

# TITAN

T-MA-(WS/WF/CN/KN/LW)

## TECHNICAL SPECIFICATIONS

### Electrical ⚡

- AC Supply voltage: 100 VAC ~ 240 VAC 50 / 60 Hz.
- Consumption: Max 3.0 W.
- Operating temperature 10 ~ 65 °C.
- Supply voltage in DC: 24 VDC (optional).
- Supply voltage in DC Solar cell: 5VDC 10 W and 20 W. (optional).

### Processor 🧠

- 32-bit DUAL CORE XTENSA® LX6.
- Clock speed: Between 160 MHz and 240 MHz.
- 520 kB SRAM memory.
- 4 MB FLASH memory.

### Case 📁

- Dimensions: 148 x 150 x 83 mm
- Certification: NOM
- Material: ABS Polymer
- Protection: IP66
- Storage Temperature: -20 ~ 80°C
- Operating Humidity: 5 ~ 90% HR

### Optional Connectivity 📶

- Model T-MA-WS:
  - Sigfox : RCZ2 902 MHz.
  - Sigfox : RCZ4 920 MHz.
  - Sigfox : RCZ1 868 MHz.
- Model T-MA-WF:
  - Wi-fi: 2.4 GHz b/g/n.
- Model T-MA-CN:
  - GSM: 3G - 3.5 G (Multicarrier).
- Model T-MA-KN:
  - Kinêis: Red satelital (In process).
- Model T-MA-LW:
  - LoraWan 868 MHz.
  - LoraWan 915 MHz.

### Inputs and Protocols 🧩

- 2 analog inputs (4-20 mA).
  - High precision reading input (<0.2 %).
  - Isolated signals, with electromagnetic isolation.
  - Isolation voltage 3000 VDC.
  - High linearity.
  - Signal loop input.



- 1 digital input (5 VDC ~ 30 VDC ).
  - Optically isolated inputs.
  - Isolation voltage 3750 mV.
  - Input resistance 10 k Ohm.
  - Logic voltage levels: Low level (0 V ~ 4.5 V), High level (5.0 V ~ 30 V).
  - Alert configuration.
  - Configuration via wifi interface.
- Screwless Pressure Clamp Connectors (16 ~ 26 AWG).
- 2 gland connectors (M16 IP66).
- 1 Gland for voltage supply.
- 1 Gland for Signals.
- Straight SMA female connector (antenna).

### Output Voltages 📊

- 24 VDC - 80 mA.

### Indicator LED's 💡

- 1 Power LED (PWR) - Green.
- 1 Start / Operation LED (RUN) - Red.
- 1 WiFi LED (WIFI) - Red.
- 1 digital pulse input LED (IN1) - Yellow.
- 1 Voltage Supply LED (AC) - Red.

TITAN | T-MA-WS with 4-20 mA signal inputs and digital pulse, it is a specialized device for wireless monitoring of variables such as:

- Flow / Consumption of Water, Gas, Electricity.
- Liquid level, pressure in pipes, temperature.
- Pulses / rhythms in production.
- Compatible with 4-20mA and pulse signals.
- Acquisition and isolation of analog signals (4-20mA).
- Among others.