

# Cable Modem Termination System (CMTS)

Delivering High-speed Internet Access Throughout Existing Buildings and New Installations –

## GIGABIT EVERYWHERE!



### Available devices:

- CMTS 1-00N** For up to 256 modems  
16 downstream channels  
4 upstream channels  
800 Mbps in the downstream  
120 Mbps in the upstream
- CMTS 2-00N** For up to 512 modems  
32 downstream channels  
8 upstream channels  
1600 Mbps in the downstream  
240 Mbps in the upstream
- CZU 2-00** Additional power supply unit
- CZU 3-00** Startup kit with accessories (inkl. Diplexer, splitter, cable)
- BZU 65-85** Diplexer 65/85 MHz  
For splitting or merging the return path (upstream) and forward path (downstream)
- SFPB 10-xxxx** Bidirectional SFP+ Transceiver 10Gbps  
For connecting the CMTS to the central switch

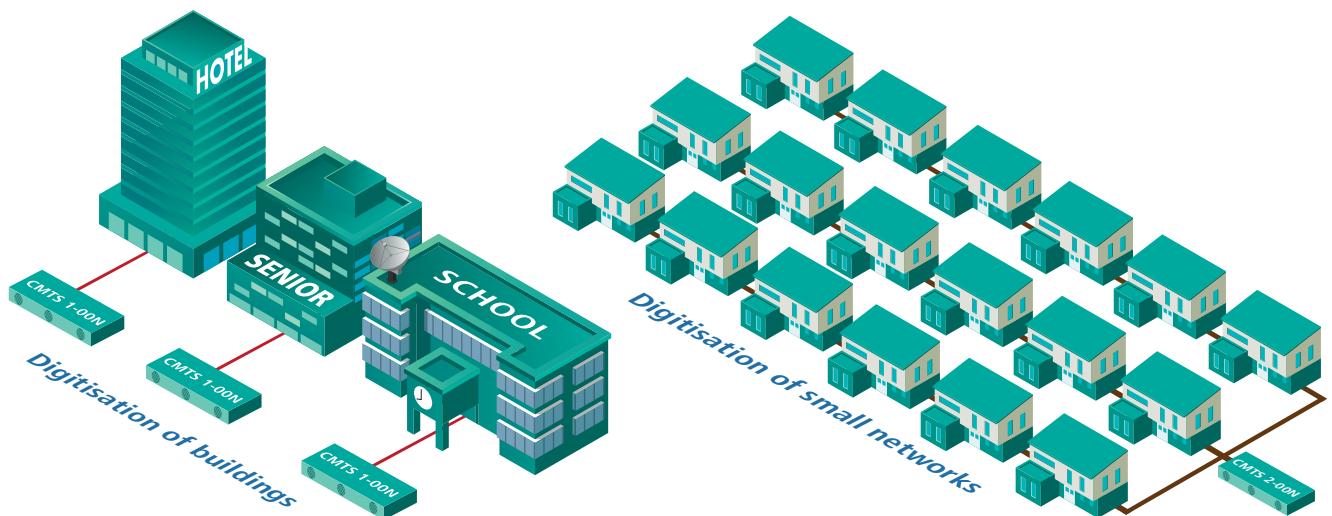


Scan for details and  
technical data

A Cable Modem Termination System (CMTS) allows professional IP services to be fed into hospitality CATV systems or small cable systems. DOCSIS 2.0 or DOCSIS 3.0 modems are supplied via downstream and upstream channels.

### Benefits at a glance:

- ✓ CMTS 1-00N ideal for building digitisation
- ✓ CMTS 2-00N ideal for large digitisation projects and cable networks
- ✓ Complies with DOCSIS and EuroDOCSIS 3.0 / 2.0 standards
- ✓ Web-based configuration
- ✓ Supports SNMPv1, v2c, v3
- ✓ 19" housing, 1U



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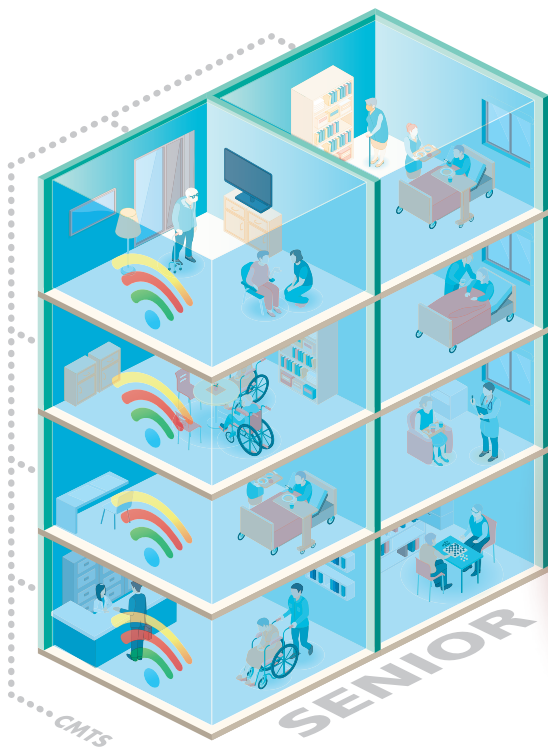
# Building digitisation

The coaxial cable is not only limited to TV and radio, it also transmits high-speed Internet very well.

### The professional approach - DOCSIS:

DOCSIS, based on the Data-Over-Cable-Service-Interface-Specifications-Protocol, is a widely recognized and extensively used technology utilized by major cable network operators like Vodafone for their Internet services, while also supporting traditional television and radio transmission. The affordability of this technology has made it increasingly viable for integration into building systems of a certain scale.

A Cable Modem Termination System (CMTS) facilitates the professional integration of IP services into coaxial cable systems. Utilizing DOCSIS cable modems, users gain access to high-speed Internet without the need for additional cables or lengthy conversion processes. With its seamless integration, it's an ideal solution for various sectors including hospitality, retirement homes, schools, student residences, and campus networks already equipped with a coaxial cable infrastructure.



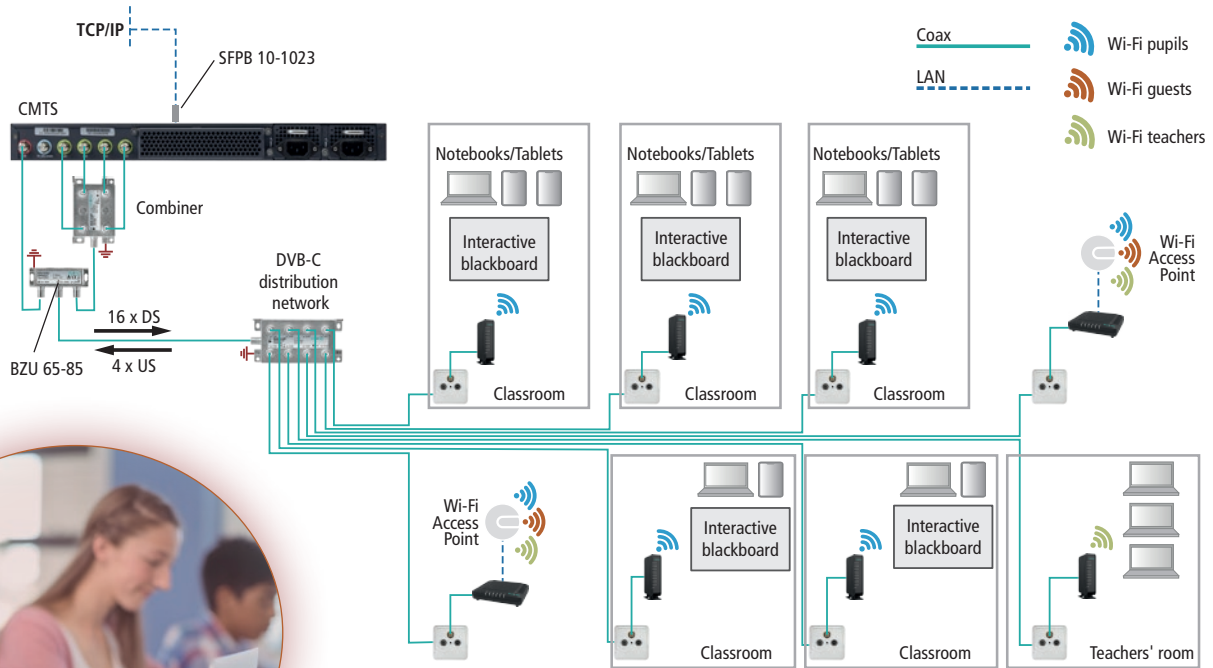
Surfing, streaming, Skyping in retirement homes, student residences or hotels

### Benefits at a glance:

- ✓ Utilisation of existing coaxial TV infrastructure
- ✓ No new cable laying necessary (no noise, no dirt)
- ✓ No long conversion times
- ✓ No obstruction due to increased fire protection requirements
- ✓ Suitable for any type of SAT or SMATV system
- ✓ High data throughput
- ✓ Uniform, loss-free data signal throughout the coaxial network
- ✓ Multiple networks and access points can be realised (e.g. for hotel guests, administration, conferences, etc.)

### And this is how it works:

The CMTS establishes the connection to the Internet backbone for up to 256 or 512 modems. The downstream transmitter modulates the data coming from the Internet onto several carriers and sends the data to the cable modem. The upstream demodulator receives the data sent from the cable modem to the CMTS. Upstreams and downstreams are combined or separated for the distribution network via a diplexer. The CMTS therefore translates between the IP and DOCSIS protocols and also regulates the data traffic and the quality of service (QoS).

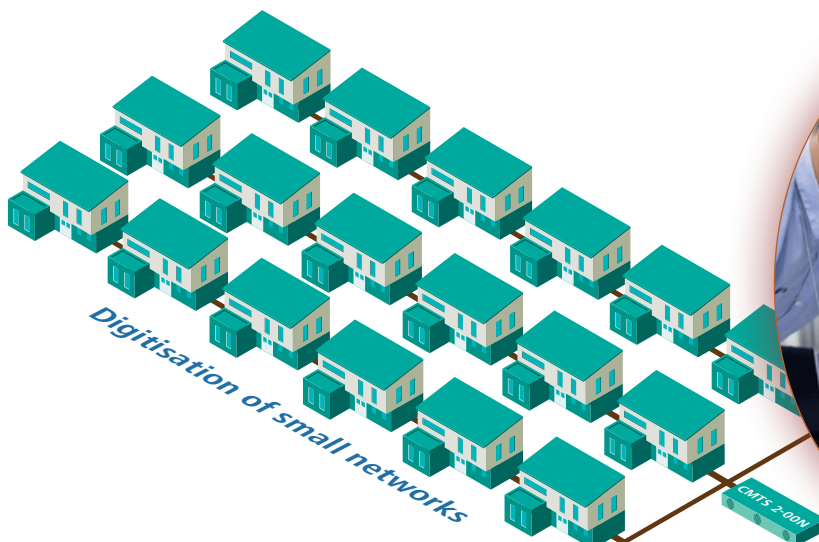


*E-learning in schools*

DOCSIS 2.0 or 3.0 modems are supplied via downstream and upstream channels. Such cable modems then provide the access points for Internet and data services via Ethernet and WiFi. Powerful WiFi access points, switches and other network technology can also be connected to such a modem. This ensures optimum coverage.

## Digitisation of small cable networks

With the combination of CMTS and cable modems, you can expand an existing coaxial system into a transparent Ethernet network. By using our innovative CMTS solutions for Internet and telecommunications, even small network operators, municipal utilities and antenna communities are able to offer competitive services.



*Expanding existing coaxial systems*