

Prisma T1/E1/J1-LineTerm Media Converters

Prisma® T1/E1/J1-LineTerm media converters are perfect for service providers and enterprise campus networks utilizing T1/E1/J1 twisted-pair circuits. These modules enable users to convert twisted-pair media to single-mode and multi-mode fiber and extend the distance of data transmissions over MAN access networks up to 80 km.

Available with remote management via the fiber port, T1/E1/J1-LineTerm modules enable network managers to conduct loopback testing, to monitor, and to manage units located up to 80 km away. Cisco management technology functions transparently to the user data, providing real-time, end-to-end management at all times. Signal Loss conditions are propagated using the standards-compliant AIS signal.

As an SNMP management application, PrismaView gives network managers the ability to monitor and control IMC Networks products. PrismaView runs standalone on Windows NT/XP/2000, as a standalone Java Application for other operating systems, in conjunction with HP OpenView, as a Web Server running under IIS, or as a Java Web Servlet.

Figure 1. T1/E1/J1-LineTerm Module



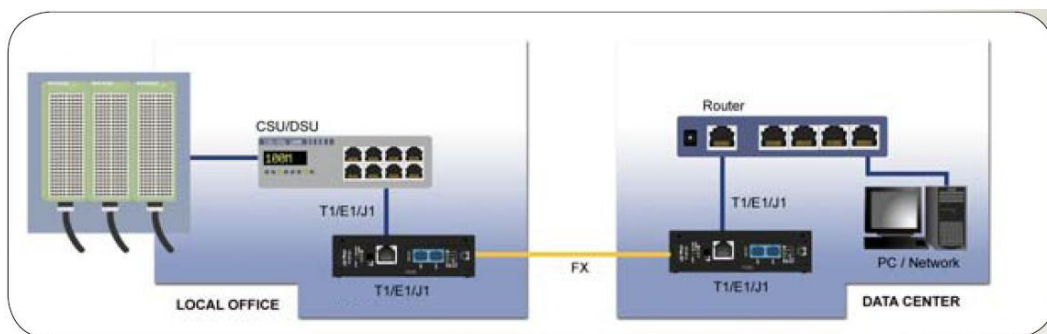
Features

- Switch Selectable Protocol
 - Operates at T1/J1 or E1 line rates
 - Line Terminating function for improved management and fault isolation
 - Convenient DTE/DCE switch
- Management
 - Conduct loopback tests, monitor/manage units via GUI-Based PrismaView
 - Supports secure, out-of-band management
 - Diagnostic LEDs (LOS, ER, RAI, PRBS)
- Supports more fiber choices
 - Available for multi-mode or single-mode fiber
 - Supports very long fiber distances
- Eases Troubleshooting
 - Loopback testing modes, plus optional SNMP management and LEDs, assist in diagnosing problems on fiber optic networks
 - Supports fiber and coax remote loopback control
 - Internal test-head function for transmitting and detecting PRBS test patterns
 - LED Line Diagnostics
 - Support for Alarm Indication Signals (AIS) for improved fault isolation
 - Supports Remote Alarm Indication (RAI)

Application Example

T1/E1/J1-LineTerm media converters allow users to link two PBXs, CSUs or routers and extend the distance between the two over fiber.

Figure 2. Network Application



Product Specifications

Table 1. General Specifications

Feature	Description
General	<ul style="list-style-type: none">• Protocol-Selectable — Operates at T1/J1 (1.544 Mb/s) and E1 (2.048 Mb/s) protocols• Supports Alarm Indication Signals (AIS)• Internal Test Head Function (PRBS, 1/0, All 1s)• Ability to manage remote unit from host end• Supports fiber and copper loopback• Selectable line build out (0-655 ft.)• Includes DTE/DCE switch on converter• Installs in Prisma MediaCenter chassis*• Supports GUI-Based PrismaView• CSU Line Gain (7.5, 15, 22.5 dB)• Monitor Boost (20, 26, 32 dB)• Supports secondary line protection• 50/125 μm or 62.5/125 μm multi-mode fiber• 9/125 μm single-mode fiber• Available for single-strand fiber
Standards Compliance	<ul style="list-style-type: none">• ANSI T1.102-1993• ANSI T1.107-1995• GR-820-CORE
Regulatory Approvals	<ul style="list-style-type: none">• FCC Class A• UL/cUL• CSA• CE

Table 2. Physical Specifications

Specification	Value
Connectors	<ul style="list-style-type: none">• RJ-48, and ST or SC• Includes diagnostic LEDs• Includes hot-swappable architecture
Operating Temperature	32 to 122°F (0 to +50°C); 5% to 90% (non-condensing), 0 – 10,000 ft. altitude
Storage Temperature	-13 to +158°F (-25 to +70°C); 5 to 90% (non-condensing)
Shipping Weight	0.30 lbs (0.14 kg)

* For DC-powered Telco environments, it is not recommended that Prisma T1/E1/J1-LineTerm converters be installed in a Prisma MediaCPE Chassis. The power source in this chassis is not isolated, and cannot support positive reference ground systems typically used in Telco environments. The MediaCenter 6 & 20 Chassis are suitable alternatives.

Ordering Information

Table 3. Ordering Information

Prisma T1/E1/J1 LineTerm MC	Part Number
Prisma T1/E1/J1 LineTerm MC MM1300-SC/UPC, 2 km	4029854
Prisma T1/E1/J1 LineTerm MC 1310/PLUS-SC/UPC, 40 km	4029855
Prisma T1/E1/J1 LineTerm MC 1310/LONG-SC/UPC, 80 km	4029856
Prisma T1/E1/J1 LineTerm MC 1550/LONG-SC/UPC, 110 km	4029857
Prisma T1/E1/J1 LineTerm MC,SS(1310xmt/1550rcv)-SC/UPC, 20 km	4029858
Prisma T1/E1/J1 LineTerm MC,SS(1550xmt/1310rcv)-SC/UPC, 20 km	4025899
Prisma T1/E1/J1 LineTerm MC,SS(1310xmt/1550rcv)-SC/UPC, 40 km	4029860
Prisma T1/E1/J1 LineTerm MC,SS(1550xmt/1310rcv)-SC/UPC, 40 km	4029861
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1430-SC/UPC, 80 km	4029862
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1450-SC/UPC, 80 km	4029863
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1470-SC/UPC, 80 km	4029874
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1490-SC/UPC, 80 km	4029875
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1510-SC/UPC, 80 km	4029876
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1530-SC/UPC, 80 km	4029877
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1550-SC/UPC, 80 km	4029878
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1570-SC/UPC, 80 km	4029879
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1590-SC/UPC, 80 km	4029880
Prisma T1/E1/J1 LineTerm MC, CWDM-SM1610-SC/UPC, 80 km	4029881



Cisco and Cisco Systems are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks.

Third party trademarks mentioned are the property of their respective owners.

The use of the term partner does not imply a partnership relationship between Cisco and any other company.

Specifications and product availability are subject to change without notice.

© 2010 Cisco Systems, Inc. All rights reserved.

Cisco Systems, Inc.
1-800-722-2009 or 678-277-1000
www.cisco.com

Part Number 7017705 Rev A
September 2010