



OxBox Micro-1323 HDTV Single Mode Fibre Optic Receivers and Transmitters



Key Features

- Optical conversion to HDTV
- Short, medium and long haul versions
- Small inline unit
- Fits on BNC connector
- 1310nm to 1550nm input
- Ideal for inexpensive optical interfacing

The neat low cost OxBox Micro-1323R HDTV Single Mode Fibre Optic Receiver module and Micro-1323T HDTV Single Mode Fibre Optic Transmitter module are ideal for adding optical and electrical connection to equipment and networks. Just slightly bigger than a pen, it does not require rack space, since it simply fits onto a BNC connector of any piece of digital video equipment. These modules are suitable for sending Serial Digital Video signals over Single mode Fibre Optic Cable and may be specified accordingly at time of order. Amongst many uses it is ideal for Routing Switcher upgrades where a cost effective means of converting to Fibre Optics is required and rack space is at a premium.

OxBox Micro Series 1323R

The OxBox Micro Series 1323R is a high quality, versatile, low cost multi mode HDTV/SDI Fibre Optic Receiver which is designed for receiving signals from fibre networks. It uses the latest VCSEL (Vertical Cavity Surface Emitting Laser) technology with infrared 1310nm wavelength, giving a circular laser beam with low divergence angle and low threshold current. It is fitted as standard, with a ST type fibre connector on the input and provides HD SDI or standard SDI on a BNC connector at the output. Please enquire if other optical connector required. The respective output standard is determined automatically by sensing the input signal and driving the output to that same standard, HDSDI or standard SDI. A red LED on the end of the unit will light to indicate that power is present to the unit but the input signal is invalid or out of range.

OxBox Micro Series 1323TS

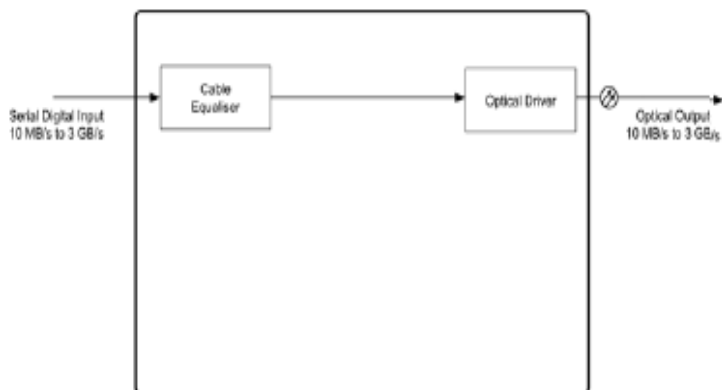
This OxBox Micro Series 1323TS is a high quality, versatile, low cost multi mode HDTV/SDI Fibre Optic transmitter which is designed for transmitting signals from fibre networks. It uses the latest VCSEL (Vertical Cavity Surface Emitting Laser) technology with infrared 1310nm wavelength, giving a circular laser beam with low divergence angle and low threshold current. It is fitted as standard, with a ST type fibre connector on the output and provides HD SDI or standard SDI on a BNC connector at the input. Please enquire if other optical connector required. The respective output standard is determined automatically by sensing the input signal and driving the output to that same standard, HDSDI or standard SDI. A red LED on the end of the unit will light to indicate that power is present to the unit and the input signal is invalid or out of range.



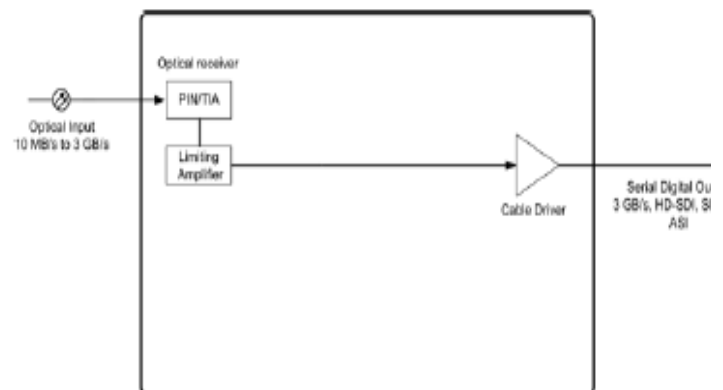
OxBox Micro-1323 HDTV Single Mode Fibre Optic Receivers and Transmitters

If multiple optical connections are required Oxygen DCT has a range of small Eurocard format dual channel optical converter cards for use in a compact box format or 3RU rack with dual power supplies which are most suited to high density installations. Oxygen DCT's fibre equipment is used in broadcast studios, stadiums, mobile flyaways, outside broadcast vehicles, fibre networks and professional communications applications. Please enquire for more details or visit the fibre section at www.oxygendct.com

Schematic Diagram 1323T



Schematic Diagram 1323R





OxBox Micro-1323 HDTV Single Mode Fibre Optic Receivers and Transmitters

Specification

General	
Max radius	25mm
Height	80mm (inc. connectors)
Weight	80g
Operating Temperature	-30 C to + 70 C
Power Supply	2.2W
Signal Detect	LED for power and loss of signal
Electrical input (1323T)	
Standards	SMPTE 292M, 259M, 297M, 305M, 310M, DVB-ASI,
Equalisation	Automatic to 50m @3Gb/s, Automatic to 100m @ 1.485Gb/s, Automatic to 300m @ 270Mb/s
Connector	75 Ohm BNC per IEC 60169-8 amendment 2
Return loss	>15dB @ 1.485Gb/s
Optical Output (1323T)	
Connector*	1 x female FC/PC, ST or SC, see ordering information
Wavelength	850nm, 1310nm, -14 dBm @ 850nm
Optical power	-6 dBm @ 1310nm
Optical Input (1323R)	
Optical Wavelength	1200 - 1610nm, see ordering info for variants
Optical Connectors	1 x female FC/PC, ST or SC, see ordering information
Max I/P Power	>-1dBm
Data Rate	10 Mb/s 10 1.485 Gb/s
Sensitivity	>-25dBm @ 1.485Mb/s > -30dBm @270 Mb/sl
Electrical Output (1323R)	
Connector	75Ohm BNC per IEC 60169-8 amendment 2
Return loss	>15 dB @ 1.485 Gb/s
Polarity	Non inverting
Signal level	800mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.2 UI line equalised
Conformance	
EMI/RFI	Complies with 89/336/EEC
Electrical	Complies with EN 61000-6-1, EN61000-6-2
Laser Safety	Complies with Class 1 laser product 24 CFR 1040.10 & 1040.11
RoHS	Complies with directive 2002/95/EC
Warranty	5 Years

Ordering Information

OxBox Micro-1323R/S HDTV/SDI Single Mode single channel Fibre Optic Receiver, Auto-sensing SDI,ASI,HD/SDI.

Fitted with FC connector.

OxBox Micro-1323R/M HDTV/SDI Multi Mode single channel Fibre Optic Receiver, Auto-sensing SDI,ASI,HD/SDI.

Fitted with SC connector.

OxBox Micro-1323T/S HDTV/SDI Single Mode Fibre Optic Transmitter (1310nm), Auto-sensing SDI,ASI,HD/SDI.

Fitted with FC connector.

OxBox Micro-1323T/M HDTV/SDI Multi Mode Single channel Fibre Optic Transmitter (850nm), Auto-sensing SDI,ASI,HD/SDI.

Fitted with SC connector

The above information is subject to continual change due to product development.
Oxygen DCT2009. E & OE.