

HELIUS-TSL



- First DATALOGGER for AGRONOMY, with triple connectivity, Terrestrial, Satellite (NTN) and LORA, for precision agriculture applications, and with option for solenoid valve control for irrigation applications.
- Integrated GNSS receiver.
- Bluetooth 5.2, triple radio in smart enclosure, to communicate, positioning and wireless sensing.
- IP65 enclosure,.
- Autonomous solar power.
 - Solar panel 12V 5 W.
 - LiFePO4 9.9V 10Ah battery. Up to 3000 charge/discharge cycles.
 - Master mode battery life : 15 days.
 - Low power battery life: 6 month.
 - Configurable communication/logging cadence.
- SIMCARD VPN , with global service.
- 6 JACK connectors for direct connection of METER GROUP probes.

Models:

- **HELIUS-TSL**, NB-IOT / LTE-CAT-M1 / NB-IOT NTN and LORA Connectivity, can connect with LORAWAN networks where they are available or with master dataloggers that have an active SIM using the NIOT-MESH protocol. Real-time data update to cloud. Bluetooth and GNSS receiver for automatic positioning.
- **HELIUS-TSL+**,
Same feature as above with irrigation control plugin.
 - 4 extra analog inputs/counters expansion.
 - 4 Latching Electro-Valve actuators.

Sensors

- 6 jacks for connecting probes, with a total of 3 analog ports + 2 digital ports + 1 port for flowmeter.
 - 0-3V Sensors.
 - Humidity, salinity, PH.
 - Dendómenters
 - TEROS 10, TEROS 12.PHYTOS, probes
 - Meteo stations such ATMOS41 / DAVIS
 - 2 SDI12 / RS485 input ports.
- 1 x I2C ports for SHT4x/BME280 temperatur2 / humidity.
- Bluetooth sensors (temperature/humidity/track and security sensors)

datalogging

- Up to 126K measures of 32 bits.

consumption

- 45uA average consumption in low power mode
- 18mA average consumption in full online mode,

