Allied Telesis®

GE8
AT-TN117-A 8 Port GbE Service and Aggregation Module

Aggregation of GbE Network Traffic

The GE8 module available for use with the iMAP 9000 series is a new advancement in line card flexibility. As network bandwidth continues to grow, Service Providers find increasing bandwidth requirements farther in the local loop. The ability to maintain a single IP infrastructure to address Network Transport bandwidth as well as last mile access bandwidth is pivotal for any network operator.

The GE8 module is primarily intended to be used as an aggregation element with the introduction of Allied Telesis' 10G iMAP common control upgrade (CFC56 and XE1). Combined, these modules provide 10G transport bandwidth as well as aggregation of up to 8 GbE feeds per GE8 module. When used in the iMAP Resource Module slots, a pair of GE8 modules can be used to subtend up to 8 EPSR™ rings providing an extremely flexible, reliable and dense aggregation point from any network location.

If point-to-point aggregation links are required, the GE8 provides cost effective and feature rich aggregation to any GbE network element. As network designs continue to blend the line between Access and Transport, the GE8 will become a key component of any IP Triple Play network design.

Metro Ethernet Connectivity

With the GE8 module, the Allied Telesis iMAP is ideally suited for delivering GbE services to any Enterprise or business location relying on last mile fiber access. With advanced features including per VLAN rate limiting, the GE8 module can be used as either a network interface for subtended remote locations or for point-to-point connectivity to a strategic business.

The GE8 module supports up to 4095 VLANs and can be used to provide business Ethernet services. Whether serving customers from traditional COs, CEVs, RTs or an Enterprise, the iMAP and GE8 module offers wirespeed and non-blocking bandwidth for any IP/Ethernet application.

Part of Allied Telesis' IP Broadband Access Family

Whether it is broadband ADSL2+, FTTH or POTS, the iMAP family is the ideal platform for last mile service delivery. The GE8 line card can be used with any of the iMAP family of carrier grade, IP Multiservice Access platforms:

- iMAP 9700 (9RU, 17 service slots)
- iMAP 9400 (3RU, 7 service slots)
- MiniMAP 9100 (1RU, 3 service slots)

Provisioning, management, and diagnostics of subscriber ports can be accomplished from either the iMAP command line interface or the NMS.

The AT-TN117 has been designed to survive the most rugged environmental conditions. It can be confidently deployed in either a central office or in outdoor enclosures withstanding extremes of heat, cold, and light exposure.

Key Features

- 8 GbE Wirespeed ports

- SFP Optics

- Up to 10 Gbps non-blocking backplane link

- Support for EPSR™ 50ms Resiliency

- Per VLAN Rate Limiting

- Hardened for OSP designs

QoS
- Eight Queues
- Strict Priority scheduling
- VLAN Stacking

Security
- Upstream Forwarding Only
- Extensive ACL Support

Services Supported
- High Speed Internet
- VoIP
- IPTV
- Business VPN
- Network Element Subtending

Allied Telesis' iMAP family of integrated Multiservice Access Platforms

Interface Specifications

Number of GbE ports: 8
Backplane capacity: 10Gbps
Physical design: Front Access
       8x SFP

Port Specifications

Number of VLANs per port: 4095
Priority queues: 8
Dropped packet counter
Full traffic classifier support
Full traffic classifier action support
ARP Filtering
Egress Metering: 1Mbps increment
Ingress Max Burst Size: 64kbps
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Protocols and Specifications

IEEE 802.1Q VLAN Bridging
IEEE 802.1p Prioritization
IETF RFC 1112 IP Multicasting/IGMP Snooping v1
IETF RFC 2236 IP Multicasting/IGMP Snooping v2
DHCP Relay Agent option 82 (RFC 3046)

Power Requirements

Maximum Power: 53W

Environmental Specifications

Operating Temp: -40C to 65C
Storage Temp: -40C to 75C
Relative Humidity: 5% to 95%, non-condensing

Regulatory Approvals

FCC Part 15 Class A/ANSI C63.4
EN 300 386 V1.3.1:2001-09/EN 55022:1998, Class A
VCCI Class A; ITE/ CISPR 22:1997 Class A
EN 300 386 V1.3.1:2001-09/EN 55022:1998, Class A
EN 300 386 V1.3.1:2001-09/EN 61000-4-3:1998
EN 300 386 V1.3.1:2001-09/EN 6100-4-6:1996
EN 300 386 V1.3.1:2001-09/EN 61000-4-4:1995
EN 300 386 V1.3.1:2001-09/EN 61000-4-5:1995
EN 300 386 V1.3.1:2001-09/EN 61000-4-2:1999
UL/cUL 60950: IEC60950
NEBS Level 3, GR-1089 Issue 3, GR63 Issue 2
USDA RUS

Ordering Information

GE8

Model	Description	Part #
GE8	8 ports, GE8 Service and Aggregation Module	AT-TN-117-A

iMAP 9x00 Chassis

Model	Description	Part #
iMAP 9700	17-slot chassis with DC power with faceplates	AT-TN-250GF
iMAP 9700	17-slot chassis with DC power without faceplates	AT-TN-250G
iMAP 9400	7-slot chassis with DC power with faceplates	AT-TN-251GF
iMAP 9400	7-slot chassis with DC power without faceplates	AT-TN-251G
MiniMAP 9101	3-slot mini chassis with DC power	AT-TN-9101-A-80
MiniMAP 9102	3-slot mini chassis with AC power	AT-TN-9102-A-XX*

iMAP Common Control

Model	Description	Part #
CFC24	24GbE switch controller card	AT-TN-401-B
GE3	3x GbE WAN interface card	AT-TN-301-A
CFC56	56 GbE switch controller card	AT-TN-407-A
XE1	10 GbE WAN interface card	AT-TN-308-A
CFC12	12GbE switch controller card	AT-TN-408-A

Related iMAP Line Cards and Accessories

Model	Description	Part #
FE10	10-port, 100Mbps Fast Ethernet Service Module	AT-TN-102-A
FX10BX	10-port, 100Mbps SM, single fiber Service Module	AT-TN-109-A

*Where XX = 10 for U.S. power cord   = 40 for Australia power cord
= 20 for no power cord   = 50 for Europe power cord
= 30 for U.K. power cord

Connecting The IP World

Allied Telesis