

MileGate 2042

Distribution Point Unit (DPU) optimised for ultra-high-speed FTTB applications with support of G.fast 212 Mhz



MileGate 2042

- Fiber-like speed in copper access deployment
- Provides 8 G.fast ports with-profiles 212a/106a
- Supports VDSL2 fallback
- Uplink via SFP interfaces (10GbE/1GbE or GPON)
- Electrical Ethernet for subtending
- Wall mounting – optimised for FTTB installations
- Easy installation – no fixed preassembled cables (no copper tail)
- Fanless unit, no noise emission
- Lockable housing/intrusion alarm supported
- Integrated 115...230V power supply
- Optional CATV converter module

MileGate 2042 is a micro DSLAM / DPU optimised for FTTB. It connects up to eight subscribers with fibre-like data rates via the copper pairs of the existing in-house cabling.

■ G.fast and VDSL2

G.fast is supported with profiles 212a and 106a. Profile 212a provides aggregated (upstream+downstream) data rates of close to 2Gbps on short copper loops. Profile 106a still delivers rates of almost 1Gbps. The downstream to upstream ratio of the G.fast interfaces of MileGate 2042 is configurable. This enables symmetric data

rates as they are required for cloud service applications or for business clients.

Apart from G.fast, MileGate 2042 also supports VDSL2. This enables network operators to deploy the broadband technology according to their needs.

■ FTTB

MileGate 2042 can be directly mounted to the wall of a building. There is no need of an additional housing.

It is lockable and has an intrusion alarm that reports any unauthorised access attempt to the network management system of the operator.

The node is directly 115/230VAC powered – no separate power supply is required. Due to the optimisation for FTTB applications, subscriber interfaces are easy to access – no preassembled breakout cable is required.

MileGate 2042 terminates the optical connection in buildings. For the uplink two SFP+ cages are available. Equipped according to operator needs 2x 10GbE or 2x 1GbE trunk speed are supported. It is also possible to use MileGate 2042 as GPON ONU. In this case the trunk is realised as GPON interface.

■ Ring connection

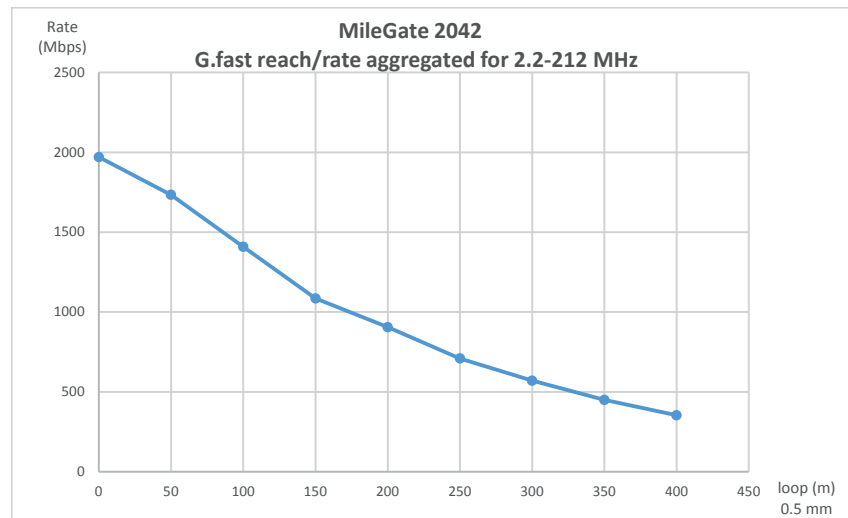
MileGate 2042 can be deployed in ring topologies. Also sub-terminating is possible via electrical 1GbE or optical 10GbE/1GbE interfaces.

■ CableTV media converter

With an optional CATV module, MileGate 2042 provides broadband cable TV via an existing COAX cabling. The CATV signal can be transmitted via separate optical fibres or via the overlay.

■ Management

MileGate 2042 is managed by CLI, SNMP and Telnet. A web GUI is available as well.



G.fast data rate (upstream and downstream aggregated) over 0.5 mm twisted copper pair using the full G.fast spectrum 2.2 MHz to 212 MHz

Technical data

General	
Function	G.fast/VDSL2 DPU for FTTB (Fibre-to-the-building)
Network interfaces	
Number of interfaces	2 trunk and 1 sub-terminating interface
Optical interfaces	1000Base-x (SFP) or 10GBase-R (SFP+)
Electrical interface	10/100/1000BaseT (RJ45)
Supported spanning tree protocols	STP/RSTP/MSTP/PVSTP/PVRSTP
Subscriber interfaces	
Interfaces	8x G.fast acc. to G.9700/9701 profile 212a and 106a, fallback to VDSL2 17 MHz acc. to Annex P
OLR (online reconfiguration)	SRA (Seamless Rate Adaption), TIGA (Transmitter Initiated Gain Adjustment), RPA (Remote management channel Parameter Adjustment), FRA (Fast Rate Adaption)
Layer2 features	
Standards supported	VLAN port/subnet/protocol, 3ad Link aggregation, port mirroring, rate limiting with egress shaping, flow control acc. to 802.3x, MAC address translation with n:1, MVR (Mcast VLAN Registration), DHCP relay option 82
Multicast features	IGMPv2/v3, IGMP snooping, IGMP proxy
Cyber security	
Standards supported	Broadcast/multicast storm control Authentication: RADIUS, TACACS+ 802.1x
Additional	
Features	Door lockable, intrusion alarm (door open), temperature monitoring
Options	Integrated POTS/ISDN splitter and integrated CATV O/E converter
IP code	IP42
Mechanics	
Dimensions (H x W x D)	380 x 340 x 105 mm
Management	
CLI, SNMPv2/v3	For inclusion in the OSS of network operators
Web GUI, Telnet, ftp, tftp, SSH	Supported
Power supply	
Input voltage nominal (min/max)	115 ... 230V AC
Operation environment	
Temperature range	ETS 300 019-1-3 Class 3.2 (- 5 ... + 45 °C, fanless operation)



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