

Soil Moisture and EC Sensor Probe DSM 600

AFS AGRO FLOW SYSTEM GmbH

Datasheet



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DESCRIPTION AND INTENDED USE

Soil Moisture and EC Sensor Probe DSM 600 is a precision device for measuring the volumetric moisture content of soil and soil electrical conductivity in field conditions, which allows measuring soil moisture and conductivity at depths up to 60 cm. The sensor runs together with the portable loggers of AFS AGRO FLOW SYSTEM Company. Widely used in agriculture to obtain the physical characteristics of the soil for further study.

Moisture and electrical conductivity measuring of the soil before planting will help determine the optimal time for farming processes which will make them more effective. Use a sensor to evaluate the moisture and electrical conductivity of the soil during the entire vegetation period for making decisions concerning irrigation.

TECHNICAL SPECIFICATIONS

ModelDSM 600Device dimensions850x28 mmCase dimensions (WxHxD)50x900x50 mmWeight750 gMaximum loading weight100 kgUnits of measure (Soil moisture)% VWCUnits of measure (Soil EC)μS/cmMeasuring range (Soil moisture)from 0% to saturationMeasuring range (Soil EC)from 0 to 7000 μS/cmAccuracy (Soil moisture)±3% VWCAccuracy (Soil EC)±5% (at 20°C)Resolution (Soil moisture)0,1% VWCResolution (Soil EC)10 μS/cmMax measuring depth60 cmMeasuring step5 cmOperation temperaturefrom +5°C to +40°CSensor housingStainless steel		
Case dimensions (WxHxD) 50x900x50 mm Weight 750 g Maximum loading weight 100 kg Units of measure (Soil moisture) % VWC Units of measure (Soil EC) µS/cm Measuring range (Soil moisture) from 0% to saturation Measuring range (Soil EC) from 0 to 7000 µS/cm Accuracy (Soil moisture) ±3% VWC Accuracy (Soil EC) ±5% (at 20°C) Resolution (Soil moisture) 0,1% VWC Resolution (Soil EC) 10 µS/cm Max measuring depth 60 cm Measuring step 5 cm Operation temperature from +5°C to +40°C	Model	DSM 600
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Max measuring depth 60 cm Measuring step 5 cm Operation temperature from +5°C to +40°C	Resolution (Soil moisture)	0,1% VWC
Measuring step 5 cm Operation temperature from +5°C to +40°C	Resolution (Soil EC)	10 μS/cm
Operation temperature from +5°C to +40°C	Max measuring depth	60 cm
	Measuring step	5 cm
Sensor housing Stainless steel	Operation temperature	from +5°C to +40°C
	Sensor housing	Stainless steel

CARE AND MAINTENANCE

Transportation terms:

Transport the device and its additional parts in the case provided in the delivery kit, by any transport if the device is protected from atmospheric precipitation and high temperatures. Be careful when transporting, in order to avoid mechanical damages.

Storage conditions:

Keep the device and its additional parts in the case provided in the delivery kit, in ventilated areas at a temperature from $+5^{\circ}$ C to $+45^{\circ}$ C and relative air humidity to 85%.

Avoid sudden temperature changes, it can lead to condensation inside the device and disrupt its performance in use.

SAFFTY MFASURFS

Do not

- use the sensor on the ground that contains a lot of solid parts;
- apply excessive force when measuring, in order to avoid sensor damage;
- open the device housing;
- work with the device in case of a malfunction.

Important

- to start the work with the device after a detailed review of the user manual;
- transfer in the case provided in the delivery kit;
- while loading, unloading and transport avoid strong impacts, which can lead to mechanical damage.

NOTE

The manufacturer reserves the right to change the design and completion of the device. The pictures in the instructions and datasheet may differ from real construction and inscriptions on the sensor.

WARRANTY INFORMATION

Device	Sensor DSM 600
S/N	
Year of production	
Warranty period	3 years (from the date of sale)
Date of sale	

- 1. AFS AGRO FLOW SYSTEM provides a guarantee in respect of new goods supplied by AFS AGRO FLOW SYSTEM for a period of 3 years following delivery unless expressly agreed to the contrary in writing. All items or components of such items in which defects might arise during this period as a result of faulty construction defects or faulty material defects will be repaired or alternatively replaced by AFS AGRO FLOW SYSTEM (at the discretion of AFS AGRO FLOW SYSTEM) free of charge, subject to the condition that such defects are brought to the attention of AFS AGRO FLOW SYSTEM in writing immediately following discovery of the same, and in all cases within the periods referred to in article 7. Damage caused as a result of inappropriate use of the products and failure to (correctly) comply with the instructions for use is not covered.
- 2. Products shall only be sent back to AFS AGRO FLOW SYSTEM for repair or replacement- at the purchaser's own expense- after AFS AGRO FLOW SYSTEM has given its written approval. Only in the case of repair or replacement under guarantee shall the products be returned to the purchaser at the expense of AFS AGRO FLOW SYSTEM.
- 3. If the guarantee relates to a product manufactured by a third party, the guarantee is limited to the guarantee provided by the manufacturer concerned.
- 4. If the purchaser carries out repairs or alterations during the guarantee period or has such work being carried out on his behalf without the permission of AFS AGRO FLOW SYSTEM, or fails to comply with his payment obligations, all guarantee obligations shall immediately lapse. The purchaser is not entitled to refuse payment on the ground that AFS AGRO FLOW SYSTEM has not, not fully or not timely complied with its guarantee obligations.

5. Without prejudice to the foregoing, unless there is an instance of deliberate act or omission or deliberate recklessness, AFS AGRO FLOW SYSTEM shall under no circumstances be liable for any indirect damages, such as damages resulting from any stoppage of business operations, delay, disruption or any other form of operational damages under whatever heading or of whatever description, for any direct or indirect damages caused to or by products delivered by AFS AGRO FLOW SYSTEM, or for damage or injury caused to property and persons. All liability on the part of

AFS AGRO FLOW SYSTEM under any heading whatever shall in all cases be limited to the maximum of the amount of the purchase price of the delivered goods already paid by the purchaser at the time of his claim. The purchaser indemnifies AFS AGRO FLOW SYSTEM against all liability towards third parties as a result of any defect in the delivered goods.

6. The Seller shall not be liable for any defect arising out of equitable wear, intentional damage, negligence, abnormal working conditions, failure to comply with the Seller's instructions (oral or written), incorrect use, alteration or inappropriate maintenance or repair of the Equipment without the Seller's approval.