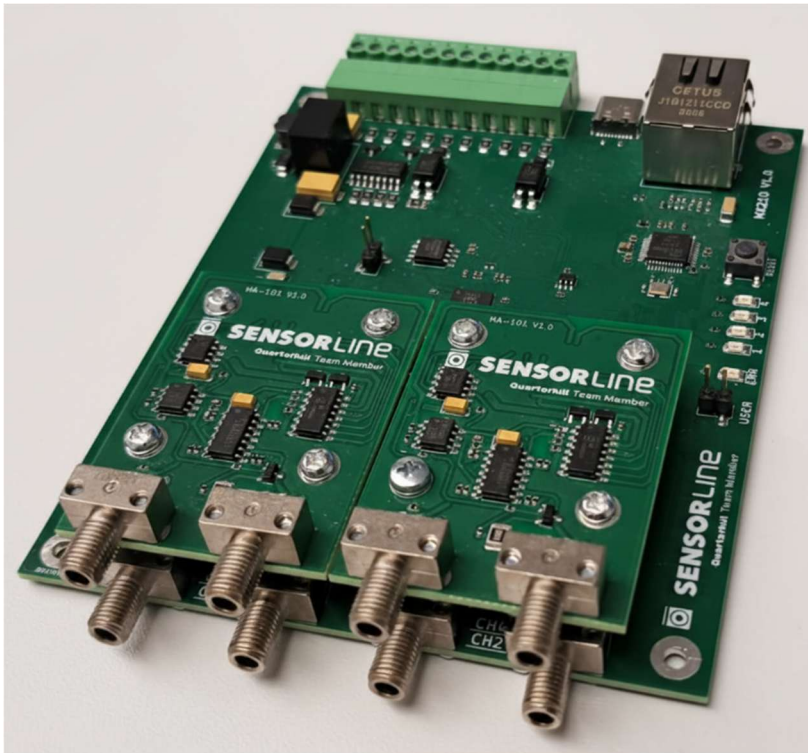




Sensor Line SL MX-210

Datasheet



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Product Description

The Sensor Line MX-210 interface is designed to operate Sensor Line fiber optic road and railway sensors by detecting changes in their optical transmittance. It converts these variations into electrical output signals, which can be retrieved by external devices for traffic data processing. The unit comprises a high-power infrared LED transmitter, a PIN diode photo detector, and advanced optical transmission analysis electronics. All Sensor Line fiber optic sensors (including PUR, EZ, SPZ, and SMS models), as well as railway sensors, are directly compatible with the SL MX-210.

The SL MX-210 stands out with its TCP/IP over Ethernet connectivity, support for up to four sensors via expansion boards, a wide input voltage range, and the innovative pulse-mode transmitter drive technology.

Specifications

- Two channels, onboard optical sensor interface
- Two channels, expansion ports (SL MA-101)
- 7V-35V DC input range switch mode power supply.
- USB-C connection without external power supply.
- Opto-isolated digital trigger output and alarm outputs
- 0-5V analogue signal outputs
- TCP/IP over Ethernet connection.
- Command based user interface on TCP/IP sockets and USB serial interfaces
- Configurable sensitivity, digital filter, digital and analogue outputs
- Opto-isolated hardware reset input
- DC and Pulse mode transmitter driving, extremely high dynamic optical input range
- 3 kSPS signal sampling rate
- Onboard LED indicators and reset button
- -25°C to +85°C industrial grade operating temperatures.
- 0 to 250km/h (road sensors), 0-500km/h (railway sensors) speed range,

Typical Analog and Digital Signal Outputs

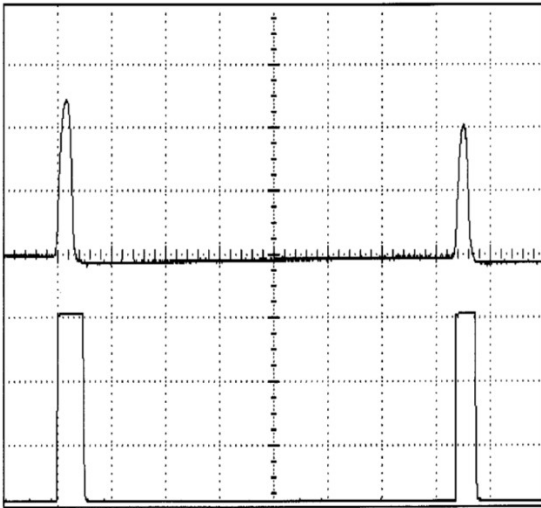


Fig. 1: SL PUR sensor operated by SL MX-210.

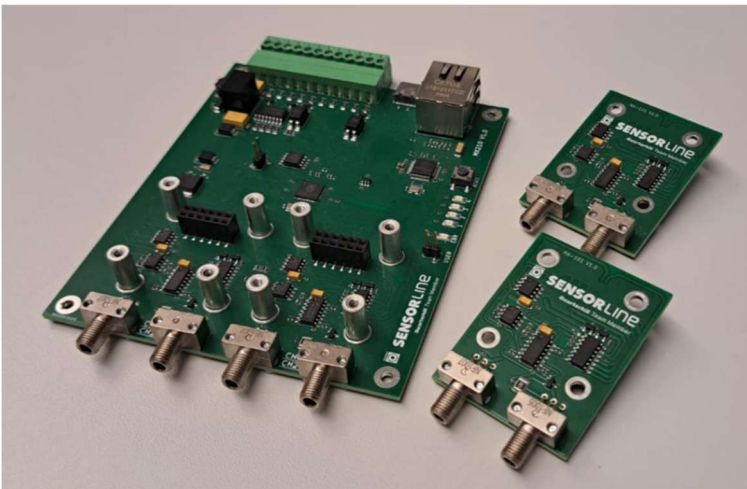


Fig. 2: SL MX-210 and SL MA-101 (expansion boards)

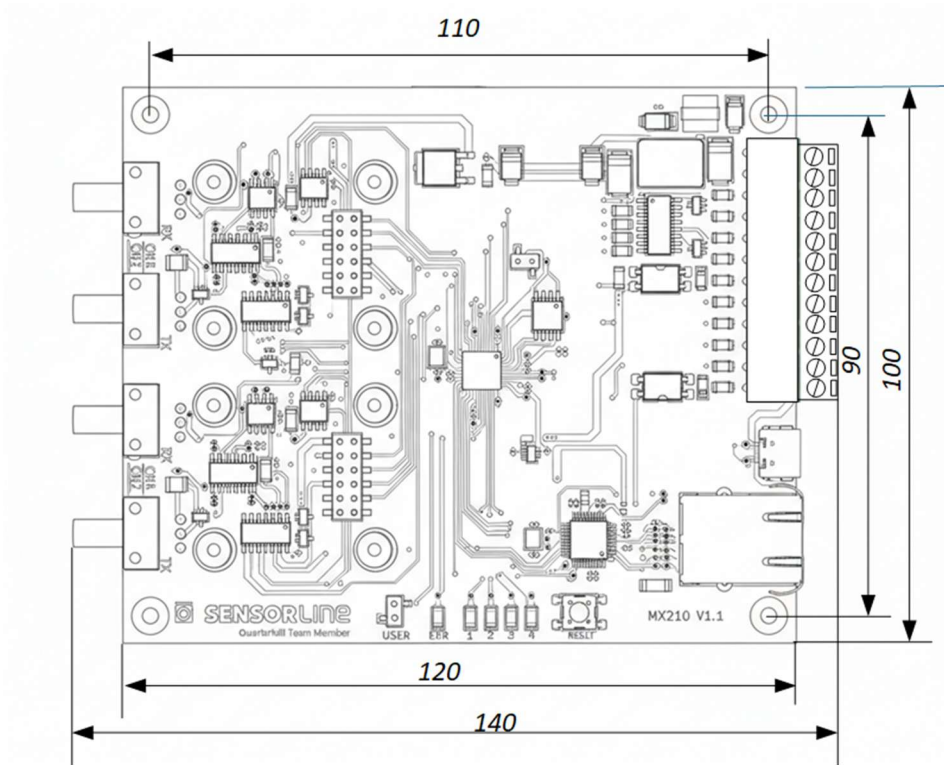


Fig. 3: SL MX-210 Dimensions in mm