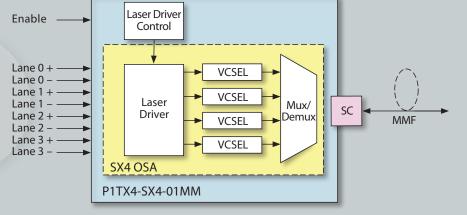
# Medical High-Speed Data Transfer



The P1xX4C-SX4x-01MM (SX4 Mini Module) transmits four video- or data-channels over one multimode fiber. Each channel is capable of transmitting up to 1.65Gbps (model = V) or 3.5Gbps (model = D). With a microcontroller preprogrammed for optimal optical transmission on board, TX-SX4 module is a fully integrated electrical to optical transmitter versatile enough to be designed in to a variety of systems.

#### **Features**

- Multiple signals over one multimode fiber
- Integrated microcontroller for laser driver control
- ~ 0.5W power consumption
- Metal enclosure with SC optical interface





### Video Over Fiber Components & Technologies

### Leading-edge Technologies for Video Over Fiber Solutions

Omron is a \$7 billion global supplier of electronic components and solutions for a broad range of applications. With over 75 years of experience manufacturing electronic components, Omron provides global and local networks of technical and sales support from design through delivery.

#### Combining Core Competencies and New Technologies

Omron applies a comprehensive mix of manufacturing and technological skills to provide innovative solutions to the medical market. Omron's SX Series Optical Sub Assemblies (OSAs) and Optical Modules enable the transmission of High Definition video over long distances for use in operating rooms, emergency rooms and remote video consultations for direct patient care as well as information sharing, training and collaboration in the networked medical facilities of tomorrow.

#### Competencies

- Materials
- Precision Replication & Assembly
- Stamping & Molding
- Integration of Active Elements
- Packaging

#### Technologies

- Switching
- Sensing
- Magnetic Actuators
- Nano Machining
- Micro Electro Mechanical Systems
- Solid State Devices



**Omron Network Products LLC (ONP),** a subsidiary of Omron Corporation and based in the Silicon Valley, is the leading developer of high-performance optoelectronic subsystems. By creating market-leading TOSA/ROSA designs and integrating them with application-oriented interfaces, ONP delivers market-changing solutions in ready-to-use packages.

## Combining Core Competencies and Break-Through Technologies

ONP's subsystems are based on a series of patented designs and proprietary manufacturing technologies that enable it to overlay a variety of channels or signals on one optical fiber. The end result is a unique, highly scalable and versatile product line that enables customers to rapidly and easily implement fiber optic solutions.

#### In-House Design Expertise:

- World's leading developer and supplier of optical modules for video transmission
- 5 years creating and developing optical module technologies
- Only manufacturer able to integrate ferrule & lenses into filter based optics
- Capable of standard or custom designs

#### In-House Manufacturing Expertise:

- Primary Factory (Pleasonton, CA)
- Expansion Factory (Thiland)

#### **Key Application: High-Definition Video**

ONP's products exceed copper distances by 10x without any quality loss and enable lower cost installation.

- HDMI<sup>™</sup>, DVI, DisplayPort<sup>™</sup> or Proprietary Video
- 3.5Gbs/Channel
- · Eliminates mixing of pixel signals
- Scalable architecture to 1 Gbps/Channel
- Direct Mapping of Multiple TMDS Signals on a Single Fiber

#### **OMRON ELECTRONIC COMPONENTS LLC**

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