

Data Acquisition Environment

Hardware – Software – Cloud application www.emsbrno.cz

EMScloud SoilSet 22

Main features:

- Data transmitting device with soil VWC, bulk EC and temperature sensor CS650
- Intended for long-term monitoring
- Low maintenance and easy installation
- Indication of tilt
- Data visualization, archiving and download fully supported by EMScloud
- Long battery lifetime





Brief specifications:

- VWC range 0 to 0.6 m³/m³
- Bulk EC range 0 to 3 dS/m
- Temperature range -50 to 70 °C
- Measuring interval 30 min
- Sending interval 60 min
- Battery lasting at least 2 years



General description

EMScloud SoilSet 22 is IoT device equipped with soil volumetric water content, electrical conductivity and temperature sensor CS650 (Campbell Scientific) transmitting data via SigFox network to EMScloud Internet application. Data visualization, archiving and downloading is fully supported by EMScloud Internet application.

Specification

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Measuring interval	30 min
Sending interval	60 min
VWC range	0 to 0.6 m ³ /m ³
VWC accuracy	$\pm 0.03 \text{ m}^3/\text{m}^3$
VWC resolution	<0.001 m ³ /m ³
Bulk EC range	0 to 3 dS/m
Bulk EC accuracy	± 5% of reading + 0.05 dS/m
Bulk EC resolution	0.5% of bulk EC
Temperature range	-50 to 70 °C
Temperature accuracy	± 0.5 °C
Temperature resolution	0.06 °C
Protection rating	IP68
Operating environment temperature	-40 to 60 °C
Operating environment humidity	0 to 100 %
Size of transmitter (D x H)	90 x 115 mm
Weight of transmitter (without pin)	ca 300 g
Sensor connection	7-pin AMPHENOL C016
Sensor cable length	3 m (special lengths on request)
Battery lifetime	at least 2 years
Battery type	SAFT LS 17500, 3.6 V, 3.6 Ah

Panel connector (female) wiring





Two-year full warranty.