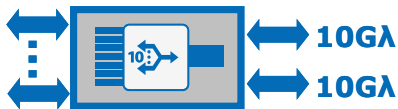


# 10-PORT MULTIPROTOCOL MUXPONDER

## BTI 7000 SERIES PACKET OPTICAL EDGE CLIENT INTERFACE MODULE

### PRODUCT OVERVIEW

The BTI 7000 Series 10-port Multiprotocol Muxponder provides high interface density for multiplexing a wide range of protocols used in today's enterprise and service provider networks onto a protected 10 Gbps wavelength. Innovative ring functionality converges distributed add/drop with the WDM layer and provides sub-50ms OTN protection switching. This double-wide module is supported across the BTI 7000 Series product family in both the 7060 and 7030.



### KEY FEATURES

- Multiprotocol support & SFP/XFP flexibility
- 10 multi-protocol capable client ports onto protected 10 Gbps line
- Distributed ring add/drop capabilities
- Extended temperature for outside plant applications
- Support for GE, OC-48, STM-16, Fiber Channel, FICON

### APPLICATIONS

#### SONET/SDH Aggregation & Interconnect

Converge up to four SONET/SDH carriers onto a single 10G wavelength with optional line protection for aggregation of wholesale and service-oriented OC-48 or STM-16 private line and ring services.

#### Data Center Storage Extension

High density fan-in of client ports support 1/2/4 Gbps Fibre Channel and Gigabit Ethernet for key data center applications including Storage Area Network (SAN) extension and Business Continuity / Disaster Recovery plus Network Attached Storage (NAS) interconnect.

#### Multi Service Ring Solutions

Combining both SONET/SDH and data capabilities with the innovative ring capabilities provides managed ring services or private build multi site connectivity solutions for converging voice, data, storage, and legacy ring connectivity onto a single high-capacity wavelength.

#### Transparent Network Interconnect

SONET OC-192, SDH STM-64 and ITU G.709 OTN encapsulation capabilities allow for standards-based (SONET/SDH or OTN) wavelength interoperability with service provider's existing core network.



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## TECHNICAL INFORMATION

<b>Module Size</b>	Double-wide Slot
<b>Supported Chassis</b>	BTI 7000 Series (7060, 7030)

### Client and Line Side Optical Interfaces

Client Type:	10 multiprotocol Small-Form Factor Pluggable (SFP) client ports
Protocols Supported:	Gigabit Ethernet (SX, LX, ZX) with IEEE 802.3x flow control 1/2/4 Gbps Fibre Channel, FICON, FICON Express, FICON 4G SONET OC-48, SDH STM-16
Line Type:	2 - 10 Gbps XFP ports
Line Aggregation Options:	G.709 OTU-2 with GCC in-band management <ul style="list-style-type: none"> <li>• Any protocol → OC-192/STM-64 → OTU-2</li> <li>• OC-48/STM-16 → ODU1 → OTU-2</li> <li>• GE/FC + ODU1 (OC-48/STM-16) → OTU-2</li> <li>• OC-192/STM-64 - Any protocol mix</li> </ul> OC-192/STM-64 <ul style="list-style-type: none"> <li>• Any protocol → OC-192/STM-64</li> </ul>
Line Protection Options:	Sub-50ms protection switching via UPSR/SNCP Optical facility protection via OTN
Signal Encapsulation:	ITU-T G.7041/ANSI T1-105 Generic Framing Procedure (GFP) Transparent GFP (GFP-T): FC/FICON, GbE; Framed GFP (GFP-F): GbE Virtual Concatenation (VCAT) for sub-rate/full-rate connectivity
GbE Bandwidth Allocation:	G.975 Forward Error Correction (FEC)
Reach Extension:	Client and line side loopback
Transmission Testing:	850nm, 1310nm, 1550nm, CWDM, DWDM
Output Wavelength:	XFP/SFP specific
Output Power:	XFP/SFP specific
Receiver Sensitivity:	LC
Connector Type:	

### Performance Monitoring & Alarms

Monitoring Intervals:	Client and Line side, 15-minute, 24-hour
Physical Layer:	XFP Optical Power Tx/Rx, XFP Laser Bias Current, XFP/SFP Supply Voltage OPR-LT, OPR-HT, OPT-LT, OPT-HT
Ethernet:	LOS, LOSYNC, TCA, CV, ES, SES, RMON 2819 Ethernet Statistics
Fibre Channel:	LOS, LOSYNC, TCA, CV, ES, SES
SONET OC-48/OC-192:	LOS, LOF, TCA, Section Trace Mismatch, CV-S, ES-S, SES-S, SEFS-S, CV-L, ES-L, SES-L, UAS-L
SONET Path:	FC-P, CV-P, ES-P, SES-P, UAS-P (Incremental to SONET OC-192 PMs)
SDH STM-16/STM-64:	LOS, LOF, TCA, Section Trace Mismatch, RS-EB, RS-BBE, RS-ES, RS-SES, RS-OFS, MS-EB, MS-BBE, MS-ES, MS-SES, MS-UAS
SDH Path:	HP-EB, HP-BBE, HP-ES, HP-SES, HP-UAS (Incremental to SDH STM-64 PMs)
OTN:	LOS, LOF, OTU-EB, OTU-BBE, OTU-ES, OTU-SES, OTU-SFS
FEC:	NUMBITSCR, NUMBYTESCR, UNCRCDWRD

For more information please contact us at [info@btisystems.com](mailto:info@btisystems.com) or call +1 613. 248. 9154 or 1 866. 626. 9154, (toll free in North America).

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