

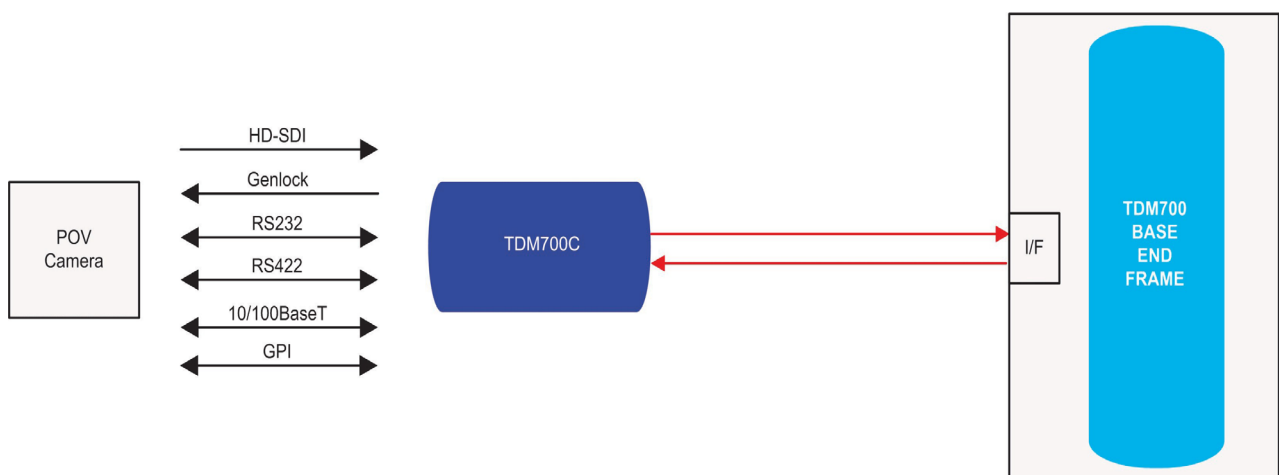
BC Series Modular Fibre Optic Interface System



Description:

- Compact and rugged optical link system for connecting remote POV cameras to OB vans or control rooms
- Supports HD/SD-SDI video from the camera and a reverse composite video feed for genlock or monitoring
- Provides bi-directional RS232 and RS422 data channels for full POV camera control
- Includes a 10/100 BaseT Ethernet link for IP device control and a GPI path for tally light operation
- All signals are multiplexed and transmitted over two fibres for simple setup and deployment
- TDM-700CE camera unit housed in a compact aluminium enclosure with connector options for studio or OB use
- TDM-700B base unit fits in a single slot of a Bluebell 19" rack frame for centralised camera integration
- Also available in BC Series card format for studio or flyaway systems, ideal for linking remote video servers to controllers
- Available in multimode, singlemode, WDM, and CWDM variants to suit any fibre application

TDM-700 Schematic Diagram:



Specifications

General TDM-700B/LC card specifications

Depth	60 mm
Width	20 mm 4TE
Height	129mm (3RU)
Weight	100 g
Operating Temperature	-30 to +70 °C
Power	6 W
Signal Detect	LED on for loss of signal
No. of slots	1

General TDM-700CE/NOC and /L3K specifications

Depth	160 mm
Width	120 mm
Height	45 mm
Weight	200 g
Operating Temperature	-30 to +70 °C

General TDM-700B/LC card specifications

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

Optical Input/Output

Wavelength	850 nm, 1310 nm, 1550 nm,
Optical Power	-2 dBm @1310 nm (typical) -2 dBm @1510 nm (typical) -0 dBm @CWDM (typical)
Sensitivity	> -26.0 dBm @ 270 Mb/s

Electrical HD/SD Input

Connector	75 Ohm BNC per IEC 60169-8 Amendment 2
Standards	SMPTE 292M, SMPTE 259M, SMPTE 297M
Equalisation	Automatic to 200 m @ 1.485 Gb/s Automatic to 300 m @ 270 Mb/s
Return Loss	> 15 dB @ 1.485 Gb/s

Electrical HD/SD Output

Connector	75 Ohm BNC per IEC 60169-8 Amendment 2
Return Loss	> 15 dB @ 1.485 Gb/s
Polarity	Non-Inverting
Signal Level	800 mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.15 UI line equalised

Electrical Genlock Video Input and Output

Standards	Composite 1V pk-pk PAL, NTSC, SECAM Bi-Level, Tri-Level syncs
Connector	75 Ohm BNC
Diff. Phase	< 1°
Diff. Gain	< 1% (at sub-carrier 3.58/4.43 MHz)

Ethernet Input/Output

Connector	RJ45
Format	Full duplex 100Base-FX Data Transmission with 1-/100 MB/s half/full duplex auto-negotiation

Data Input/Output

Connector	D Sub
Format	1 x bidirectional RS232, 1 x bidirectional RS422 1 x bidirectional GPI

Ordering Information

TDM-700CE/xx	Remote end singlemode HD-SDI transmitter, Genlock receiver with bidirectional 232/422 Data and 10/100 BaseT on 2 fibres. Supplied in rugged aluminium enclosure fitted with 4 pin XLR for power.
TDM-700BE/xx	Base end singlemode HD-SDI receiver, Genlock transmitter with bidirectional 232/422 Data and 10/100 BaseT on 2 fibres. Supplied in rugged aluminium enclosure fitted with 4 pin XLR for power.
Key /XX	Use /L3K Lemo 3K Series SMPTE Hybrid Connector ¹ Use /NOC Neutrik OpticalCON DUO Hybrid Connector ¹ Use /LC Standard LC connectors provided via SFP module For alternate hybrid connectors please contact the Sales Office.
TDM-700C/LC	Remote end singlemode HD-SDI transmitter card, Genlock receiver with bidirectional 232/422 Data and 10/100 BaseT on 2 fibres. Fitted with LC connectors as standard. Fits into standard Bluebell BC Series frames.
TDM-700B/LC	Base end singlemode HD-SDI receiver card, Genlock transmitter with bidirectional 232/422 Data and 10/100 BaseT on 2 fibres. Fitted with LC connectors as standard. Fits into standard Bluebell BC Series frames.

Bluebell Opticom Limited,
Unit 2 The Quadrant,
Howarth Rd,
Maidenhead,
Berks,
SL6 1AP, UK
Tel: +44 (0) 1628 510055,
Email: sales@bluebell.tv
Website:www.bluebell.tv

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