



Environmental hardened cabinet

In order to obtain higher data rates and shorter loops, the xDSL equipment is moving closer to the end-user.

Moving the equipment closer to the end-user also means smaller installations. The EDA environmental hardened cabinet solution scales from 12 to 96 ADSL subscribers.

Description

The environmental hardened cabinet is intended for EDA installation in rough environments; outdoors as well as indoors. Placement in basements is one example of indoor use. The environmental hardened cabinet is designed to meet today's standards for equipment installed in non-weather protected locations, providing a highly cost-optimized solution.

Scalability

The environmental hardened cabinet is designed to be equipped with 12-line IP DSLAMs (EDN312x) and the 8-port aggregation switch (ESN108). The 12-line IP DSLAMs have embedded filters and the 8-port aggregation switch has built-in Power over Ethernet. Depending on the desired configuration, the capacity of the cabinet scales from 12 to 96 ADSL subscribers. The environmental hardened cabinet has the dimensions of only HxWxD: 800 x 650 x 425 mm.

Backhaul connectivity

The 8-port aggregation switch (ESN108) provides a 100Base-FX uplink that is considered an ideal backhaul connection as it has no electromagnetic problem. The solution can also be equipped with a Fast Ethernet to E1 converter (EXN104) providing TDM connectivity. Alternatively, 1 HU is reserved for third-party transmission type equipment in the cabinet.

Installation

The environmental hardened cabinet solution is designed for wall or pole mount with the advantage of additional installation cost savings. Subscriber and Local Exchange Connectivity MDF is part of the solution.

Power

The environmental hardened cabinet is equipped with a 120/230 V AC 300 W power supply solution and has battery backup for two hours of operation of a fully equipped solution.

Environment

The solution is designed for operational conditions such as temperature range -45 to +45°C (ETSI 4.1E), and up to +55°C when there is no exposure to direct sunlight.

Technical data

THIS DOCUMENT IS VALID FOR RELEASES

- EDA 2.0 and EDA 2.1

INTERFACES (BACK HAUL)

- 100Base-TX Fast Ethernet
- 100Base-FX Fast Ethernet as an SFP module
- Four E1 ports, 120 Ohm (EXN104 solution)

CAPACITY

- Configurable from 12 to 96 subscribers with 12-line IP DSLAMs EDN312x

POWER CONSUMPTION

- 300 W depending on configuration

VOLTAGE INPUT

- 120/230 V AC

OVP AND SAFETY

- EN 61643-1
- Isolation, creepage and clearance, between primary and secondary side according to EN 60950 reinforced insulation

DIMENSIONS

- HxWxD: 800 x 650 x 425 mm
- Weight: 60 kg when fully equipped

EMI/EMC

- EN 300 386:2001 Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; Electromagnetic Compatibility (EMC) requirements.
Emission: class B
Environment: Telecommunication centers and locations other than telecommunication centers.
- EN 300 386-2 Section 5.2, other than telecommunication centers
- ETS 300 386:2001-1 Table 4: Public telecommunications equipment

EARTHQUAKE RESISTANCE

- ETS 300 019-1-4
- Bellcore NEBS Zone 4 (Richter Magnitude >7.0)

ENVIRONMENTAL

- ETS 300 019-1-4 class 4.1E for stationary use at non-weather protected locations. (Class 4.1E applies to all European countries).
- EN60529 (IEC 60 529) IP55

STORAGE AND TRANSPORTATION REQUIREMENTS

- ETS 300 019 -1-1 class 1.2 (weather protected, not temperature-controlled storage locations)
- ETS 300 019-1-2 class 2.3 (public transportation)