

MileGate

Distribution Point Unit MileGate 2051/2052/2053

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



MileGate 205x
G.fast DPU (Distribution Point Unit)

Features & Benefits

- + Fiber-like speed in copper access deployment
- + Uplink via SFP+ interface (1GbE/10GbE or GPON/XGS-PON)
- + Wall mounting – optimized for FTTB installations
- + Easy installation – no fixed preassembled cables (no copper tail)
- + Optional features:
 - MELT (Metallic Line Test)
 - Reverse Power Feeding
 - CATV converter module

MileGate 205x is a DPU optimized for FTTB, that can be optionally powered from the subscriber side (RPF = Reverse Power Feeding). Depending on the variant, it connects up to 16 subscribers with fiber-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 2 Gbps on short copper loops. Profile 106a still delivers rates of almost 1 Gbps. MileGate 205x enables symmetric data rates as they are required for cloud service applications or for business clients. Apart from G.fast, MileGate 205x also supports VDSL2. This enables network operators to deploy the broadband technology according to their needs.

FTTB

MileGate 205x can be directly mounted to the wall of a building. It is lockable and has an intrusion alarm that reports any unauthor-

ized access attempt to the network management system of the operator.

The node is directly 115/230 V AC powered, via reverse power feeding or with booth options in parallel. Therefore the installation in locations without power supply is possible.

MileGate 205x terminates the optical connection in buildings. Equipped according to operator needs it offers a 10GbE or 1GbE trunk interface. It is also possible to use MileGate 205x as GPON/XGS-PON ONU.

MELT

With MELT (Metallic Line Test), the transmission line can be easily qualified via the management.

The function determines external voltages, resistances and capacities. In case of an error, the source of interference can be identified.

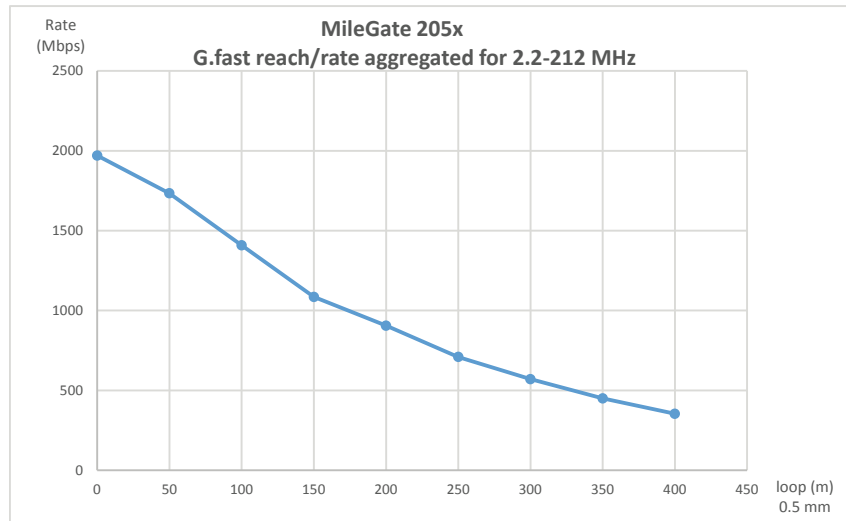
MileGate

CableTV media converter

With an optional CATV module, MileGate 205x provides broadband cable TV via an existing COAX cabling. The CATV signal can be transmitted via separate optical fibers or via an overlay.

Management

MileGate 205x is managed by CLI, SNMP, Telnet and NETCONF/YANG. A web GUI is available as well.



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

Technical data

General	
Function	G.fast/VDSL2 DPU for FTTB (Fiber-to-the-building)
Network interfaces	
Interfaces	1000Base-x (SFP) / 10GBase-R (SFP+) GPON / XGS-PON
Subscriber interfaces	
Interfaces	4x (MileGate 2051), 8x (MileGate 2052) or 16x (MileGate 2053) G.fast ports acc. to G.9700/9701 profile 212a and 106a Fallback to VDSL2 30a, 35b and 17a 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, 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 CATV O/E converter, MELT, Reverse Power Feeding
IP code	IP42
Mechanics	
Dimensions (H x W x D)	340 x 380 x 112 mm
Management	
CLI, SNMPv2/v3	For inclusion in the OSS of network operators
SDN	NETCONF/YANG according to TR-355 and TR-383
Web GUI, Telnet, FTP, TFTP, SSH	Supported
Power supply	
Input voltage nominal (min/max)	115 to 230V AC
Operation environment	
Temperature range	ETS 300 019-1-3 Class 3.2 (-5 to +45 °C, fanless operation)