

Crocus SHDSL 2P Repeater



The Crocus SHDSL Repeater provides a solution where the local loop distance exceeds the distance of a simple SHDSL link. The Crocus SHDSL 2P Repeater is designed for easy deployment, including automatic mechanisms for speed adaptation and power feed through. The unit is available in indoor and outdoor versions.

CROCUS SHDSL 2P REPEATER

The SHDSL line coding used in the ONEACCESS SHDSL transmission equipment provides superior reach and noise immunity compared to other DSL technologies. Nevertheless local loop distances may exceed the distance achievable by simple point-to-point connections, especially if full 2Mbps transport is required. Examples include DSL links alongside railways, motorways, pipelines, waterways, power lines and local loops in rural areas. Therefore the OneAccess SHDSL range includes also SHDSL repeaters.

Each repeater fully regenerates the signal and thus doubles the transmission distance. It is possible to deploy multiple repeaters on a single link without introducing jitter and wander problems. As repeaters are often used outside a conditioned environment, all versions can be remotely power fed and both indoor and outdoor versions exist. The table below gives an overview of the 2 pair repeater versions.

Two successive 2 pair repeaters can be remotely powered by a single source. The remote power source is one of the Crocus SHDSL CN4 cards with a remote power feed option board.

The Crocus SHDSL 2P Repeater can be managed locally with a VT100 terminal or terminal emulation (indoor version). Alternatively it is manageable over the line from the central SHDSL equipment. The Crocus SHDSL 2P Repeater can be fully integrated in the TMA network maintenance and management suite.

The Crocus SHDSL 2P Repeater can be used with Crocus SHDSL equipment (desktop and card versions), the 1423 and the 1424 SHDSL Routers. In combination with the latter it supports also SHDSLbis rates up to 5,7Mbps per line pair. The Crocus SHDSL TWINCV and Crocus SHDSL QUAD-CV cards can have a RP Source option board mounted to remotely power the repeaters.

Models	Features			
	SHDSL line pairs	Line Power Sync	Direct local powering	Local powering via adapter
Crocus SHDSL 2P Repeater Indoor RP/NPWR	2	✓	12Vdc	Vdc & Vac
Crocus SHDSL 2P Repeater Card RP	2	✓		

FEATURES AND BENEFITS

- Extends the span of the local loop
- Variable line-transmission rates for highest possible reach
- SHDSLbis line rates up to 5,7Mbps per pair
- Indoor and pole-mount versions
- Local and remote powered versions
- Remote power feeding up to 2 repeaters
- Low power consumption
- Advanced maintenance and management options

The two pair repeater card suits into an IP66 housing for pole-mount use. This housing can accommodate up to 6 repeater cards.





Outdoor version

CROCUS SHDSL REPEATERS SPECIFICATIONS

Line interface

- 2 line pairs
- Coding: TC PAM, compliant ITU-T G.991.2 Annex A&B (G.SHDSL), ETSI TS 101524, SHDSLbis (annex F and G)
- Line speeds:
 - 640 – 5696kbps per line pair
 - Fixed speed or customer side follows the speed of the network side
- Handshaking: compliant ITU-T G.994.1
- Performance monitoring: compliant ITU-T G.826
- Optimised for minimal throughput delay

Test loops

- Network side remote digital loopback
- Customer side remote digital loopback

Management tools

- Local maintenance via the CTRL interface (indoor version)
- Management information available over the line via the EOC messages
- Complete set of management tools on a central SHDSL equipment gives full access to repeater information
- Conform TDRE through an Orchid card on the central card nest or an Orchid desktop

Control interface

- Applicable standards: ITU-T V.24, V.28, EIA/TIA 574
- Connector: female DB9
- Speed: 9600bps

Front panel indications

- PWR: Power
- Network (or NE): network side line status
- Customer (or FE): customer side line status

Mechanical data

Indoor repeater

- Dimensions: 45 x 220 x 135 mm
- Weight: 500 g
- Wall mountable and rack mountable (optional 19" rack-mount kit required)
- 2 RJ45 connectors for the line

Pole-mount housing

- 6 slots for repeater cards
- EN 60529 IP66
- Screw connections
- Dimensions housing: 165 x 252 x 400 mm
- Weight: 7,6 kg
- Wall mountable

Repeater card for pole mount housing

- Built in metal case for easy installation
- Dimensions: 29 x 170 x 120 mm
- Weight: 450g

Power requirement

- Local input voltage: 12Vdc (indoor version only)
 - Power adapters available for 115Vac, 230Vac, 24Vdc and -48Vdc
- Remote power feeding via the line
- Configurable power feed-through

Sales Code

- > 203420 CROCUS SHDSL 2P INF NX64K REPEATER INDOOR RP/ NPWR
- > 203594 CROCUS IP66-HOUSING FOR SHDSL INF REPEATER CARDS
- > 203419 CROCUS SHDSL 2P INF NX64K REPEATER CARD RP