

# **Interface TC.RS422 Option**

## **Diagnostics and control connection**



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Regatron AG

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#### Installation location:

The interface is built into the rear side of the device. It can be retrofitted to a device or be already installed on delivery.

#### Combination with other interfaces

- Standard connection Point to point connection.
- Multi drop network
   A maximum of ten RS-422 receivers are allowed to be connected to a transmitter within one transmission device.

#### **Technical characteristics**

Type: designed as D-Sub socket, 9 pin

Interface standard: ITU-T V.11

#### **Function**

The RS-422 interface is used for high speed data transmission (up to 10 Mbps) over large distances (up to the maximum of 1200 m).

The serial data are transmitted as a voltage difference between two corresponding wires without a reference to ground.

For each signal to be transmitted there is one pair of cores that comprises an inverted signal wire and a non-inverted signal wire that are twisted together.

The receiver only evaluates the difference between the two wires such that common mode interference up to 7 V on the transmission cable will not corrupt the data signal.



You can obtain further information from Regatron support.

#### Pins of the Interface



Fig. 1 D-Sub 9 Pin: female -1- and male -2-

RS-422 interface			
Pin	Signal	I/O	Description
1	GND	I/O	Common ground
2	RX+	I/O	Receive positive pin
3	TX-	0	Transmit negative pin
4			n.c.
5	GND		Common ground
6			n.c.
7	RX-	I/O	Receive negative pin
8	TX+	0	Transmit positive pin
9			n.c.
	Schield		Connected to earth

Tab. 1 Interface pins

#### Connection between transmitter and receiver

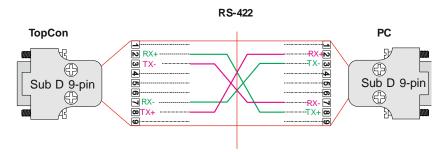


Fig. 2 Connection between transmitter and receiver.

### **CAUTION** Possible damaging of interface RS-422 by:

· Peak current and static electricity

#### Avoidance:

⇒ All devices with a connection via RS-422 should not have voltage at the interface, before the connection is mechanically produced.

