LPWAN miniUNI Truebner SMT100

PRODUCT DESCRIPTION

The LPWAN miniUNI Truebner SMT100 device is engineered to measure soil moisture, temperature, and permeability by incorporating the superior Truebner SMT100 probe through an SDI-12 interface. The MiniUNI Truebner SMT100 is engineered for a single SMT100 probe; however, it can be expanded to accommodate multiple probes with distinct addresses, facilitated by the SDI-12 interface. This expansion is feasible for technologies where the payload length is not restricted to a few bytes (e.g., Sigfox). For solutions involving multiple probes, we recommend utilizing LoRaWAN or NBIoT technology.

The device operates on battery power, with battery life optimized through the selection of high-quality, low-energy components. It boasts a battery life exceeding 5 years, with an anticipated usage of 6 messages per day. The housing is constructed from premium ABS plastic and is designed to comply with IP65 standards. Upon request, the device can also be provided in an IP68 rating, along with additional specifications prior to ordering.

USAGE

- Irrigation systems
- Soil assessment
- Data source for agricultural prediction models

FEATURES	PARAMETERS
Cover	IP65
Operating temperature	-40 to +80 °C
Power source	3.6V lithium battery 14505(M)/2600mAh, up to 2 batteries permissible
Energy utilization	<3.5 µA in deep sleep / 80 mA transmission (Sigfox, LoRa) / 500 mA BIoT)
Battery industry	Approximately 20,000 transfers
Supported LPWAN Standards	Sigfox, LoRaWAN, NB-IoT (one of the chosen options in order)
Dimensions in millimeters	107 x 65 x 33 + probe 182 x 30 x 12
Weight	145g
Soil sampling probe	Truebner SMT100, refer to specifications here: http://www.truebner.de/en/smt100
Accuracy	VWC 3%, temperature ±0.2°C
Cable length	Upon request, a maximum of 10 meters.
Antenna/standard range	Helical antenna, achieving a gain of 2.5 dBi over a range of 45 to 110 km, contingent upon LPWAN technology.

Solidus TECH
Smart solutions together...

SOLIDUS TECH s.r.o.
Na Poříčí 595, 738 01 Frýdek-Místek
Tel.: +420 739 822 476 | E-mail: info@solidustech.cz
www.solidustech.cz