

Active Optical Xtreme®

Nortech's ruggedized active optical Cables provide long length, high data-rate and customizable solutions where signal integrity, durability and reliability are critical.



- Long runs of high-speed data
- Reliable video communications
- Tiny invasive medical imaging (endoscopy, robotic surgery)
- Miniature body-worn imagers and sensors on the battlefield
- Secure communications in electrically noisy environments
- Flexible communications where wireless won't work
- Smaller, lighter, high-bandwidth harnesses
- Portable displays and peripherals powered and operated on a single cable
- Legacy systems upgraded with more bandwidth and/or distance

50 meter USB-C cable that delivers 250W and 10Gbs of data to a 4K ruggedized display







Benefits

- Long cable length
- High bandwidth
- Light, thin, flexible
- Robust
- **Flexible**
- Protocols
- Connector variety
- EMI free data
- Transparent to system
- Power delivery & data

Use Cases

- 10 meter fiber-only cable, 2mm cable OD transmitting medical images/video
- 6 meter hybrid (fiber plus copper) quick-disconnect cable to support portable device operation
- Low power 2-way video and control cable for augmented reality night vision goggles
- 75 meter, IP68, 5.5mm cable OD for power, control and video communication with submersible camera

Features

- Up to 100 meters, low bit error rate (BER)
- Up to 16 Gbps/fiber
- 250 um tactical grade optical fiber, hybrid cables
- Configurable shield, jacket, and IP rating
- USB, MIPI, proprietary DC-balanced
- USB-C, D38999, ARINC, nearly unlimited options
- Optical signals immune to **EMI**
- Cable consumes only 80mW (10 Gbps USB)
- Delivers up to 250W + 64 **Gbps of Data**











