

# CROCUS SHDSL QUAD

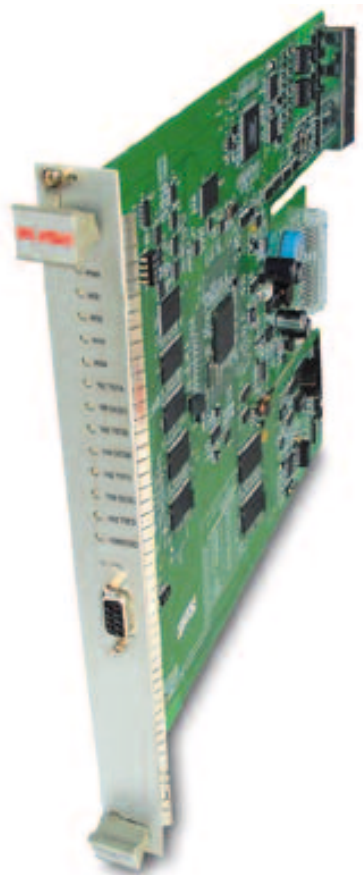
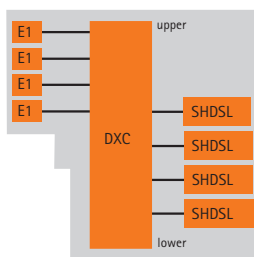
> THE CROCUS SHDSL QUAD DXC IS A CARD FITTING IN THE CARD-NEST 4 (CN4) INTEGRATING SHDSL TRANSMISSION TECHNOLOGY WITH CROSS-CONNECT FUNCTIONALITY INTO A HIGH-DENSITY MODULAR CENTRAL OFFICE SOLUTION.

The Crocus SHDSL Quad DXC is a card fitting in the card-nest 4 (CN4) integrating SHDSL transmission technology with cross-connect functionality into a high-density modular central office solution. For this purpose, the card features 4 SHDSL line pairs and 4 fixed G.703 interfaces. The SHDSL line pairs can be configured as individual links or can be combined into two-pair operation for increased distance reach.

The SHDSL lines can be terminated at the remote end by the complete range of Crocus SHDSL desktop units, offering full flexibility for end-user connectivity. The SHDSL line-speed can be automatically adapted based on the user requirements, optimising distance performance.

The on-board digital cross connect (DXC) function offers switching of the 64 kbps time-slots between all ports without restrictions. It gives possibilities for grooming lines, add-and-drop multiplexing and cascading of several cards. Alternatively, the digital cross connect function may also be disabled, offering up to four individual modem links that can be operated in framed or unframed mode.

V CROCUS SHDSL QUAD SCHEMATIC VIEW



Using an option board, the Crocus SHDSL Quad DXC can deliver wetting current or remote powering on the lines. It also can be used in combination with the CN4 add-on chassis for remote power feeding.

The unit is designed for integration into demanding network environments and can be controlled by the complete set of network maintenance and management tools as they are described in this catalogue.

## FEATURES & BENEFITS

- > BASED ON THE NEW G.SHDSL STANDARD FOR HIGHER SPEEDS AND LONGER LOOP RANGES
- > 4 SHDSL LINE PAIRS PER CARD WITH BUILT-IN DIGITAL CROSS CONNECT
- > 4 G.703/G.704 UPLINKS
- > 1-PAIR OR 2-PAIR SHDSL OPERATION
- > ADVANCED MAINTENANCE SOFTWARE AND MANAGEMENT TOOLS
- > CENTRAL SITE HIGH-DENSITY CARD-NEST FOR UP TO 60 MODEMS

### LINE INTERFACES

- > Number of interfaces: 4
- > Single pair or two pair line access
- > Connector: screw
- > Impedance: 135 ohm
- > Coding: TC PAM, compliant ITU-T G.991.2 Annex A&B (G.SHDSL), ETSI TS 101524
- > Line speeds: Single pair: N x 64 kbps (N = 3 ... 32)  
Two pair: N x 128 kbps (N = 3 ... 16)
- > Handshaking: compliant G.994.1 (automatic speed negotiation) or fixed speed
- > Performance monitoring: compliant G.826 (errored seconds, severely errored seconds, unavailability seconds)

### G703 INTERFACES

- > Number of interfaces: 4
- > Applicable standards: I.431, G.703, G.704, G.706, G.736, G.823, G.825
- > User speed: (F)E1 N x 64 kbps (N = 1 ... 32)
- > Connector: RJ45 (120 Ohm), DCE
- > Transparent or fractional operation

### CONTROL INTERFACE

- > Applicable standards: ITU-T V.24, V.28, EIA/TIA 574
- > DCE signals: RXD, TXD, SGND
- > Connector: female DB9 (EIA/TIA 574)

### CROSS-CONNECT FUNCTIONALITY

- > Applicable standards: ETS 300 010-1, ETS 300 010-2
- > Maximum DXC throughput delay: 650 µsec

### CLOCKING

- > Possible clock source: Station Clock  
G.703 interfaces  
Internal clock
- > Fallback possibility in case of clocking failure
- > Applicable standards: G.812, G.813

### REMOTE POWER FEEDING OPTION

- > Controlled by network management
- > Maximum standard remote power voltage: 120 Vdc
- > Maximum standard remote power current: 60 mA
- > Conform ITU-T K.15
- > Conform IEC60950-21 Edition 2002-12

### WETTING CURRENT OPTION

- > Maximum standard wetting current: 10 mA

### FRONT PANEL INDICATIONS

#### General

- > PWR: Power
- For each G.703
- > AIS ERR AIS (Alarm Indication Signal)  
Bit Error Test (ET) indication  
Local alarm signalling

#### For each SHDSL connection:

- > 142 TST Test indicator
- > 109 DCD Handshaking progress  
Data carrier detect

#### Testloops

- > SHDSL analogue loop
- > SHDSL remote digital loop
- > G.703 external loopback
- > G.703 internal loopback
- > G.703 internal nx64kbit/s loopback (ETS 300 010-2 §7.1.3)
- > Built-in test pattern generator

#### Local maintenance tools

- > Direct connection for VT100 local console (command line interface or interactive interface)
- > Direct connection for TMA (Telindus Maintenance Application)
- > External hand LCD terminal

### NETWORK MANAGEMENT TOOLS

- > Integration in the TMA management suite

### MECHANICAL DATA H X W X D

- > 235 x 20 x 300 mm Weight: 1 kg

### POWER REQUIREMENTS (PER CARD)

- > 48Vdc (36Vdc - 72Vdc) 190 mA

### SALES CODES

- > 175258 Crocus SHDSL Quad CV DXC
- > 180329 Crocus SHDSL wetting current option board (4 lines)
- > 182466 Crocus SHDSL CV Remote powering option board (4 lines)

### MORE INFO:

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