

CROCUS SHDSL



The Crocus SHDSL (Symmetrical High bit rate Digital Subscriber Line) is a manageable baseband modem offering full duplex transmission up to 2.3 Mbps over a single two-wire unconditioned unshielded twisted-pair cable.

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A special 2-pair version offers the possibility to extend the speed range to 4.6 Mbps. The line speed of the modem can be automatically adapted to optimise the throughput as a function of the characteristics of the local loop.

A complete range of plug-in interface boards makes the Crocus SHDSL ideal for interfacing with almost every application. Not only traditional serial interfaces like V.35, V.36, RS-530 and X.21 (configurable for Nx64 kbps operation), but also G703 (transparent or with G.704 framing), dual port interfaces and direct Ethernet 10/100 Base-T connections with integrated router functionality are available. For large concentration sites, rack-mount versions are mounted in the CN4 card-nest and can offer densities of up to 30 or 60 modems per nest. An option board on those card-versions allows for remote power feeding over the DSL line.

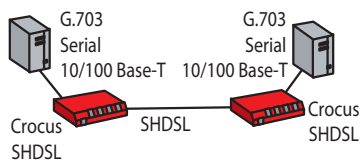
The unit is designed for integration into demanding network environments and is shipped with a free user-friendly graphical Windows® application (TMA). Through the use of the Orchid 1035 proxy, it can be controlled by the complete set of network maintenance and management tools.



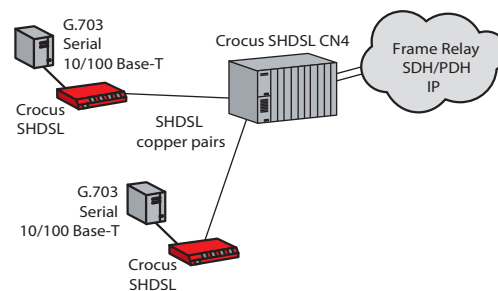
FEATURES AND BENEFITS

- Based on the G.SHDSL standard for higher speeds and longer loop ranges
- Line-transmission rates up to 2.3 Mbps (4.6 Mbps for 2-pair model)
- Modular plug-in data interfaces for maximum flexibility and efficient stock management
- Desktop and Rack-Mount Units





Point to point connection



Classical Access Network

CROCUS SHDSL SPECIFICATIONS

Versions

- Standard desktop units:
 - separate 48 Vdc and 230/115 Vac versions
 - separate 1-pair and 2-pair versions
- Rack-mount units: 2 modems/card

Line Interface

- Single or dual pair line access
- Connector: RJ12/RJ45
- Impedance: 135 Ohm
- Coding: TC PAM, compliant ITU-T G.991.2 Annex A&B (G.SHDSL), ETSI TS 101524
- Transmit level: 13.5 dBm
- Line speed per pair: N x 64 kbps (N=1..36, except G.703: N=3..32)
- User speeds:
 - 1 pair-model: N x 64 kbps (N=1..36)
 - 2 pair-model: N x 128 kbps (N=1..36)
- Handshaking: compliant G.994.1 (automatic speed negotiation) or fixed speed
- Performance monitoring: compliant G.826 (errored seconds, severely errored seconds, unavailability seconds)

Ideal maximum distance (noise free) on a single pair

1p line speed (kbps)	2p line speed (kbps)	0.4 mm 26AWG (km)	0.5 mm 24AWG (km)	0.6 mm (km)	0.8 mm 20AWG (km)	1.0 mm 18AWG (km)	1.2 mm (km)
64	128	11.0	15.1	21.5	27.2	38.2	42.4
128	256	8.0	11.0	15.6	19.8	27.8	30.8
256	512	8.2	11.3	16.0	20.3	28.5	31.6
512	1024	7.2	9.9	14.0	17.8	25.0	27.7
1024	2048	5.5	7.6	10.7	13.6	19.1	21.2
1536	3072	4.0	5.5	7.8	9.9	13.9	15.4
2048	4096	4.2	5.8	8.2	10.4	14.6	16.2
2304	4608	4.0	5.5	7.8	9.9	13.9	15.4

Sales Codes

- 1 pair basic units
- >180055 Crocus SHDSL TT BU VAC
 - >180056 Crocus SHDSL TT BU 48VDC
 - >193491 Crocus SHDSL TWIN-CV BU (2 modems)
- 2 pair basic units
- >180053 Crocus SHDSL 2P TT BU VAC
 - >171976 Crocus SHDSL 2P TT BU 48VDC
 - >193492 Crocus SHDSL 2P TWIN-CV BU (2 modems)
- Interfaces
- >175253 G703 2M
 - >175254 G703 NX64K
 - >177458 G.703 + Serial Dual Port
- All other transparent data interface modules are found in the sales codes quick reference.

Available Modular Interfaces

- V.35, V.36/RS-449, X.21, RS-530/RS-530A, G.703/G.704, G.703 + serial (dual port), IP Router 10 M

Management Interface

- Desktop versions: 9600 bps asynchronous (subD 9-pin)
- Rack-mount versions: Synchronous High speed bus (RJ45) 9600 bps asynchronous (subD 9-pin)

Possible test loops

- Analogue loop, Remote digital loop, Local digital loop, Integrated error test generator

Maintenance and Management Support

- Conform TMA management suite
- Insertion/extraction of management channel in G.703 time-slot 0

Front panel Indications

- PWR: Power
- 142 TST: Test indicator (circuit 142)
- AIS ERR: Test error indications/AIS for G.703/local alarm indications
- 103 TXD: Transmit Data on modular interface
- 104 RXD: Receive data on modular interface
- 105 RTS: Request to send on modular interface
- 109 DCD: Data carrier detect

Mechanical data

- Desktop version: 45 x 220 x 235 mm
- Weight: 750 g (excl interface)
- Rack-mount version: 235 x 20 x 300 mm
- Weight: 1 kg (excl interface)

Power requirements

- 1 pair desktop versions: 85..265 Vac, 9 W / 36..72 Vdc, 4 W

