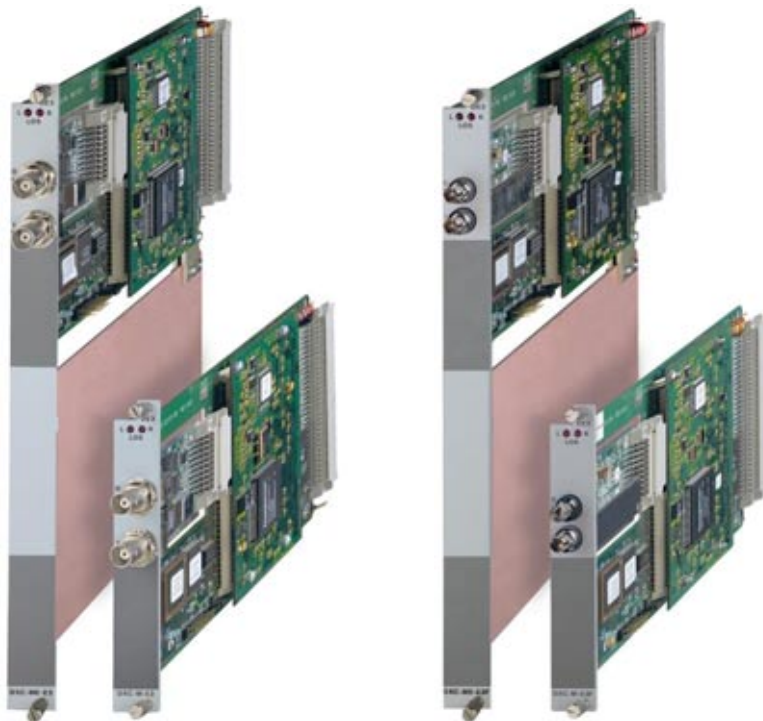




E3 Multiplexer Modules



FEATURES

- Standard E3 interface for direct connection to E3 networks
- Terminal multiplexer to provide grooming of T1/FT1, E1/FE1, $n \times 64$ data and $n \times$ E1 inverse multiplexer traffic
- Framing and multiplexing format complies with ITU-T G.751
- Multiplexes up to 16 E1 channels
- Supported link interfaces:
 - E3 unbalanced copper
 - 850, 1300 nm fiber with LED; 1300, 1550 nm fiber with laser
- Fits into any DXC chassis:
 - 3U-high version fits into DXC-8R, DXC-10A, DXC-30, DXC-STM-1;
 - a special 6U-high version fits into DXC-30E chassis
- Works with all DXC modules
- Monitoring and control by ASCII terminal or by RADview Network Management System
- Extensive performance monitoring and diagnostics of E3

DESCRIPTION

- DE3 is an E3 multiplexer module for the DXC family, providing access to standard E3 interface over copper or fiber lines.
- The E3 module functions as a terminal multiplexer, to be used as a feeder for an E3 network or channelized E3 ports in higher order switches. In this capacity, it provides traffic grooming and multiplexing of T1/Fractional T1, E1/Fractional E1 and $n \times 64$ kbps data. In addition, it supports $n \times$ E1 (where $n = 1$ to 8), with the use of the DIM inverse multiplexer module.

Note: Grooming of Fractional E1 into E3 is limited to data traffic only; for voice traffic, Fractional E1s are transparently mapped into the E3 frame. T1 and FT1 are similarly mapped, with the F-bit mapped into TS25.

- The DXC's maximum bus capacity is 960 DS0s, which enables taking a full E3 link and distributing the 16 E1s among the various other installed modules. These can include any DXC module, except DT3, DT3/747 and DFSTM-1.
- Each internal E1 channel of the E3 module can be used as the source clock or the fallback clock for the DXC system. The user can choose the master clock or the fallback clock from any internal E1 channel of the E3 interface, or from any T1, E1 or HS module.
- The DE3 module provides the full channelization functionality of an M13 multiplexer required to multiplex and demultiplex 16 independent E1 channels into and from an E3 interface.
- The E3 link interface can be either unbalanced copper or fiber optic. A number of fiber optic link options are available including: 850 nm multimode, 1300 nm single mode, 1300 nm single mode with laser and 1550 nm single mode with laser.
- Maintenance and diagnostic capabilities include individual E1 remote loopbacks, and E3 local and remote loopbacks, to enable rapid location of faults.
- Setup, control and diagnostics can be performed via a supervisory port using an ASCII terminal, or by the RADview SNMP network management system. Control of remote units can be implemented via a dedicated management timeslot in the E3 path.

E3 Multiplexer Modules

- Line and hardware redundancy are ensured by installing two modules in a chassis (only one is active).
- The module panel features Local and Remote sync loss LED indicators for indicating system faults on the line.

SPECIFICATIONS

E3 INTERFACE

- Electrical**
E3 per ITU-T G.751
- Framing Option**
Framing per ITU-T G.751
- Data Rate**
34.368 Mbps

COPPER LINK

- Line Code**
HDB3
- Line Impedance**
75Ω
- Pulse Shape**
G.703
- Connector**
BNC, female

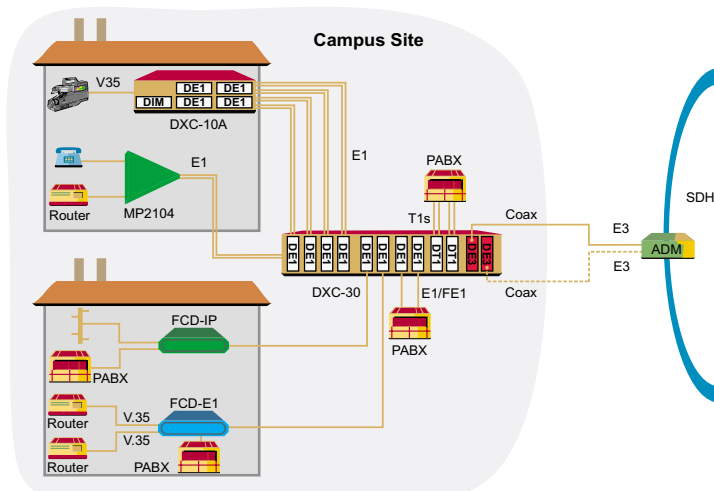
FIBER OPTIC LINK

- Operating Wavelength**
850 nm, multimode with LED
1300 nm, single mode with LED
1300 nm, single mode with laser diode
1550 nm, single mode with laser diode
- Connectors**
ST, SC or FC/PC (see Ordering)

GENERAL

- Timing (DXC System)**
System clock source:
Internal (± 32 ppm)
Station clock
Receive clock (from any link or from any internal E1 link of E3 interface)
- Indicators (LEDs)**
L LOS (local sync loss) - red
R LOS (remote sync loss) - red
- Diagnostics**
Loopbacks:
 - E3 local/remote loopbacks
 - Local loopbacks on each internal E1 port
 E3 performance monitoring:
complies with RFC 1407
- Physical**
Occupies a single DXC module slot
- Power Consumption**
7.5W

APPLICATION



ORDERING

DXC-M/E3/# +

3U-high E3 Multiplexer Module

DXC-ME/E3/# +

6U-high E3 Multiplexer Module

Specify link connector type:

CX for electrical interface with coaxial BNC connectors**ST** for ST type fiber connectors**FC** for FC/PC type fiber connectors**SC** for SC type fiber connectors

+ Specify optical interface wavelength and transmitter type (not relevant with CX option):

85 for 850 nm, multimode, LED**13** for 1300 nm, single mode, LED
13L for 1300 nm, single mode, laser diode**15L** for 1550 nm, single mode, laser diode

data communications

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772-128-11/01