

MileGate

MileGate 2510/2310

Subracks of the Ethernet-based broadband access platform for DSL, telephony and Ethernet



MileGate 2510 (left) and MileGate 2310

Features & Benefits

- + Ideal for FTTx architectures
- + Wide range of DSL interfaces incl. VDSL2 with vectoring
- + Active (P2P) and passive (GPON) optical interfaces
- + POTS/ISDN via SIP/H.248 or V.5x
- + Uplink via Ethernet, SDH, PDH
- + Up to 400 Gbps backplane capacity and 20 Gbps to every slot
- + High availability due to redundancy concept
- + Designed for indoor and outdoor deployment
- + All functions via one network management system

The subracks MileGate 2510 and MileGate 2310 provide comprehensive multi-service capabilities in a compact chassis.

With MileGate network operators are able to provide broadband services and legacy services via a single network element. These services are easy to manage and can easily be integrated in the operating procedures of network operators. MileGate can be deployed in outdoor cabinets to provide VDSL2 with vectoring, for example. With its comprehensive redundancy concept, MileGate guarantees maximum availability.

Ethernet and TDM

All line cards are connected to the core unit via the backplane. All subracks have two 1 Gbps connections and one TDM bus for every slot. MileGate 2510 and 2310 have two additional 10 Gbps connections. This way MileGate already today is designed for the requirements of high bandwidths that, for example, are provided in FTTH applications.

Services

Due to its unique combination of Ethernet and TDM bus, MileGate provides legacy and Ethernet services in a single network element. This way migration to this access technology is made simple and cost-effective. Active and passive (PON) optical interfaces as well as comprehensive Ethernet-based DSL services (ADSL2plus, VDSL2, SHDSL) can be offered together with legacy services like POTS/ISDN (via SIP or H.248 media gateways or V5.x interface). In addition, MileGate provides a high number of data interfaces as well as gateways for the data exchange between Ethernet and TDM technology.

MileGate 2510

The subrack offers 21 slots, 20 of which can be fitted with service line cards. It is designed for major access points, to connect a large number of subscribers with different services. With its high port density, up to 1,216 POTS, 1,280 ADSL2plus, 960 VDSL2 customer ports, extended with vectoring, can be provided. 480 customers can be connected via optical fibre by active Ethernet.

MileGate

MileGate2310

The subrack offers 8 slots, of which 7 can be allocated with service line cards. It is designed for mid-sized access points.

Up to 384 POTS, 448 ADSL2plus, or 288 VDSL2 customer ports, extended with vectoring, can be provided per subrack. It can be installed horizontal or upright as well as wall-mounted in equipment rooms in buildings or in street cabinets. 168 customers can be connected via optical fibre by active Ethernet.

Safety/redundancy

To achieve maximum availability, the core unit and the media gateway can be installed redundantly. This way the breakdown time, where services are not

available due to a component failure, is reduced to a minimum.

MileGate uses a distributed powering concept with onboard power supply units on each line card, gateway etc. This eliminates the risk of total breakdown caused by a failure of a central power supply unit.

To integrate external alarms, MileGate 2510 provides 12 alarm inputs and 2 alarm outputs integrated in the management system via the fan unit. MileGate 2310 offers 12 alarm inputs.

Management

All services are centrally managed via the management system UNEM or via local management access (CLI, XML, SNMP).

Technical data

General	MileGate 2510	MileGate 2310
Number of slots (for services line cards)	Max. 20	Max. 7
Slots for core units with redundancy	Max. 2	Max. 2
Slots for media gateways with redundancy	Max. 2	Max. 2
Supported fan unit	FANU4	FANU6
Performance Features	MileGate 2510	MileGate 2310
System architecture	Fully modular architecture, each service at each slot	
Safety functions	Core unit and media gateway with 1:1 component redundancy	
Capacity Ethernet star per slot	2 x 10 GbE	2 x 10 GbE
SDH capacity	Up to STM-4	
Dimensions (W x D x H) and Weights	MileGate 2510	MileGate 2310
Required height units	8 HE (with cable duct)	4 HE
Without front panel	482.6 x 284 x 308.2 mm, 6,440 g	482.6 x 279.7 x 177 mm, 4,450 g
With front panel	482.6 x 286 x 308.2 mm, 7,430 g	482.6 x 283 x 177 mm, 5,050 g
Cable tray	482.6 x 240 x 87.1 mm, 870 g	Included in 19" adapter
Heat sink	482.6 x 237 x 87.8 mm, 1,580 g	Not necessary
Construction and design	19" and ETSI installation	
Standards		
Electromagnetic compatibility	EN 55022, class B	
Safety	IEC/EN 60950-1	
Management		
MCST	For local management	
UNEM	For central management	
Power Supply		
Input voltage nominal (min/max)	-48/-60 V DC (-39.5 V DC ... -72 V DC)	
Operation Environment		
Temperature range	-25°C ... +60°C	
Humidity	Acc. class 3.2, up to 95 %, without condensation	