Phytech wireless system

DATASHEET

V1.1

General description

- Phytech logger is part of an advanced AG IoT platform for optimized irrigation management. The device receives Plant sensor measurements and sends them to the Phytech cloud for analyzing and processing. The outcome is a simple color coded alert and recommendation Application (Mobile, web) provided to the farmer in order to help him decide when and how much to irrigate

Product features

Sensor

- Easy mount
- GPS based Self-location
- High resolution stem/trunk diameter measure
- Event triggered radio transmission

Logger

- > 100 sensors per logger
- 14 days data logging
- Solar power system
- Cellular communication with cloud servers

Interfaces

Sensor

- Reset button and indication LED
- Analog sensor

Logger

- Reset button
- 3 indication LED's
- Cellular LE910 Telit module approved by FCC under FCC ID:RI7HE910GL. Operating frequencies in GSM850, EGSM900, DCS1800, PCS1900, WCDMA modes, compliant to the 3GPP and WCDMA specifications. The Cellular module communication is used to upload sensors data to cloud servers.

Radio

- UHF 433.9 MHz
- FSK modulation
- 4.8 kbps
- Custom antenna (both sensor and logger)

Electrical

Sensor

- Input voltage 3.2 – 2.7v (2 X AAA alkaline battery)

Logger

- Input voltage 4.3 – 3.7v (18650 Li-ion battery)