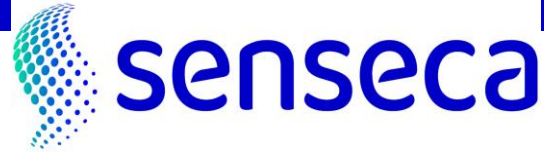


DX 721

Digital wide range soil moisture probe



- Precise determination of the volumetric water content
- Maximum possible range of up to 100% VWC
- Integrated temperature measurement
- Interchangeable
- Low power
- Fast and accurate
- Designed for long term use and long term stability

DESCRIPTION

The DX 721 is a state-of-the-art soil moisture sensor – suitable for fast measurements in changing location or for long term monitoring in fixed locations.

With the suitable PRO D01 / PRO D05 meters this is a reliable reference for agricultural/horticultural applications.

The multichannel data logger meters PRO D05.2/3 can combine up to 3 Sensors in one instrument – or combine the sensors with each of the available DX-digital sensors to incorporate a multiparameter measuring solution “in one hand”.

They are fully interchangeable- the sensors are ready adjusted. Just “plug and measure”!

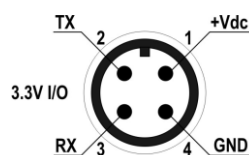
The accuracy depends on the application.

With factory calibration up to $\pm 3\%$ (VWC) in mineral soils with medium salinity from 0 to 50% VWC.

With soil-specific calibration, accuracy of up to $\pm 1\%$ (VWC) can be achieved.

Measurement in other substrates, e.g. mineral wool, coconut fiber, wood fiber, etc., possible.

Supplied with 2 or 5 m cable with 4-pin M12 connector.



M12 DX 721 sensor pin out

TECHNICAL SPECIFICATIONS

| | | |
|-----------------------|---------------|---|
| Sensor | Soil Moisture | TDR high frequency, measuring area 110x30 mm |
| | Temperature | Pt100 |
| Measuring range | Soil Moisture | 0 ... 60% VWC volumetric water content (up to 100% volumetric water content with limited accuracy) |
| | Temperature | -40...+80 °C |
| Resolution | Soil Moisture | 0.1% VWC |
| | Temperature | 0.1 °C |
| Accuracy | Soil Moisture | typ. ±3%, depending on soil conditions |
| | Temperature | typ. ± 0.2 °C, max. ± 0.4°C over whole range |
| Operating conditions | | -40...+80 °C / 0...100 %RH |
| Output & Power supply | | DX-Sensor-Interface |
| Power consumption | | Ø 0,5 mA typ. |
| Connection | | 4-pole M12 via cable |
| Dimensions | | measuring area 110x30 mm 182mm x 30mm x 12mm (measuring area thickness ca 1.6mm) Cable length: 2, 5 or 10 m |
| Weight | | 95 g approx. with 2 m cable 150 g approx. with 5 m cable |
| Materials | | In contact with soil: FR4 epoxy Handle: Luran / stainless steel screws Cable: PVC |

STANDRAD ARTICLES

| | | |
|---------------------|---|-----------------------|
| DX 721-L02-P | Digital wide range soil moisture probe, 2 m PVC cable, DX connector M12 | Art.No. 487434 |
| DX 721-L05-P | Digital wide range soil moisture probe, 5 m PVC cable, DX connector M12 | Art.No. 487647 |

SUITABLE INSTRUMENTS

| | | |
|------------------|---|-----------------------|
| PRO D01 | 1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries | Art.No. 486134 |
| PRO D05.2 | 2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website. | Art.No. 486136 |
| PRO D05.3 | 3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website. | Art.No. 486137 |