

EM500-SMTC



Soil Measurements

Designed for Harsh Environments and Long Battery Life

EM500-SMTC measure soil:

- Moisture
- Temperature
- Electrical conductivity

EM500-SMTC is with its P66 enclosure, corrosion resistance and tough probe ideal for harsh environments.

EM500-SMTC is applied within agriculture, greenhouses, horticulture, golf courses, irrigation control, etc.

EM500-SMTC applies one replaceable 19000 mAh battery, providing up to 10-year battery life.

EM500-SMTC is equipped with NFC for mobile app configuration (Android and iOS).

USB-C and NFC is available for configuration via Notebook.

EM500-SMTC is compliant with standard LoRaWAN[®] gateways and network servers



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Wireless transmission

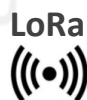
Technology	LoRaWAN®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-147dBm @300bps
Mode	OTAA/ABP Class A

Moisture

Range	0% ~ 100% RH
Accuracy	±2% (0~50%), ±3% (50%~100%)
Resolution	0.5%

Temperature

Range	-40°C to 80°C
Accuracy	0.5%
Resolution	0.1°C



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Conductivity

Range	0~20000 $\mu\text{s/cm}$
Accuracy	$\pm 3\%$ (0~10000 $\mu\text{s/cm}$), $\pm 5\%$ (10000~20000 $\mu\text{s/cm}$)
Resolution	1 $\mu\text{s/cm}$

Physical characteristics

Cable length	2m
Power supply	One 19000 mAh Li-SOCL2 battery (ER34615)
Battery life at 10 min interval	>10 years (SF7) ~4 years (SF12) For guideline purposes only!
Operating Temp.	-30°C to +70°C
Relative humidity	0% to 100% non-condensing
Ingress protection	Transceiver: IP66 Soil sensor: IP68
Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Soil Sensor: 88 × 68 × 26 mm (3.5 × 2.7 × 1.0 in) Probe length: 50mm/1.97 in
Installation	Pole, wall and DIN-rail mounting