

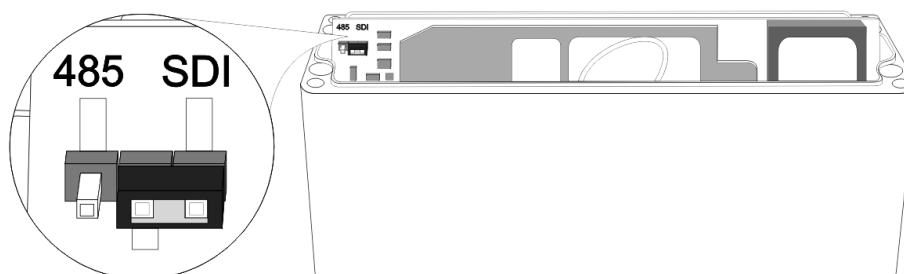
## Remote Terminal Unit T707 (SDI-12 firmware)

### Installation instructions

The following instructions are valid for the model running the T707-SDI firmware, to be installed in conjunction with any SDI-12 compliant sensor (for more details on the SDI-12 bus specification please visit <http://www.sdi-12.org>).

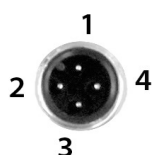
### Electrical connections

The T707 device uses a four-wire cable carrying the SDI-12 bus signals and the bus power supply (typically 12 volt). Alternatively the bus can be switched to RS-485 levels, but this can be done only if all devices on the bus support it. To switch the unit from SDI-12 (factory default) to RS-485 you must open the lid and change the jumper on the board from SDI to 485 (see also picture below). Make sure to properly fasten the screws after mounting the lid back.



For SDI-12 sensors, only the pins 1, 2 and 4 should be used (Brown, White and Black respectively).

### SDI-12 Bus connector



Pin	Signal	Wire color
1	+Vin (12 V nom.)	Brown
2	-Vin and GND	White
3	RS-485 A Data	Blue
4	SDI-12 or RS-485 B Data	Black

In case it is used, the T110 solar power supply must be also connected to the bus (see the T110 installation leaflet) to power all bus devices.

### RS-232 Service connector

The RS-232 connector is used for maintenance and service. You should not have to deal with this connector unless indicated so by Metrilog support personnel.

### Mounting the T707 unit

The T707 unit should be preferably mounted outdoors on a 4 cm diameter mast by means of the hose clamp supplied. In this case fasten the optional metallic mounting fixture to the T707 enclosure using the two M6 screws and spacers (see figure 1). If the unit is not installed outdoors, rather left on a table or a cabinet, you can ignore the metallic fixture.

It is recommended to place the **top of the unit (where the built in antenna resides) not too close to metallic objects**, especially to the mast itself; ideally the

Pin	Signal
1	DCD
2	RD
3	TD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

unit should be mounted on the very top of the mast (see also figures 2 and 3). Use the supplied tie wraps to fasten the cables to the mast after the mechanical installation.

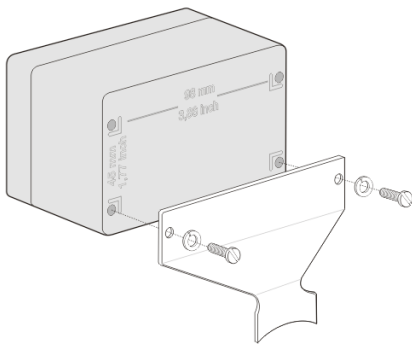


Fig. 1

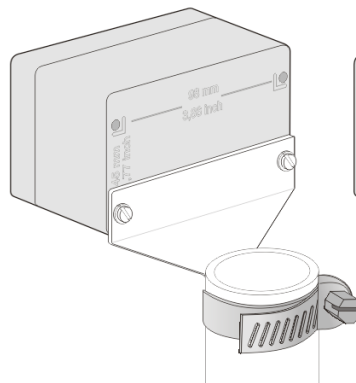


Fig. 2

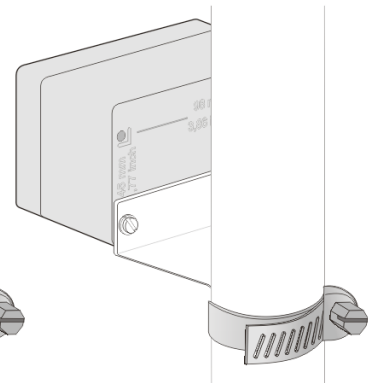


Fig. 3

### **Technical parameters**

Recommended

Acceptable

Parameter	Value
GSM/GPRS	900/1800 MHz
Interfaces	RS-485, RS-232, SDI-12
Supported protocols	TCP/IP, WAP, XML, WBXML
Internal storage	256 Kbytes, non-volatile
Sampling interval	Programmable (minutes, hours, days, weeks)
Power supply	External, 5.5 to 20 Volt
Power consumption	Standby, receive: avg. 1mA (at 12 V) Transmit max 300 mA (at 12 V) Absolute maximum 600 mA (at 5.5 V)
Operating temperature	-20°C to +60°C
Dimensions	110/75/55 mm
Weight	400 g
Environmental protection class	IP66

**Note for USA:** This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.