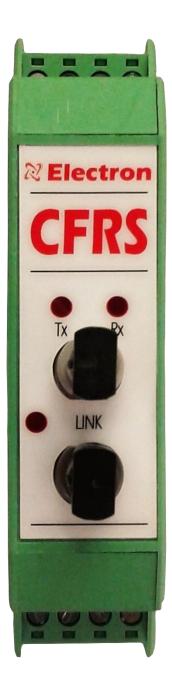
# CATALOG

# **OPTICAL FIBER TO RS485 SERIAL SIGNAL CONVERTER - CFRS**





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# INTRODUCTION

The Electron Serial Signals converter was designed to attend the most recent technologies used on Power Plants communication network, Chemical and industrial plants. It converts signals that that uses all communication protocols in RS-485 patterns (ANSI/TIA/EIA-485-A a dois fios), USB 2.0 and Optic Fiber, which ensures immunity to the network against electrical surges, electromagnetic inductions, voltage surges and atmospheric discharges. Increasing the data reliability, the communication speed, and through the distance between IED's, data servers or supervisory systems (SCADA).

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

To connect the converter on the computer or USB port is automatically detected and installed as a native COM port.

The Converter is built obeying to rigorous quality patterns and it uses last generation electronic components (SMD), its hardware was projected to support severe environment conditions, it can be installed directly on substations panels. It attends to requirements levels, supportability, and reliability according to IEC, DIN, IEEE and ABNT patterns.

#### MAIN CHARACTERISTICS

- Compact box with 22.5x100x113.5 mm in ABS for DIN rail 35 mm;
- USB port power <200 mA;
- Communication speed from 1200 to 115200 bps;
- Maximum fiber length of 3000 m (multimode optical fiber, 62.5 / 125 μm);
- Fiber connector without ST standard;
- Minimum transmission power -14.0 dBm (multimode optical fiber, 62.5 / 125 μm);
- Maximum transmission power -10.0 dBm (multimode optical fiber, 62.5 / 125 μm);
- Minimum reception sensitivity -24 dBm (multimode optical fiber, 62.5 / 125 μm);
- Compatible with 50/125  $\mu m,$  62.5 / 125  $\mu m,$  100/140  $\mu m$  and 200  $\mu m$  multimode optical fiber;
- Wavelength 850 ηm;
- LED indication of on, data transmission and reception and link;
- Half Duplex transmission mode;
- USB 2.0 Plug and Play computer interface;
- USB connection with Micro-B connector;
- Resistant to lightning strikes and damage caused by electrostatic discharge;
- Resistant to EMI / RFI and current fluctuations, ideal for data communications near transformers, heavy electrical equipment and other electrical or radio interference;
- Easy installation and use.
- 2 year warranty;

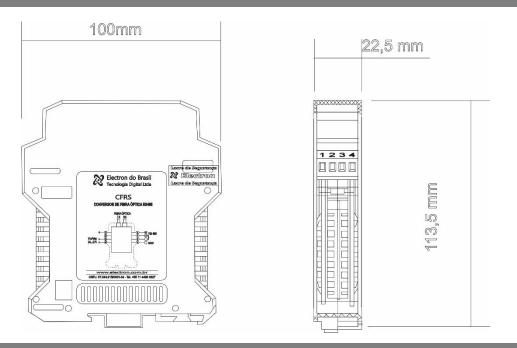


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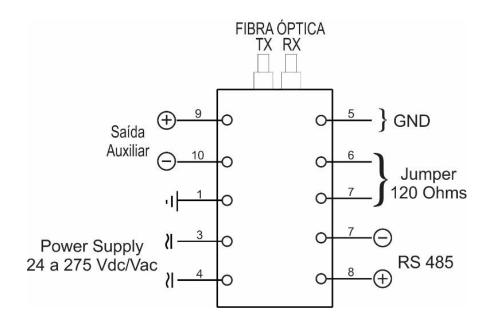
# **TYPE TESTS**

- 1.5kV / 60Hz / 1 minute isolation between auxiliary power and bus;
- 3.5kV / 60Hz / 1 minute isolation between auxiliary power and power;
- Auxiliary power output of 2W, 5Vdc or 23Vdc or 27Vdc;

# DIMENSIONS



CONNECTION DIAGRAM

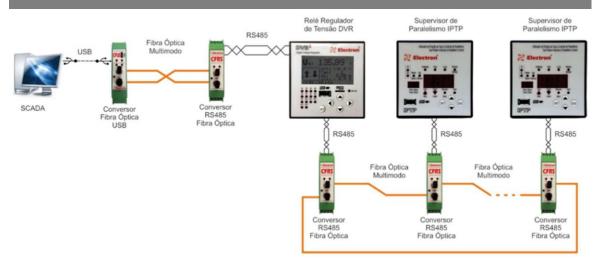


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ORDER SPECIFICATION

