

# Fiber-optic telecommunication network for isolated or remote locations

Isolated or remote locations face particular challenges when it comes to the availability of Internet and TV services. A locally owned and managed communication infrastructure can be a viable solution to address these unsatisfied connectivity needs. With the BKTEL® Fiber-Island solution, HUBER+SUHNER has developed a self contained system that enables access to high speed internet with data rates of up to 10 Gbit/s as well as HD quality TV via a fiber-optic network. BKTEL® Fiber-Island connects communities, institutions, campuses, or businesses. Whether browsing, gaming, video conferencing, working from home, running a business or simply watching TV the BKTEL® Fiber-Island solution provides your customers with the key connectivity needed in today's digitalized world. Every room in every building can be supplied with a connection, enabling real time work flows and video conferences run parallel to IP traffic or TV entertainment without compromising signal quality.



## Key features and benefits:

- High-Speed Connectivity: The network provides speeds up to 10 gigabits per second, enabling seamless browsing, gaming, video conferencing, and other data-intensive activities.
- Improved Reliability: Fiber optic connections are known for their reliability, minimizing disruptions and ensuring consistent performance.
- Enhanced Capacity: The increased bandwidth allows for more devices to connect simultaneously without performance degradation.



Sustainability: Protection of environment and costs through low energy consumption

- Future-Proof Solution: Fiber-optic technology is scalable and can accommodate future increases in data demand.
- Quality TV Experience: A high-quality TV programming package can be made available, enhancing the overall entertainment experience.
- Scalable from 32 to 1064 subscriber
- Adjustments and expansions possible at any time depending on the

#### **Key components**

**AOTxE:** Directly modulated 1550 nm Amplified Optical CATV Transmitter

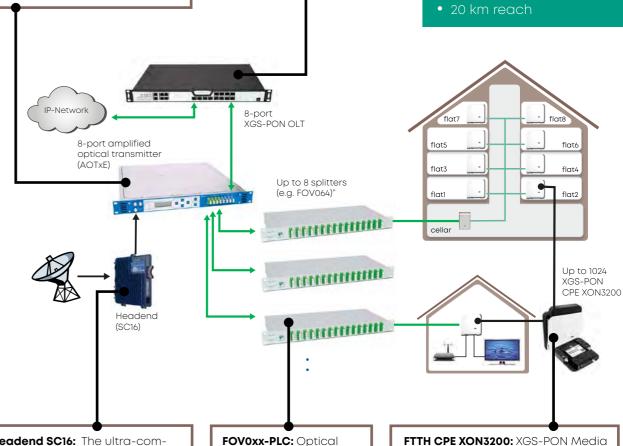
- · Electrical to optical conversion of multichannel CATV signals
- Optical Amplification with 8 or 16 x 20 dBm optical output
- High quality transmission in point-to-multipoint links up to

#### XGS PON OLT:

- · Optical line termination for XGS-PON with speeds up to 10Gbit/s per subscriber
- 8 or 16 ports
- Fully compliant with ITU-T G.9807.1 XGS-PON standards

### **System capacity**

- Max. 16 XGS-PON/video ports + 16x 1:64 Splitter
- Total number subscribers:
- Internet speed up to 10Gbit/s
- CATV service with 16 QAM DVB-C carriers for 32 HD or 128 SD TV channels



Headend SC16: The ultra-compact cable TV headend solution

- 16-channel DVB-C transmodulator with DVB-S, DVB-S2, and DVB-S2X front-end
- Environmentally friendly and very energy efficient maximum performance at minimum power consumption with only 1.5W per carrier
- · Comprehensive HW/SW functionality with TS multiplexing, PES filtering, NIT, LNB supply, DiSEqC

Splitter Converter

• Splitter for distribution • Optical fiber WAN interface of optical signals in supporting XGS-PON networks and Passive Optical Networks

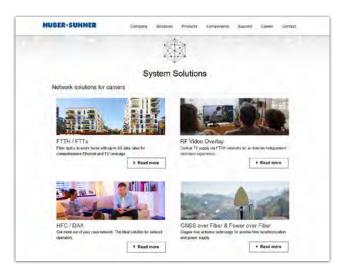
(PON)

- Fully compliant with ITU-T G.9807.1 XGS-PON standards · Optical home receiver for multi-
- channel television and radio signals

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# Do you have any questions?

Visit us online. On our website you will find a lot of information about FTTH, video overlay and other network solutions:



bktel.com/system-solutions

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