

HubBox HB-R20

Single Channel 3G-/HD-/SD-SDI Optical Receiver for SMPTE 297-2006 Video applications

Data Sheet



Description

Single Optical Fiber to SDI converter supports 3G-/HD-/SD-SDI and DVB/ASI. Support data rates from 50Mbps to 3Gbps.

It is housed in an extremely compact and rugged aluminium case ideally suited to both studio and portable applications.

The HubBox is perfect for using with the miniHUB system where one or two signals are required remotely.

Part Number Options

Part Number	Temperature
HB-R20	0°C to +40°C

Features

- Multi-rate reclocking with automatic rate detection and automatic bypass for non SDI data rates
- LEDs display power and SDI lock status
- Locking DC jack
- Optical output on LC/PC connector
- Provides reclocked SDI outputs
- PIN receiver technology
- Excellent performance with SDI-Checkfield test signal at SD-, HD- and 3G-SDI
- Use in conjunction with another HB-T1310 or the miniHUB system for a complete fibre transmit/receive system

Absolute Maximum Ratings

Absolute maximum ratings are those values beyond which functional performance is not intended, device reliability is not implied, and damage to the device may occur.

Parameter	Minimum	Maximum	Unit
Storage temperature (non-operating)	-40	+85	°C
Relative Humidity (non-condensing)	5	80	%

General Operating Conditions

Parameter	Minimum	Typical	Maximum	Unit
Operating temperature	0		+40	°C
Supply voltage (Vcc)	6		12	V
Dimensions	63.5mm x 84mm x 30mm (excluding connectors)			
Weight	145g			

Electrical Characteristics

Parameter	Minimum	Typical	Maximum	Unit
Supported standards:				
• SMPTE	292M-2008, 259M-2008, 297M-2006, 424M-2006			
• DVBASI	EN50083-9			
• Laser safety	Class 1 21CFR and IEC60825-1			
Number of outputs	1			
Output signal level	800mVp-p ±10%			
Connectors	BNC			
Impedance	75ohm			
Return loss	≥15 dB [5-1485 MHz], ≥10dB [1485-2970MHz]			
LED Indicators	Power and SDI lock			
Data rate	50		3000	Mbps

Receiver Optical Characteristics

Parameter	Minimum	Typical	Maximum	Unit
Transmitting circuit fiber	Single Mode (9/125µm), Multi Mode compatible			
Receiver technology	PIN			
Optical input overload power	-3			dBm
Optical receiver sensitivity @ 3Gbps (3G-SDI Checkfield, BER = 10 ⁻¹² , TX _{EXT} ≥ 7dB)		-19	-17	dBm
Optical receiver sensitivity @ 1.5Gbps (HD-SDI Checkfield, BER = 10 ⁻¹² , TX _{EXT} ≥ 7dB)		-19	-17	dBm
Optical receiving window	1260		1620	nm

Norwia AS
Kilgata 12
3217 Sandefjord
Norway

Contact:
phone: +47 33 45 20 90
e-mail: info@norwia.no
web: norwia.com

