1 (2) Loss
	Input 1(2) 3G
	Input 1(2) HD
	Input 1(2) SD
	Input 1 (2) Tx Laser Bias High Warning

Indicators

Power	OK (Green)
CPU	OK (Green flashing)
Input 1 (2)	OK (Green), Bypass (Orange), Loss (Red)

Specifications

1310 nm Tx

Wavelength	1310 nm
Spectral width (FWHM)	>1.5 nm (typ)
Output power	-2 dBm (±1 dBm)
Extinction ratio	>7.5:1 (typ)
Transmission distance	Up to 30 Km max

1550 nm Tx

Wavelength	1550 nm
Spectral width (FWHM)	>1 nm (typ)
Output power	4 dBm max
Extinction ratio	>7.5:1 (typ)
Transmission distance	Up to 50 Km max

Power Consumption

Module power consumption	Single Tx 3.5W max Dual Tx 3.5W max
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Order codes for IQH3A/1A enclosures cont...

IQOTX3333-1A(3)

1550 nm Single mode fiber optic transmitter for (3G)HD/SD-SDI. 1 x (3G)HD/SD-SDI input, 4 x (3G)HD/SD-SDI outputs, 2 x optical output.

IQOTX33-3G

Upgrade for IQOTX33 Single mode fiber optic transmitter to operate with 3Gbps signals.

IQOTX3557-1A(3)

1550 nm Single mode fiber optic transmitter for (3G)HD/SD-SDI. 1 x (3G)HD/SD-SDI input, 4 x (3G)HD/SD-SDI outputs, 1 x optical output.

IQOTX35-3G

Upgrade for IQOTX35 Single mode fiber optic transmitter to operate with 3Gbps signals.

For more details on enclosure types please refer to datasheet IQH3A.

Company policy is one of continuous product improvement. Specifications are therefore provisional and subject to change without notice. All other trademarks mentioned herein are duly acknowledged.

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