ADSL2/2+ MINI-PIM

Product Overview

The ADSL2/2+ Mini-Physical Interface Modules (Mini-PIMs) are for use with the Juniper Networks SSG20 Secure Services Gateway. The ADSL2/2+ Mini-PIMs, one supporting Annex A over plain old telephone service (POTS) and the other Annex B over ISDN, each include one physical asymmetric digital subscriber line (ADSL) port that supports ADSL, ADSL2, or ADSL2+ protocols.

Product Description

The Juniper Networks® single-port ADSL2/2+ Mini-PIMs for the Juniper Networks SSG20 Secure Services Gateway can be used to provide ADSL WAN connectivity. The ADSL2/2+ Annex A (over POTS) and ADSL2/2+ Annex B (over ISDN) support ADSL, ADSL2, and ADSL2+ protocols.

Features and Benefits:

• Automatic configuration of ADSL line after negotiating with the digital subscriber line access multiplexer (DSLAM), minimizing configuration

• One RJ-11 or RJ-45 ADSL interface

• Supports ADSL, ADSL2, and ADSL2+ protocols on the same interface card

• Dying Gasp support

• Multilink Point-to-Point Protocol (MLPPP) over two ADSL cards

• Supports ATM Adaption Layer 5 (AAL5) with constant bit rate (CBR), variable bit rate nonreal time (VBR-NRT), and unspecified bit rate (UBR) traffic types

Table 1: ADSL/ADSL2/ADSL2+ Features and Benefits

FEATURE	FEATURE DESCRIPTION	BENEFIT
ADSL/ADSL2/ADSL2+ support	Same module can be used in ADSL, ADSL2, and ADSL2+ environments	Provides investment protection when upgrading WAN connectivity
Automatic configuration	Automatically configures the ADSL line after negotiating with the DSL access multiplexer (DSLAM)	Minimizes configuration and support overhead
Dedicated network processor	Provides additional processing resources	Helps maintain predictable WAN performance by offloading the J Series or SSG Series CPU
Dying gasp support	Notifies the DSLAM, in the event of power loss, that the SSG Series or J Series is about to go offline	Reduces downtime associated with unplanned power outages

1-Port ADSL 2/2+ Mini-PIM with Annex A (Over POTS)

1-Port ADSL 2/2+ Mini-PIM with Annex B (Over ISDN)

Specifications

Dimensions (W x H X D) and Weight

- 3.75 x 0.8 x 5.9 in (9.5 x 2 x 14.5 cm)
- 0.17 lb (77.1 g)

ATM

- ATM Adaptation Layer 5 (AAL5)
- Up to 10 permanent virtual connections (PVCs) per card
- CBR, VBR-NRT, and UBR

Environmental

- Operating temperature: 0 to 40°C
- Storage temperature: -40 to 70° C
- Relative humidity: 5 to 90% noncondensing

Diagnostics

- Operation, Administration, and Maintenance (OAM) F4 far loopback test
- OAM F4 near loopback test
- OAM F5 far loopback test
- OAM F5 near loopback test

LEDs

PIM LEDs indicate port status with the following LED states:
- SYNC – Green
- TX/RX – Green

Management Capabilities

- Telnet/Console/Web: Remote and local configuration, monitoring, and troubleshooting

Standards and Compliance

Safety

- CAN/CSA-C22.2 No. 60950-1-03/UL 60950-1 Third Edition, Safety of Information Technology Equipment
- EN 60950-1:2001+A11, Safety of Information Technology Equipment
- IEC 60950-1:2001 First Edition, Safety of Information Technology Equipment

EMC (Emissions)

- AS/NZS CISPR22 Class B
- EN-61000-3-2 Harmonic current emissions
- EN-61000-3-3 Voltage fluctuations
- FCC Part 15 Class B (USA)
- EN 55022 Class B (Europe)
- VCCI Class B (Japan)
- BSMI Class B (Taiwan)

Immunity

- EN 55024
- EN-61000-4-2 ESD
- EN-61000-4-3 Radiated Immunity
- EN-61000-4-4 EFT
- EN-61000-4-5 Surge
- EN-61000-4-6 Low Frequency Common Immunity
- EN-61000-4-11 Voltage Dips and Sags

European Telecommunications Standardization Institute (ETSI)

- ETSI EN-300386-2: Telecommunication Network Equipment Electromagnetic Compatibility Requirements

Telecom

- FCC Part 68/TIA-968
- IC CS-03

Standards

- ANSI T1.413 II compliant (vendor version 1)
- G994.1 (G.HS) Version 05/03 + Amendment 1 (02/04)
  – Annex A (POTS overlay)
  – Annex B (ISDN overlay)
  – Appendix 1 (ATM Interface – Utopia)
- G992.1 (G.DMT; ADSL)
  – Annex A (POTS Overlay)
  – Annex B (ISDN Overlay)
  – Appendix 1 (ATM Interface-Utopia)
- G992.3 (G.DMTbis; ADSL2) + Amendment 1,2
  – Annex A (POTS overlay)

Specifications (continued)

Standards (continued)

– Annex B (ISDN overlay)
  – Annex L (Reach Extended)
  – Appendix 1 (ATM Interface – Utopia)
- G992.5 (ADSL2+) + Corrigendum 1 + Amendment 2
  – Annex A (POTS overlay)
  – Annex B (ISDN overlay)
  – Appendix 1 (ATM Interface – Utopia)
- ETSI TS 101 388 V1.3.1

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Ordering Information

PRODUCT NUMBER	DESCRIPTION
JXM-1ADSL2-A-S	1-port ADSL 2/2+ interface card with Annex A (over POTS) support, RJ-11
JXM-1ADSL2-B-S	1-port ADSL 2/2+ interface card with Annex B (over ISDN) support, RJ-45

ScreenOS Software Release

ADSL2/2+ Annex A and Annex B functionality is supported in ScreenOS 5.4 or greater.

About Juniper Networks

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