

## turfRad Sensor: Product Technical Datasheet

### 1. Product Identification

Product Name	turfRad Moisture Sensor
Model Number	turfRad Rev. 1.4
SKU / GTIN	7629999272521
HS Code	9031.80.00.00
Product Category	Non-contact radiometer for soil moisture Measurement
Manufacturer	TerraRad Tech AG, Zurich, Switzerland
Country of Origin	Switzerland

### 2. Product Images



Front



Back  
Label Locations 



Side



Serial / Model Label



Compliance Label

### 3. Technical Specifications

Operation Method	Passive Microwave Brightness Temperature (TBH, TBV)
Measurement Frequency	1400-1427 MHz (receive only)
Power Supply	11-15 V DC, ~4 W
Communication Interface	Wi-Fi (2.4 GHz 802.11 b/g/n) Bluetooth (802.15.1)

GNSS Receiver	L1C/A, L2C GLONASS, Galileo, BeiDou
Dimensions	630 x 354 x 130 mm
Weight	4.9 kg /
Operating Temperature	-20°C to +50°C
Package Dimensions (standard)	70 x 50 x 30 cm
Package Weight (standard)	8 kg

#### 4. Compliance and Certification

The turfRad sensor has been tested according to FCC CFR 47, Part 15, subpart B, Radiated Emissions, Part 15.109(b), Class A; ICES-003, Class A. The product complies with FCC and CE requirements for electromagnetic compatibility and safety. The turfRad sensor contains the following pre-certified IC, installed according to Modular Integration Instructions:

FCC ID	2AC7Z-ESP32WROVERE	USA - FCC <a href="#">Certificate</a>
IC ID	21098-ESPWROVERE	Canada <a href="#">Certificate</a> Europe - CE <a href="#">Certificate</a> China - SRRC <a href="#">Certificate</a> MIC - Vietnam <a href="#">Certificate</a> Other <a href="#">Certificates</a>

#### 5. Internal Battery

The turfRad sensor contains a single-cell Lithium Ion battery. The battery is installed in the equipment and shipped as such. Battery Specifications:

Model	18650
Type	Lithium-Ion (li-Ion)
Voltage	3.6 V
Storage Capacity	2600 mAh

#### 6. Accessories

The turfRad sensor contains cables and mounting hardware:

- Power cable
- USB power adapter
- GNSS Antenna
- Mount triangle
- Mount hardware (4x M5x12mm screws, nuts, washers)

#### 6. Manufacturer Contact Information

Company Name	TerraRad Tech AG
Address	Hohlstrasse 190, 8004 Zürich, Switzerland
Contact Person	Fabian Kolodziej, Operations Manager
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