



# SERIAL FIBER TO RS485 SIGNAL CONVERTER – CFRS

CATALOGUE



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#### INTRODUCTION

Electron's Serial Signal Converters were designed to meet the latest technologies used in communication networks of power substations, petrochemical plants and industrial plants, being able to convert signals that travel all communication protocols in RS485 (ANSI/TIA/EIA-485-A two-wire), USB 2.0 and also optical fiber, which makes the network totally immune to electrical noise, electromagnetic inductions, lightning strikes and voltage surges, increasing the reliability of data traffic, the speed of communication and the distances between IEDs / data server or supervisory system (Scada).

The Converters are designed for the interface between PC and the RS485 fiber serial communication bus. The interface with the PC is through a USB port.

By plugging the converter into the PC's USB it is automatically detected and installed as a native COM port.

The Converters were built in compliance with strict quality standards and use state-of-the-art electronic components (SMD), their hardware was designed to withstand severe working conditions, and can be installed directly in power substation panels. Meets the levels of demands, supportability and reliability according to IEC, DIN, IEEE, ABNT standards.

#### MAIN CHARACTERISTICS

- Compact housing with 22.5x100x113.5 mm in ABS for DIN rail 35 mm;
- Powered by USB port < 200 mA;</li>
- Communication speed from 1200 to 115200 bps;
- Maximum fiber length of 3000 m (multimode optical fiber, 62.5/125 μm);
- Fiber connector in ST standard;
- Minimum transmit power -14.0 dBm (multimode optical fiber, 62.5/125 μm);
- Maximum transmit power -10.0 dBm (multimode optical fiber, 62.5/125 μm);
- Minimum receive sensitivity -24 dBm (multimode optical fiber, 62.5/125 μm);
- Supports 50/125 μm, 62.5/125 μm, 100/140 μm, and 200 μm multimode optical fiber;
- Wavelength 850 ηm;
- Indication with LED's of on, transmission and reception of data and link;
- Transmission Mode: Half Duplex;
- Interface with USB 2.0 Plug and Play computer;
- USB connection with Micro-B connector;
- Resistant to lightning strikes and damage caused by electrostatic discharge;
- Resistant to EMI/RFI and current surges, ideal for data communications near transformers, heavy electrical equipment, and other electrical or radio interference;
- Easy installation and use.
- 2 years warranty;



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### DIMENSIONS



## CONNECTION DIAGRAM





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