

STANDALONE transmissions over optical fiber



The X-RACER series composes of a range of useful handheld transmission units designed for the broadcast environment. Each module integrates its own mains power supply and is available with optional standard SMPTE connector.

Standard models are:

- Bidirectionnal 3G / HD / SD + 100 Mb/s Ethernet over 2 optical fibers with SC/APC connectors.
- Bidirectionnal 3G / HD / SD over 1 fiber with SC/APC connector.
- Bidirectionnal MAD1 media converter over 2 optical fibers with SC/PC connector.

Each module is fitted with signal presence LED and alarms LED to ease on field troubleshooting. The aluminium case offers a thermal operating range of -20°C to +60°C.

Each 3G / HD / SD optical receiver performs reclocking on the received signal, each transmitter has a built in cable equalizer.

Ethernet transmission is fitted around a built in Ethernet switch allowing different network settings at each end of the transmission and performs automatic crossover for straight or crossed cables.

The size of the enclosure (42*86*150mm) offer the possibility to install it horizontally on a 1RU tray or vertically on a 2RU tray.

Depending model, numerous options are available such as multiple SDI outputs per module, low voltage redundant power supply input on XLR4 or SMPTE cable Neutrik / LEMO connector instead of the SC type.



X-RACER: PART NUMBERING

SDI Unidirectionnal	
XR-1HD-T31-option	Single 1310nm transmitter -3Dbm. SC/APC connector.
XR-2HD-T31-option	Dual 1310nm transmitter -3Dbm. SC/APC connector.
XR-1HD-R-option	Single Wideband 1270-1610nm receiver 1 output per signal. SC/APC connector.
XR-2HD-R-option	Dual Wideband 1270-1610nm receiver 1 output per signal. SC/APC connector.
SDI Bidirectionnal	
XR-1HD-B31-option	Single bidi 1310nm transmitter -3Dbm, 1550nm receiver 1 output per signal. SC/APC connector.
XR-1HD-B55-option	Single bidi 1550nm transmitter -3Dbm, 1310nm receiver 1 output per signal. SC/APC connector.
XR-2HD-B31-option	Dual bidi 1310nm transmitter -3Dbm, 1550nm receiver 1 output per signal. SC/APC connector.
XR-2HD-B55-option	Dual bidi 1550nm transmitter -3Dbm, 1310nm receiver 1 output per signal. SC/APC connector.
SDI bi-di + Ethernet	
XR-HDE-B31-option	Bidi 1310 nm SDI transceiver, 1 output per signal + 1310nm Ethernet transmitter. SC/APC connector.
XR-HDE-B55-option	Bidi 1550 nm SDI transceiver, 1 output per signal + 1550nm Ethernet transmitter. SC/APC connector.
MADI	
XR-MAD-TR31-option	MADI media converter over 2 optical fibers 1310nm transmitter / 1310nm receiver. SC/PC connector.

-option	
-XLR4	8-20 Volts low power input (redundant with mains input).
-EDW	Lemo EDW connector fitted instead of the SC type connectors.
-FXW	Lemo FXW connector fitted instead of the SC type connectors.
-NC2	Neutrik DUO connector fitted instead of the SC type connectors.
-NC4	Neutrik QUAD connector fitted + 2 free fiber out on the SC/APC front panel connectors.
-3O	Triple SDI output option on a module with a SDI receiver.

Note: All option will not fit on every models, all options may not be cumulative, please ask ERECA or our reselling network for more details.

X-RACER: TECHNICAL SPECIFICATIONS

Optical	
Dynamic range:	15dB as a standard, ask for availability of powerfull laser sources.
Connector:	SC/APC in standard (MADI is standard in SC/PC), LEMO / Neutrik.
Video SD/HD	
Connector:	3G certified BNC.
Impedance:	75 Ω.
Standard:	SDI, ASI, HD, 3G (built in reclocker).
Amplitude:	Input: cable equalization (80 m Belden 1694A for 3G), Output: 800 mV pp.
Return loss:	Better than - 15 dB for 0 to 1500 MHz and better than - 10 dB for 1500 to 3000 MHz.
Ethernet	
Connector:	RJ45 Socket.
Protocols:	10 or 100 Mb/s, Full or Half-duplex (Auto), MDI or MDI-X (Auto).
Siganlling	
Transmitted signals:	
Transmitted signals:	1 LED per signal.
Alarms	1 LED per technical alarm (Power supply / Fiber alarm / Link loss).
Powering	
Consumption:	3.8 Watts maximum for the dual SDI bidi module.
Low voltage source:	8 to 20 VDC, XLR 4 pins connector, protected by internal resettable fuse.
Mains source:	From 90 to 260 VAC / 47 to 63 Hz, IEC 3 pins standard connector, internal PCB fuse.
Mechanical	
Material:	Body: extruded aluminium blue anodized, Fascia: Stainless steel.
Size:	42*86*150mm excluding connector.
Tray support	Lateral guides to clamp or slide M3 screw head / square nut.
Operating temperature	From -20 to + 60°C. (Avoiding direct sun exposition).

ERECA reserve the right to change specifications without notice.