Specification sheet

PLICSMOBILE T81

External radio unit for HART sensors

Application area

The PLICSMOBILE T81 is an external GSM/GPRS/UMTS radio unit for wireless transmission of measured values and for remote parameter adjustment of HART sensors.

Typical applications are measured value transmission in conjunction with mobile vessels, battery-operated level measurement and deep well measurements.

The PLICSMOBILE T81 is particularly suitable for data exchange with the web-based visualisation software VEGA Inventory System.

Your benefit

- Economical solution for remote measured value enquiry and remote parameter adjustment of up to 15 HART sensors
- Worldwide use through multi-band technology
- Free choice of mobile network operator gives user great flexibility
- Increased service life with battery or accumulator power supply through integrated Power Management

Function

In conjunction with any HART sensor there is the option of transmitting measured values and diagnostic information. The measured value and message transmission can be optionally carried out via e-mail or SMS. The transmission can be time, measured value or status-controlled. Furthermore the measured value can be transmitted via https to the visualization "*VEGA Inventory System*".

There is also the option of accessing the connected VEGA instrument via remote parameter adjustment. World-wide use is possible through multi band technology.

The combined radio antenna enables the GSM/GPRS/UMTS communication as well as the Bluetooth connection. In addition, the antenna enables the reception of position data via GPS.

By using the optional battery operating mode, measuring points can be set up without high installation costs. For this purpose, the PLICSMOBILE B81 battery housing as well as the PLICSMOBILE S81 solar panel are available.

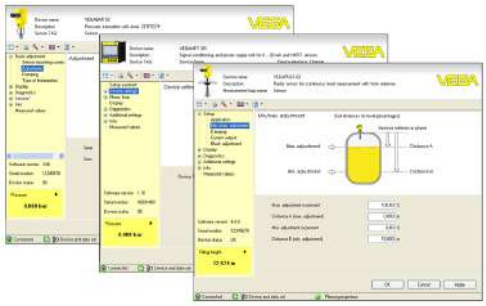
The device is adjusted via PC/notebook with PACTware and the corresponding DTM. As an alternative, you can use a smartphone/tablet with the VEGA Tools app (Android or iOS). The connection is made via the Bluetooth interface integrated in PLICSMOBILE.

Technical data

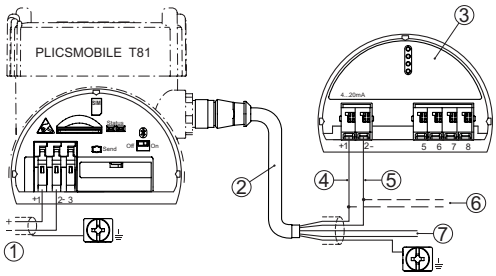
Voltage supply	
Operating voltage	9.6 … 32 V DC
Power consumption	
– Power saving mode (9 V/12 V)	0.18 mW/0.3 mW
– Power saving mode (24 V/32 V)	1.8 mW/3.7 mW
– Permanent operation	1.1 W
– Peak power (measured value transmission)	11 W
Sensor power supply	
– Off-load voltage	31 V (24 V with Ex version)
– Max. current	80 mA (26 mA with Ex version)
Sensor input	
Number of sensors	up to 15 x HART sensors (up to 5 x with Ex version)
Terminal voltage	
– Non-Ex version	approx. 14 V with 15 sensors (60 mA)
– Ex version	approx. 14 V with 5 sensors (20 mA)
Current limitation	approx. 80 mA (26 mA with Ex)
Mobile network	
SIM card slot	Mini-SIM (25 x 15 mm)
Radio frequency	UMTS multi band GSM (850/900/1800/1900 MHz)
Bluetooth	
Bluetooth standard	Bluetooth Smart (Bluetooth LE)
Max. participants	1
Max. effective range	approx. 25 m (82 ft)
Ambient conditions	
Ambient temperature	-25 … +60 °C (-13 … +140 °F)
Electrical protective measures	
Protection rating	IP 66
Pollution degree	4
Protection rating (IEC 61010-1)	II

Adjustment

The device is adjusted via a PC with PACTware and the corresponding DTM or via smartphone/tablet with the VEGA Tools app. The connection is made via the Bluetooth interface integrated in PLICSMOBILE T81.



Electrical connection

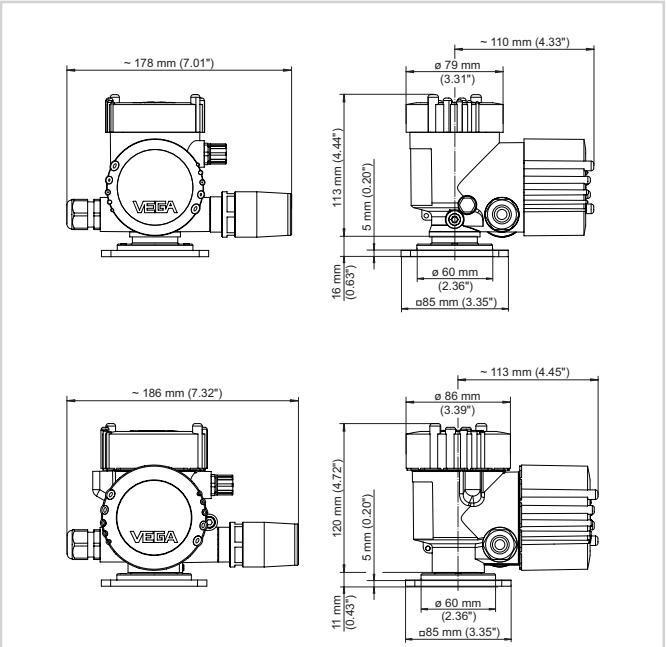


Connection of the voltage supply in the electronics housing

1 *Power supply PLICSMOBILE and sensor*
2 *Sensor connection cable*
3 *HART sensor from the plics® series*
4 *Brown cable (+) for sensor power supply/HART communication*
5 *Blue cable (-) for sensor power supply/HART communication*
6 *Unused wires that must be insulated (not present on Ex version)*

If multiple sensors are connected, they are connected in parallel. The sensors must first be set to HART Multidrop mode with individual HART addresses.

Dimensions



Dimensions PLICSMOBILE T81 with plastic housing and StSt/Aluminium housing