FEATURES

- 5-level moisture readings(5 sensors), sensing length 47cm
- Temperature readings at two levels
- Arduino and STM32 HAL client software libraries.
- Dust and waterproof
- Calibration functions for Dielectric permittivity
- Low cost and easy to use.
- Fairly accurate readings

ELECTRICAL PROPERTIES

	Min/Sleep	Typical	Max
Supply voltage (VCC), V	2.2	3.3	5v
Working current (VCC=3.3V), mA	-	12	14
Operating Temperature Range, Celsius	0	25	60

If your application needs to power up the sensor before measurement, the time to wait before taking the measurement is 300ms.

MEASUREMENT PROPERTIES

	Resolution	Range /avg Tolerance
5x Dielectric permittivity (ε) (Temperature corrected)	0.1ε	1 (air) to 80 (water) /5%
2x Temperature (°C)	0.1°C	-20 to 70°C/3%
5x Degree of water saturation in the soil Volumetric water content - VWC calculation from Dielectric permittivity ε. VWC = 0.002974 * pow(ε,2) + 0.07424 * ε -1.295;	0.1%	0 – 100% /8%

PHYSICAL PROPERTIES

Sensor dimensions 54cm(48cm sensing part) x 1cm x2,5cm
Cable length 1.4m; **2,9m(standard)**; 4,9m

ARDUINO   **SDA and SCL lines require pullup resistors ~4.7k**

wiring to Arduiono:

Arduiono pin #3V3 - sensor **red** (3.3v)
Arduiono pin #A4 - sensor **green** (SDA)
Arduiono pin #A5 - sensor white (SCL)
Arduiono pin #GND - sensor **black** (GND)
Arduiono pin #GND - sensor shield (GND)

Get software

This sample software demonstrates how to read data from sensor.
Sensor default I2C address is 0x63.
Download Arduino library from there.