

# CROCUS E3 MUX

- E3 multiplexer with up to 16 E1 input circuits
- Integrates seamlessly in CN4 product range
- Includes free maintenance software
- Ethernet port for direct SNMP and Telnet support



The Crocus E3 MUX is part of the Crocus TDM access solution and offers a comprehensive solution for the concentration of up to sixteen 2 Mbps E1 based traffic streams onto a single 34 Mbps E3 connection. The operation is based on a two-stage concentration mechanism. In a first stage, 4 E1 channels can be concentrated onto an 8 Mbps internal E2 circuit. The second stage concentrates 4 of these E2 circuits onto a 34 Mbps E3 circuit. Each E2 circuit can accept either a quad E1 module or a 10Base-T module with integrated bridge functionality. This modular design allows to scale the number of E1 input circuits with the needs of the end-user, and allows the combination of the E1 data with Ethernet based traffic.

The equipment comes as a card for mounting into the CN4 range of card-nests. Depending on the selected card-nest, a rack-mount or desktop solution can be created. The card has an on-board SNMP agent, and supports directly TELNET, PING and TFTP through an integrated 10Base-T connection. The unit can also be configured through the free Telindus Maintenance Application (TMA), which also gives comprehensive and visual information on the status and statistics of the Crocus E3 MUX .

One of the important applications is situated in the concentration of 2 Mbps based services. For this purpose, the Crocus E3 MUX can be combined with the cross-connect and different high-speed modem cards in the Crocus range. The global access solution is presented as a compact single shelf solution with integrated network management facilities.

## Input modules

Number of input Modules: 4

Types of input Modules (field exchangeable)

### Quad E1:

4x G.703 E1 circuits

Nominal line data rate 2048 kbps

Line code HDB3

Line connection 120 ohm balanced RJ45 connector DTE

### Bridge:

10Base-T module with integrated bridge functionality

IEEE 802.3 compatible

## Multiplexing characteristics:

E1 characteristics: ITU-T G.703, G.704, I.431, CRC-4 insertion

E3 characteristics: ITU-T G.703, 75 ohm BNC connector

E1 to E2 internal multiplexing: ITU-T G.742

E2 to E3 multiplexing: ITU-T G.751

Global jitter performance: ITU-T G.823

## Station clock interface (on card nest CN4)

Nominal rate: 2048 kbps

Line code: HDB3

Line connection: 120 ohm balanced RJ45 connector

## Management interfaces

Synchronous High speed bus CN4 card nest backplane connection for use with Orchid 1003 LAN controller card  
Console port 9600 bps, asynchronous, 8N1, SubD 9-pin  
ATWIN, TMA, CLI, TML  
Local 10Base-T Ethernet Direct connection of TMA, TMA for HP OpenView, Telnet, SNMP, TFP, TMA CLI  
Alarm contacts Major, minor (See CN4)  
Password protected

E3 clocking schemes

Internal clock: free running  
Station clock: from CN4 chassis  
Slave/Receive: recovered from E3 receive data  
A fallback mechanism to internal clock will occur in case the configured station clock is not present.

Front panel indicators

PWR Power  
LNK LAN link condition  
For each E2 input slot and E3 output:  
TST Test indicator  
ERR Error condition  
LOS/LOF Loss Of Signal/Loss Of Frame-alignment

Tests

External loop-back (Loop3) for each individual E1 line  
Internal loop-back (Loop4) for each individual E1 line  
External loop-back (Loop3) for E3 line  
Internal loop-back (Loop4) for E3 line

Conformity to international standards

EN60950 (class I equipment)  
EN41003  
EN55022B  
EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11  
ENV50204  
EN61000-3-2, EN61000-3-3

Mechanical data

H x W x D: 50 x 335 x 262 mm

Environmental requirements

Operational ambient temperature: -10°C to +50°C  
Operational relative humidity: 0% to 95% non-condensing  
Compliant to ETSI ETS 300 019-1-3 Class 3.1 & 3.1e  
Storage temperature: -25°C to +70°C

Power

48Vdc or 230Vac, 10W max

Sales codes

171293 CROCUS E3 MUX CV BU  
163369 4E1 INTF.CROCUS FO  
150466 BRIDGE INTF.CROCUS