

TC.OptoLink Option

Interface OptoLink option



Part of the
“TopCon fibre optic converter set”

DO6130.0072 V01.05

1. Overview

Built in location:

The interface will be built in on the rear side of the device. It can be built in later or directly at the distribution into the device..

Combination with other interfaces

- Duplex 1:1 connection.
- In case of using this interface, no other interfaces are available for the device remote at the same time.

Technical specification

- Kind of interface: 2x fibre optic -ST socket
- Wavelength 850 nm (monochromatic)
- Transmission rate : 38400 Baud
It is determined by the TopCon device
- Additional interface D-Sub, 9-pin
according option RS-232REAR

Function

The interface is used to connect to fibre optic cables for a serial data transmission over large distances.

Serial data of interface will be transmitted as electrical isolated light signals between the connection nodes. The transmission and receiving channels are realized with fibre optics connections.



For further information refer to the Regatron customer support.

1.1. Pin definitions

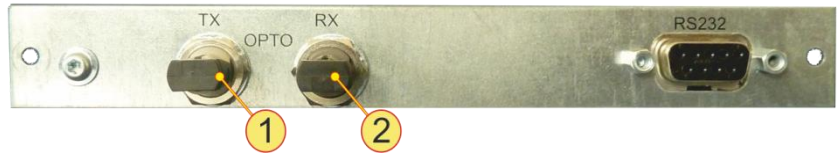


Fig. 1 D-Sub 9 Pin: Socket -1- and connector -2-.

TC.OptoLink interface			
Pin	Signal	I/O	Description
1	TX	O	Transmission channel , output High signal: sends laser light Low signal: don't sends laser light
2	RX	I	Receive channel , input High signal: receives laser light Low signal: don't receives laser light

Tab. 1 Interface - Pins

1.2. Connection between transmitter and receiver

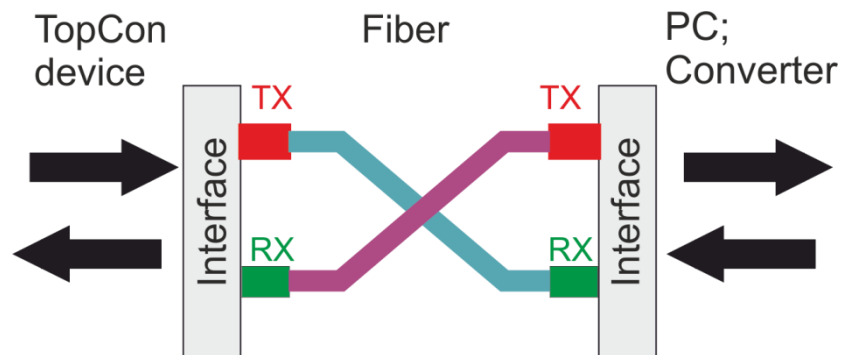


Fig. 2 Connection between transmitter and receiver.

The RX input of the TopCon fibre optic interface TC.OptoLink has to be connected with the TX output interface of the TC.USBOptoConverter.

The TX output of the TopCon fibre optic interface has to be connected with the RX input interface of the TC.USBOptoConverter.

2. Dis-/connect a fibre optic interface with a fibre optic cable

2.1. Remove and fit protective covers

2.1.1. Remove the interface protective covers

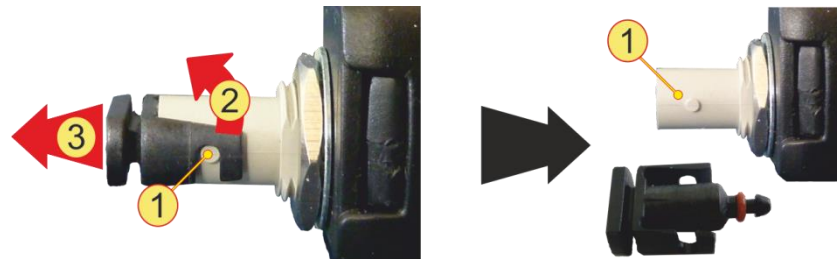


Fig. 3 Interface – Remove the protective cover

Procedure:

- Turn the cover of the first socket ant clockwise **-2-** until to the stop.
Pay attention to the guide nipple **-1-** of the interface socket and the guide groove of the cover.
- Pull the cover from the socket **-3-**
- Keep on the cover.
- Repeat the procedure for the other socket.

2.1.1.1. Fit the interface protective cover

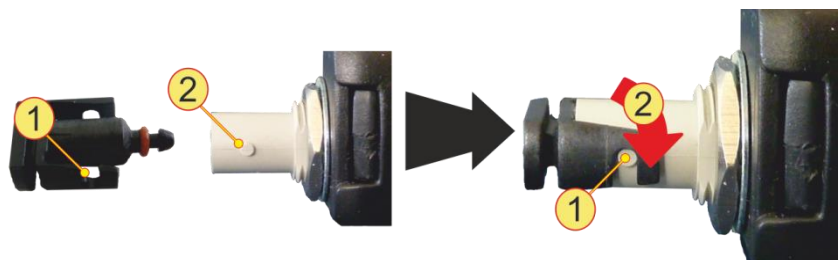


Fig. 4 Interface – Fitting of the protective cover

Procedure:

- Put the protective cover on the first interface socket.
Pay attention to the same position of the guide groove beginning **-1-** and the guide nipple **-2-**.
- Turn the protective cover clockwise until to the stop **-3-**.
- Repeat the procedure for the other interface socket.

2.1.2. Fibre optic cable – Removing the protective cover

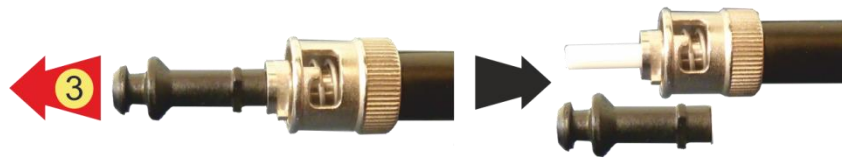


Fig. 5 Fibre optic cable – Removing the protective cover

Procedure:

- Pull down the protective cover -3- from the cable.
- Keep on the protective cover.

2.1.3. Fibre optic cable – Fitting the protective cover



Fig. 6 Fibre optic cable – Fitting the protective cover

- Put the protective cover-3- on the cable.

2.2. Connect the fibre optic cable with the interface

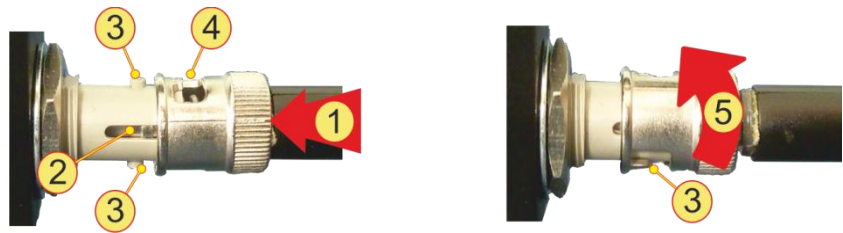


Fig. 7 Connection of a fibre optic cable with its interface plug

- Remove the protection cover from the cable, refer to chapter 2.1.2, page 4.
- Remove the protection cover from the interface socket, refer to chapter 2.1.1, page 3.
- Find the right position **-2-** of the fibre optic plug guide nipple to the beginning of the interface the guide groove.
- Find the right position of the bayonet-lock and its guide groove beginning **-4-** to the position of the interface socket guide nipple **-3-**.
- Push the fibre optic cable plug **-1-** on the interface socket.
- Turn bayonet-lock of the fibre optic cable plug clockwise **-5-** until to the stop.

2.3. Disconnect the fibre optic cable from the interface

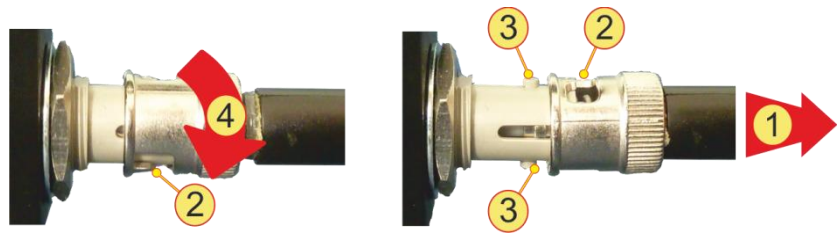


Fig. 8 Disconnection of a fibre optic cable with its interface plug

- Turn the bayonet-lock of the fibre optic cable plug anti clockwise **-4-** until to the stop.
- ↳ The right position is found between the fibre optic cable plug guide groove **-2-** and the interface socket guide nipple **-3-** to apart.
- Pull the fibre optic cable smoothly and carefully away backwards **-1-**.
- Fit the protective cover on the fibre optic cable plug, refer to chapter 2.1.3, page 4.
- Fit the protective cover on the interface socket, refer to chapter 2.1.1.1, page 3.

3. Option “TopCon fiber optic converter set”

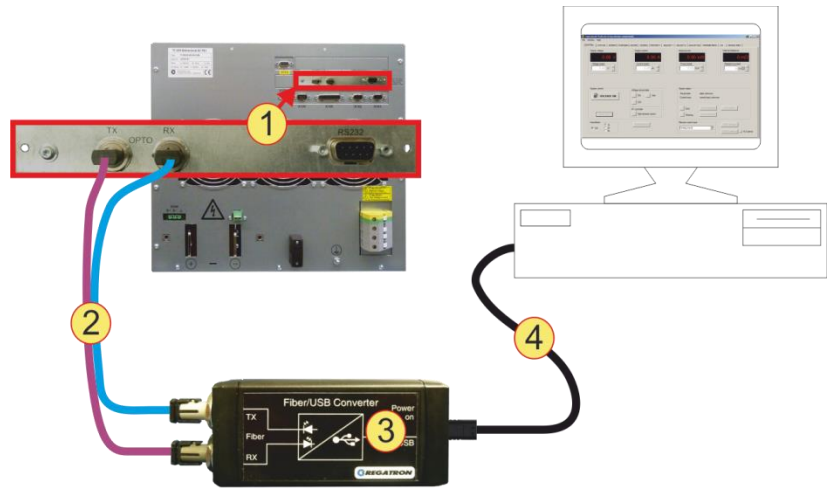


Fig. 9

TopCon fiber optic converter set (Option)

The set consists of a Interface OptoLink option **-3-**, a device interface card TC.OptoLink **-1-** and duplex fibre optic cables **-2-**.

Available cable length of the fibre optic: 5 m, 10 m, 20 m, 50 m, 100 m.

For further Information about the “TopCon fibre optic converter set” refer to the customer support.

Regatron recommends the following technical specifications of a fibre optic cable:



Technical Data – Duplex fibre optic 50/125 µm	
Jacket	3,5 x 6,2 mm
Jacket material	according UL94V-0; colour: orange (OM2)
Diameter single fibre	2,7 mm
Minimum bending radius	50 mm

Tab. 2 Technical Data – Duplex fibre optic 50/125 µm.