

## Application Note



## Cost-effective solution for ultra-fast broadband in apartment buildings

### MileGate 2042 offers:

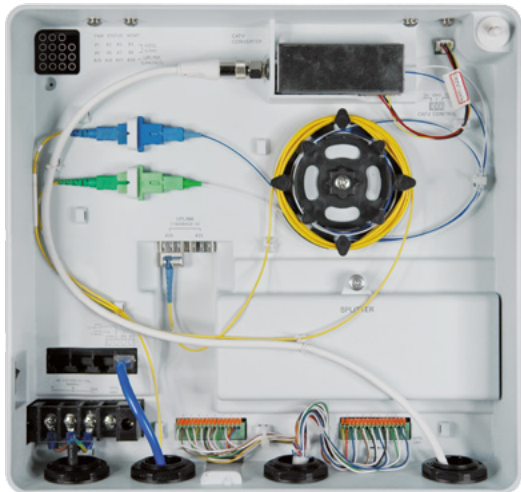
- Fast internet via the building's existing phone lines
- Data rates of almost 2 Gbps per home
- No extra costs for new cables
- Simple, fast and secure wall-mounted assembly in halls, basements or utility rooms
- Passive and silent cooling system
- Data transmission via existing coax cables instead of the phone line as an option



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connected to the mains immediately and requires virtually no maintenance thanks to its lack of moving parts. All the electronics are enclosed in the housing, which rules out any damage due to improper handling during assembly for example.



MileGate 2042 is easy to mount, cooled passively, operates silently and requires virtually no maintenance.

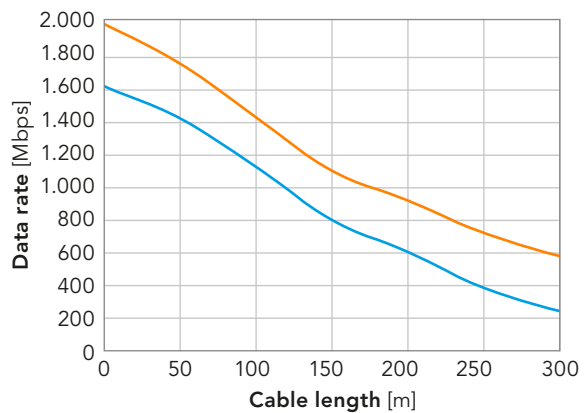
## Flexibility in terms of data rates and user numbers

With G.fast, the DPU serves frequency ranges of up to 212 MHz. The ports can also be configured to VDSL2. Therefore, existing VDSL2 broadband connections can be migrated without the need to exchange the terminal equipment.

There is also flexibility when it comes to the upstream and downstream ratio. In the case of G.fast, both transmission directions alternately use the whole frequency range. The major advantage of this process is that network operators can decide for themselves what the ratio between upstream and downstream per port and subscriber should be. For instance, a fast downstream rate of 1 Gbps and a slower upstream rate of 600 Mbps would be typical of an assumed aggregated total data rate of 1.6 Gbps. But other combinations are also possible.

The units come with 8 ports and can be combined with one another in order to serve fluctuating numbers of subscribers. In spring

## MileGate 2042 G.fast Data rates



— G.fast Profil 212a (2,2–212 MHz) full spectrum — G.fast Profile 212a (40–212 MHz) VDSL2 Profile 35b compatible

Data rates: Upstream and downstream aggregated over 0.5 mm copper wire pairs

2020, there will be a version with 4 ports, with 16-port units to follow from mid-2020.

Ten gigabit Ethernet, one gigabit Ethernet or GPON are used to provide the connection to the optical fibre network.

With an optional CATV module, the operator can also use MileGate 2042 to offer broadband cable TV.



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## User-friendly management

Ports are usually configured quickly and in a user-friendly way through profiles, which define parameters such as the ratio between upstream and downstream or data packet priorities. The higher the priority, the greater the level of performance and convenience with which subscribers can use the broadband services they want. MileGate 2042 operators can divide their customers into the different premium, medium and regular user price groups, create a dedicated, configured profile for each group and then simply assign a new subscriber to a group. Consequently, new customers can be connected to the network very quickly.

Operators have various ways of managing MileGate 2042. A command line interface (CLI) offers the full range of operations. An easy-to-use, web-based GUI is the right choice for occasional and quick configuration changes. SNMP is a network protocol that allows MileGate 2042 to be integrated into overarching management systems. From 2020, Netconf/Yang, the interface of the future, will enable DPU management in software-defined network structures.



MileGate 2042 can be locked, is theft proof and comes with an alarm system to prevent unauthorised access

## MileGate 2042: flexible, simple and requires no maintenance

Thanks to the popular MileGate 2042, owners of apartment buildings and property management companies have a cost-effective, maintenance-free and flexible network node. It delivers data rates via the copper lines already in the buildings of the sort only otherwise possible with optical fibre. The housing is quick to mount, theft proof and the unit operates silently thanks to a passive cooling system. Operators can configure MileGate 2042 via remote maintenance using a user-friendly, web-based GUI which is accessible via an internet browser, SNMP and CLI. It can be flexibly adapted to match the requirements of tenants and the number of homes.



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