Specification sheet

PLICSMOBILE T81 LTE

External radio unit for HART sensors

Application area

The PLICSMOBILE T81 is an external GSM/GPRS/UMTS/LTE 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/LTE 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

Power supply PLICSMOBILE	
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
– Max. current	80 mA
Sensor input	
Number of sensors	up to 15 x HART sensors
Terminal voltage	approx. 14 V with 15 sensors (60 mA)
Current limitation	approx. 80 mA
Mobile network	
SIM card slot	Mini-SIM (25 x 15 mm)
Mobile radio standard	2G (GSM), 3G (UMTS), 4G (LTE)
Data rate	CAT 4 (150 Mbit/s download, 50 Mbit/s upload)
Antenna version	Isotropic (Omni) antenna
Bluetooth	
Bluetooth standard	Bluetooth 5.0 (downward compatible to Bluetooth 4.0 LE)
Max. participants	1
Ambient conditions	
Ambient temperature	-25 … +60 °C (-13 … +140 °F)
Electrical protective measures	
Protection rating	IP66
Pollution degree	4
Protection rating (IEC 61010-1)	II

Approvals

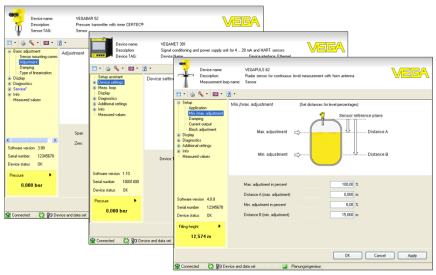
Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

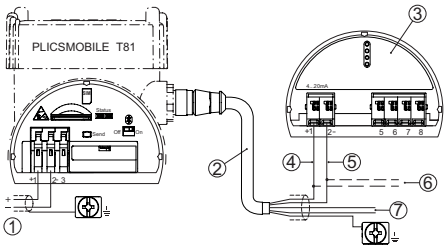
You can find detailed information on the existing approvals with the appropriate product on our homepage.

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



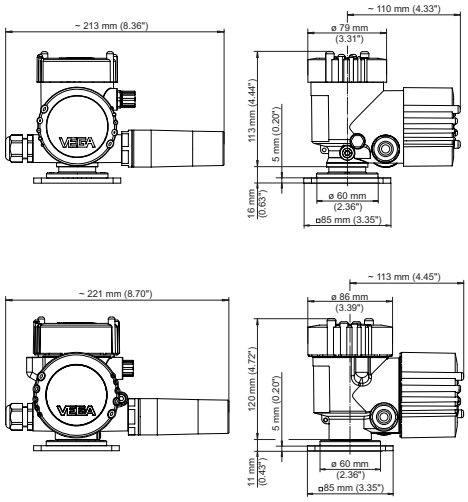
Connection of the voltage supply in the electronics housing

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 *Connection of additional HART sensors*
7 *Unused cores to be insulated*

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

You can find details on electrical connection in the instrument operating instructions on our homepage at www.vega.com/downloads.

Dimensions



Dimensions PLICSMOBILE T81 with plastic housing and StSt/Aluminium housing

Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Contact

You can find your personal contact person at VEGA on our homepage under " *Contact*".