

BTI 700 Series

Complete Ethernet Access Solutions



High bandwidth, video-rich applications are in demand by a proliferating number of end users today, causing service providers to accelerate their move to packet-based offers. Leveraging Carrier Ethernet at the network edge can enable significant bandwidth, economic, and service management benefits. The BTI 700 Series delivers high performance, affordability and simplicity as the on-ramp to high-speed Carrier Ethernet-based networks.

Solutions for Ethernet Business, Mobile Backhaul, and Wholesale Connectivity Services

BTI 700 Ethernet Access Devices provide intelligent demarcation, extension, and aggregation functionality for simplified distribution of Ethernet and IP-based voice, video, and data services. The portfolio delivers Ethernet connectivity through the access network directly to customer premises, allowing providers to cost-effectively extend Ethernet services to business customers, cell towers, outside plant deployments and multi-tenant campuses. Featuring pluggable, temperature-hardened devices with small form factors, the BTI 700 series provides a carrier-grade, remotely managed solution that enables ease of deployment and faster time-to-revenue.

The BTI 700 series enables a complete range of Ethernet-based services, including Ethernet Virtual Private Networks (VPNs): E-LINE, E-LAN, and E-TREE, dedicated Internet access, Ethernet access for IP VPN connectivity, Ethernet backhaul for 4G wireless (LTE and WiMAX) and Triple-Play service delivery (Internet, voice, video). Tightly integrated with the BTI 7000 Packet Optical Edge platform, the BTI 700 Series interworks with BTI's transponders, muxponders, and the packetVX™ Integrated Ethernet Service modules to deliver end-to-end Carrier Ethernet networking solutions.

Scalable, Secure, Carrier Ethernet

The BTI 700 Series provides extensive functionality for network scalability, traffic segmentation, and service security. As a Metro Ethernet Forum (MEF)

compliant solution, it leverages a standardized User Network Interface (UNI) as well as service and traffic management features, which allow service definition on a per-port, priority, or VLAN basis. Differentiated service levels can be defined using prioritization, policing, shaping, and flow control mechanisms.

Ethernet OAM and End-to-End Service Management

The BTI 700 Series delivers remote performance monitoring and testing capabilities leveraging standards-based Ethernet in the First Mile (EFM), Connectivity Fault Management (CFM), and ITU Y.1731 Fault and Performance Monitoring. As well, a suite of optical and Ethernet protocol performance capabilities enable extensive network and service visibility, remote fault diagnosis, and service verification. Service and network security is provided, ensuring customer traffic segregation and secure network and device administration.

Intelligent Ethernet Access from BTI Systems

Service Visibility: Ethernet service management

Performance Monitoring: Continuity Checks and Ethernet PMs

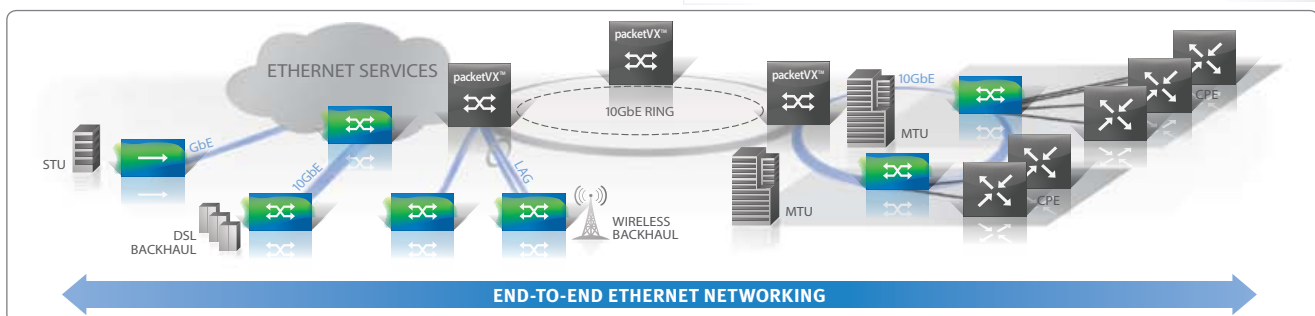
Service Scalability: VLANs and Provider Bridges

High Availability Networking: 50ms Ethernet Ring Switching Protection


Carrier Grade: Hot swappable redundant AC or DC power

Nodal Security: ACLs, DHCP Snooping and DoS Detection

Interface Flexibility: 10/100/1000 combo ports and 10 GbE XFPs



Portfolio Overview

	BTI 702	BTI 704	BTI 712	BTI 718
				
Network Interfaces				
Combo Ports 10/100/1000 Mbps RJ-45 / 1 Gbps SFP Transceiver	2	12	12	
1 Gbps SFP Transceiver	2	4		24
10 Gbps XFP Transceiver			2	2
Ethernet Bridging				
Ethernet Services at the UNI (MEF 9) / Traffic Management (MEF 14)	■	■	■	■
MAC Address Table Size	8 K	8 K	32K	32 K
VLAN Tagging (IEEE 802.1Q)	■	■	■	■
Provider Bridging (IEEE 802.1ad)	■	■	■	■
C-VLAN Translation			■	■
Traffic Management and QoS				
Priority Queues	8	8	8	8
Traffic Classification (IEEE 802.1P, Port, VLAN, ToS, DSCP)	■	■	■	■
Broadcast Storm Control	■	■	■	■
Rate Limiting and Ingress Policing	■	■	■	■
Egress Shaping			■	■
Bandwidth Meters (CIR/CBS)	■	■	■	■
Bandwidth Meters (PIR/PBS)		■	■	■
Network Protection and Rapid Restoration				
Link Aggregation with LACP (IEEE 802.3ad)	■	■	■	■
Spanning Tree (MSTP/RSTP/STP IEEE 802.1D)	■	■	■	■
Ethernet Switch Ring (ESR) Protection	■	■	■	■
Redundancy Link (RLINK) Protection	■	■	■	■
Ethernet Linear Protection Scheme (ITU-T G.8031) < 50ms	■	■	■	■
Ethernet Ring Protection Scheme (ITU-T G.8032) < 50ms	■	■	■	■
Performance Management and Control Plane				
Optical Performance Monitoring	■	■	■	■
Ethernet Performance Monitoring (RMON Groups 1,2,3 and 9)	■	■	■	■
Ethernet in the First Mile (EFM - IEEE 802.3ah)	■	■	■	■
Connectivity Fault Management (CFM - IEEE 802.1ag)	■	■	■	■
Fault Monitoring, Link Trace and Loopback (ITU-T Y.1731)	■	■	■	■
Link Layer Discovery Protocol (LLDP - IEEE 802.1AB)	■	■	■	■
Ethernet Local Management Interface (MEF 16 E-LMI)	■	■	■	■
HD Video Delivery and Multicast				
IGMP Snooping / Proxy / Filter	■	■	■	■
IGMP Fast Leave / Join	■	■	■	■
Cross VLAN multicast		■	■	■
Security				
Access Control List (ACL)	■	■	■	■
AAA/RADIUS Support	■	■	■	■
Network Access Control (IEEE 802.1x)	■	■	■	■
Port Isolation	■	■	■	■
Local Port Mirroring	■	■	■	■
DHCP Snooping	■	■	■	■
DoS Detection	■	■	■	■
Device Management				
Craft Console (RJ-45 – RS-232)	■	■	■	■
Out of Band Management LAN (RJ-45 – 10/100 Ethernet)	■	■	■	■
In Band Management VLAN and S-VLAN	■	■	■	■
Command Line Interface (CLI)	■	■	■	■
SNMPv1/v2c, SNMPv3	■	■	■	■
proNX Management Suite	■	■	■	■
Hardware Profile and Operating Environment				
Dimensions (HxWxD - mm.)	44 x 440 x 240	88 x 440 x 260	88 x 440 x 260	88 x 440 x 260
AC (96-260V 50-60Hz) or DC (-36 to -72V)	■	■	■	■
Dual Hot Swappable AC or DC Power	■	■	■	■
Maximum Power Consumption	25W	75W	100W	100W
Operating Temperature -20°C / -4°F to +65°C / 149°F	■	■	■	■