

## DXC-100 Module

# D8E1T1

### 8-Port E1/T1 Interface Module



Eight-port, E1/T1  
copper links  
for the DXC-100  
family of modular  
cross-connects

- Eight E1 or T1 links on a single module
- Any port can be configured for either E1 or T1 operation
- Up to 10:1 hardware redundancy available via the DXC-100PSX unit
- Monitoring and control by ASCII terminal, Telnet, or by RADview Network Management System

D8E1T1 is an 8-port E1/T1 module for use with the modular multiservice access node DXC-100. The module provides E1 or T1 links over copper cable and operates at E1/T1 or fractional E1/T1 rates.

D8E1T1 provides up to eight E1 or T1 links, in any combination. It uses D4, ESF, or G.70x framing and AMI, B8ZS, or HDB3 line coding.

Setup, control, and diagnostics can be performed using an ASCII terminal connected to the supervisory port. Alternatively, these can be performed using Telnet or the RADview SNMP element management system connected to the Ethernet 10/100BaseT port.

Diagnostic capabilities include local, remote, and inband code-activated loopbacks on each E1/T1 port. Also, a BER test can be performed on any link. For voice applications, call-processing ABCD signaling bits can be monitored.

The module has an RJ-48M 50-pin female Telco connector, which is convertible to 8 RJ-45 connectors via an adaptor cable (see *Ordering*).

In a stacked DXC-100 configuration, each DXLC module installed in Nests 2 to 8 can also perform all the functions of the D8E1T1 main module. To achieve this, a D8E1T1 interface module should be installed at the rear of each DXC-100 chassis, to provide 8 additional E1/T1 ports.

Up to 10:1 hardware redundancy is available via the external DXC-100PSX unit.



# D8E1T1

## 8-Port E1/T1 Interface Module

### Specifications

#### Number of Ports

8

#### Standards

Complies with the relevant sections of the following technical standards:

ITU-T Rec. G.703, G.704, G.706, G.732, G.733, G.734, G.775, G.796, G.821, G.823, G.826, G.921

AT&T TR-62411, TR-54016, TR-43801

ANSI T1.101, T1.403, T1.107, T1.102

Bellcore TR-TSY-000170, TR-TSY-000499, TR-TSY-000194, TR-TSY-000191

#### Connector

50-pin RJ-48M connector on the rear interface module, convertible to 8 RJ-45 connectors via adaptor cables (see *Ordering*)

#### E1 LINKS

##### Data Rate per Port

2.048 Mbps

##### Framing

CRC  
CAS

##### Line Code

HDB3

##### Jitter Performance

As per ITU-T Rec G.823

##### Line Impedance

120Ω ±5%, balanced

##### Pulse Shape

As per ITU-T Rec. G.703

#### T1 LINKS

##### Data Rate per Port

1.544 Mbps

##### Framing

SF (D4)  
ESF

##### Line Code

AMI, B8ZS

##### Jitter Performance

As per AT&T TR-62411

##### Line Impedance

100Ω ±5%, balanced

##### Pulse Shape

As per T1.403

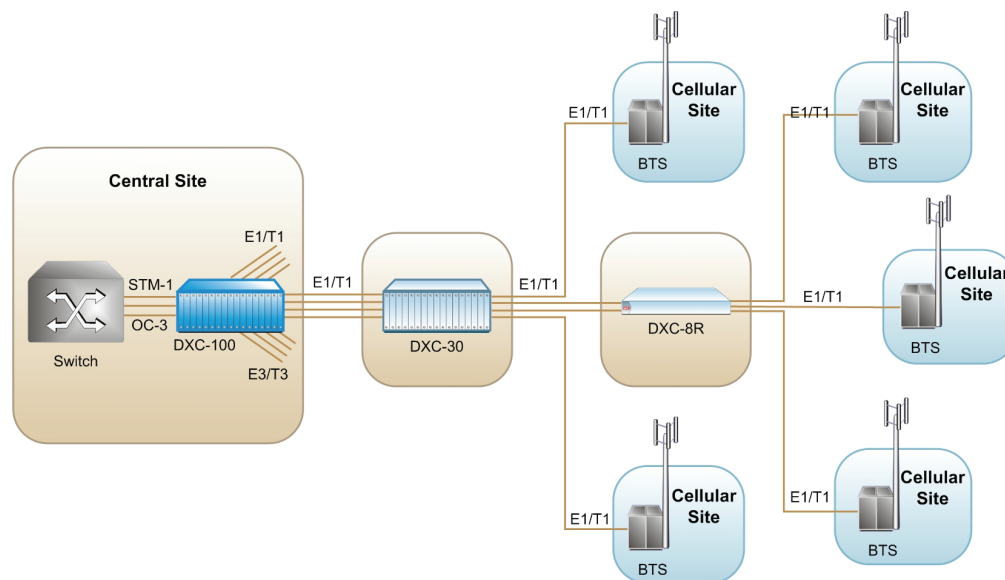


Figure 1. Cellular Aggregation over E1/T1 Links to a Central Site

**Timing**

Receive timing is recovered from the incoming line signal or received via the DSMC.2 module

Transmit timing is locked to the DXC-100 master (Stratum 3) clock, incoming line signal, or station clock (all via the DSMC.2 module)

**Redundancy Capability**

Up to 10:1 with DXC-100PSX

**Indicators**

READY (green/red): indicates the status of the module set in general

STATUS (red/green): indicates link status separately for each of the E1/T1 links

TEST (yellow): indicates test status for each of the E1/T1 links separately

**Timeslot Allocation**

User-defined, any timeslot maps to any other timeslot

**Diagnostics**

Local and remote loopbacks on each module port

BER testing on each port

Inband code activated loopback

**Power Consumption**

14.3W (2.86A @ +5 VDC)

**Configuration**

Programmable via DXC-100 management by ASCII terminal, Telnet, or RADview Network Management System

**Physical**

Front main module:

Height: 26.3 cm (10.3 in)

Width: 2.5 cm (0.9 in)

Depth: 21.3 cm (8.3 in)

Weight: 0.4 kg (0.9 lb)

Rear interface module:

Height: 26.3 cm (10.3 in)

Width: 2.5 cm (0.98 in)

Depth: 12.7 cm (5.0 in)

Weight: 0.5 kg (1.1 lb)

## D8E1T1

### 8-Port E1/T1 Interface Module

#### Ordering

**DXC-100M-8E1T1-?**

8-port E1 and T1 module

*Legend*

- ? Module type (default is main and interface module set):
- M** main, front-mounted module
- B/IO** interface, rear-mounted module

#### OPTIONAL ACCESSORIES

**DXC-100PSXM-8E1T1/\***

3U DXC-100PSX 8E1/T1 interface module

*Legend*

- \* Module type:
  - P** primary module
  - R** redundancy module (one module is required per system)

**Note:** *One Telco interconnection cable*

*(CBL-100PSX-D8E1T1) is provided with each DXC-100PSX module to connect to DXC-100*

**CBL-DXC-100-D8E1T1/BAL/X**

Cable for D8E1T1, 2m (6.56 ft), RJ-48M

50-pin female Telco connector to

8 × RJ-45 connectors

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