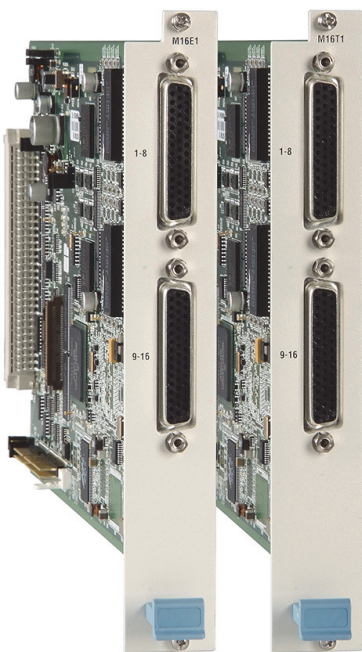


Megaplex-4100 Modules

M16E1, M16T1

16-Port E1 and T1 Modules

- Up to 16 E1 or T1 interfaces
- E1 interface compliant with ITU-T Rec. G.703, G.704 and G.732
- T1 interface compatible with ANSI requirements
- Multiple clock source selection
- Up to 160 E1/T1 links in a single MP-4100 chassis



High port density
E1/T1 modules

The M16E1 and M16T1 modules enable direct connection of Megaplex-4100 to up to 16 E1 or T1 lines. Up to 10 modules can be installed in a single chassis, providing Megaplex-4100 with up to 160 E1/T1 ports.

The M16E1, M16T1 modules have 16 independently configurable E1/T1 external ports. The E1 interface is compatible with all carrier-provided E1 services, meeting the requirements of ITU-T Rec. G.703, G.704 and G.732. It features both 2 (G732N) and 16 (G732S) frames per multiframe formats, as well as unframed mode. CRC-4 and E-bit are also supported, complying with G.704 recommendations. Zero suppression over the line is HDB3.

It supports both 2 (G732N) and 16 (G732N) frames per multiframe formats, as well as unframed mode. CRC-4 and E bit are also supported, complying with G.704 recommendations. Zero suppression over the line is HDB3. The E1 interface is equipped with an integral user-enabled LTU, ensuring ranges of up to 2 km (1.2 miles).

The T1 interface is compatible with ANSI requirements. Both D4 and ESF framing formats are supported. Zero suppression is selectable for Transparent, B7, or B8ZS.

DIAGNOSTICS

Diagnostic capabilities include local and remote loopback on the E1/T1 ports and inband code-activated loopbacks specified in ANSI T1E1.2/93-003 (T1 interface only). Performance statistics for the E1/T1 ports may be obtained and analyzed via the Megaplex management system.



M16E1, M16T1

16-Port E1 and T1 Modules

Specifications

E1 INTERFACE

Standards Compliance

ITU-T G.703, G.704, G.732 (Including CRC-4 and E bit)

Framing

2 frames (G732N), or 16 frames (G732S) per multiframe, with or without CRC-4

Unframed

Data Rate (per link)

2.048 Mbps

Line Code

HDB3

Jitter Performance

As per ITU-T G.823

Impedance

Balanced 4-wire: 120Ω

Unbalanced coax: 75Ω

Signal Level

Receive: 0 to -12 dBm

Transmit:

Balanced: ±3V (±10%)

Unbalanced: ±2.37V (±10%)

T1 INTERFACE

Standards Compliance

ANSI T1.107 and T1.403

Framing

D4, ESF

Data Rate (per link)

1.544 Mbps

Line Code

Bipolar AMI

Zero Suppression

Transparent, B7, B8ZS

Signal Level

Receive: 0 to -12 dBm

Transmit: 0.6, 1.2, 1.8, 2.4, 3.0 dBm

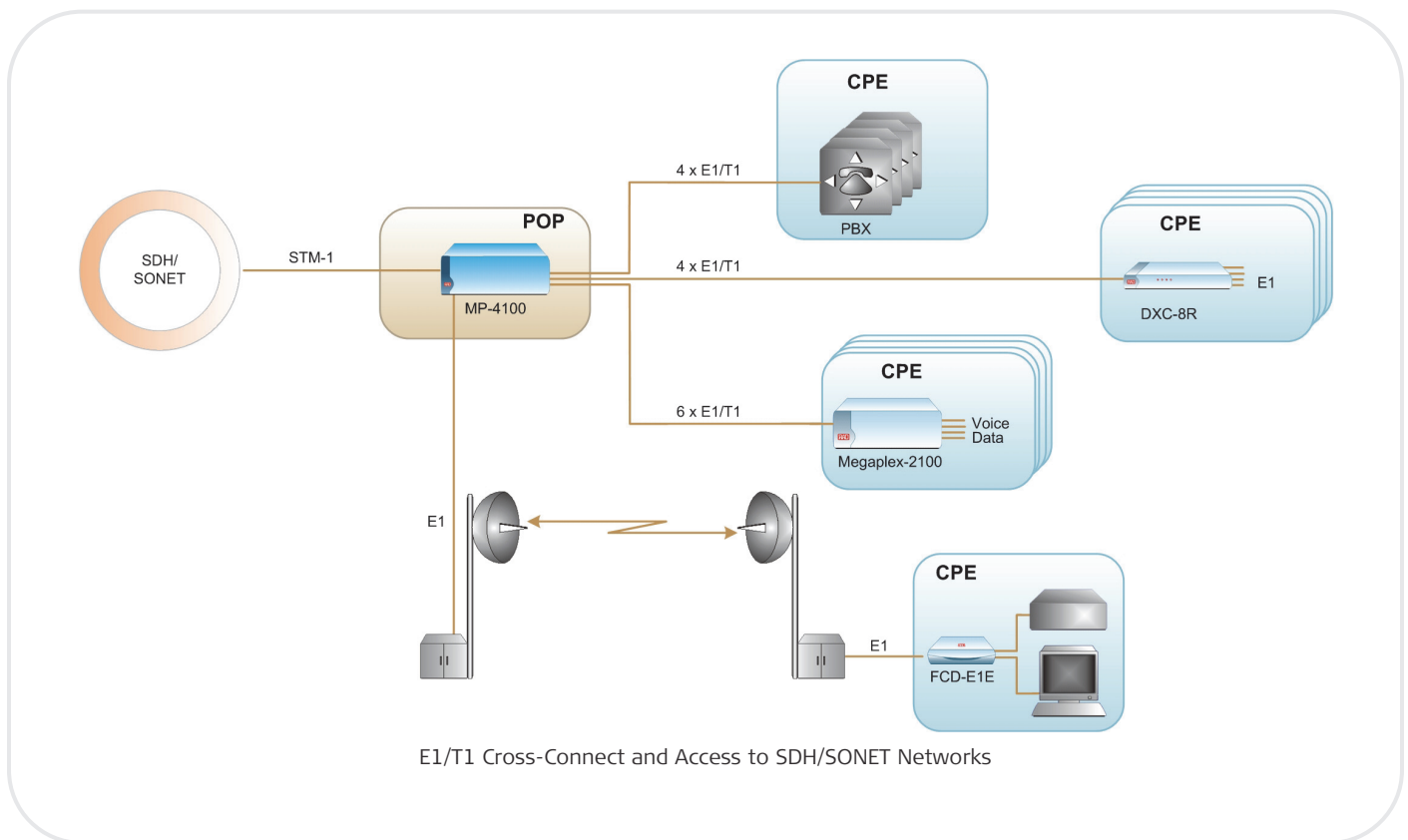
user-adjustable, measured at 0 to 655 ft

Jitter Performance

As per AT&T TR-62411

Impedance

Balanced 4-wire: 100Ω



DIAGNOSTICS

Loopbacks

User-activated local and remote loopback
on each port

Local and remote loopbacks per timeslot

T1 interface only:

Network line loopback

Network payload loopback

Statistics

Full statistical diagnostics capability
according to ANSI T1.403

GENERAL

E1/T1 Line Connector

Dual DB-44, female for channels 1-8 and
9-16 (see *Ordering* for splitter cables
available from RAD)

Environment

Operating temperature: -10°C to 55°C
(14°F to 131°F)

Storage temperature: -20°C to +70°C
(-4°F to +160°F)

Humidity: up to 95%, non-condensing

Power Consumption

10.5W

M16E1, M16T1

16-Port E1 and T1 Modules

Ordering

MP-4100M-16E1

MP-4100M-16T1

OPTIONAL ACCESSORIES

CBL-G703-8/RJ45/ST

Splitter cable for splitting each
44-pin module connector to 8 E1 or 8 T1
balanced RJ-45 connectors

CBL-G703-8/RJ45/X

Splitter cross-cable for splitting each
44-pin module connector to 8 E1 or 8 T1
balanced RJ-45 connectors

CBL-G703-8/COAX

Splitter cable for splitting each
44-pin M16E1 module connector to
8 pairs of unbalanced BNC connectors

CBL-G703-8/OPEN/2M

Open-ended cable with DB-44 connector
on the Megaplex side for balanced E1 or
T1 applications

All cables are 2m (6.6 ft) long.

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