



**Product ID:** Mex03L

**Category:** Datalogger LoRaWAN

Ultra-low power data logger for remote monitoring using LoRaWAN communication technology.

## TECHNICAL SPECIFICATIONS

<b>CPU</b>	Microcontroller 16bits@8MHz with 256KB Flash, 16KB RAM
<b>Memory</b>	Dataflash 4MB for storage of data EEPROM 32KB for storing configuration
<b>Real time clock</b>	Real time clock integrated with backup super battery
<b>ADC</b>	ADC converter of 16 bits multiplexed to the 2 analog inputs
<b>Watchdog timer (WDT)</b>	Internal Watchdog available
<b>Device configuration</b>	Local configuration via USB cable and desktop application.
<b>Firmware update</b>	Local via USB cable by authorized technical service.
<b>Time between measurements</b>	Configurable from 120 to 86400 seconds

## I/O AND COMMUNICATIONS PORTS

<b>I/O</b>	Two configurable analog or digital inputs (10Hz) that are potential-free. The analog inputs can be for voltage or current in the following ranges: 0-1.25V, 0-2.5V, 0-5V, 0-10V and 4-20mA.  An SDI-12 communications port that can manage up to two SDI-12 probes. The maximum number of parameters that can be read is 36 (depending on the sending format).
<b>Communications ports</b>	LoRaWAN RN2483 module
<b>Protection of the I/O</b>	The inputs are protected against incorrect wiring with the following restrictions: Max. voltage in the digital inputs 20 Vcc

## SUPPLY CIRCUIT

<b>Supply voltage</b>	3.7V/3.2A, rechargeable lithium battery 18650 provided
<b>PV Charger</b>	Charger circuit by an integrated 6V solar pannel integrated in the outside of the box
<b>Consumption</b>	90uA standby, 60mA transmission
<b>Autonomy</b>	More than 30 days (without recharging)* *Depends on the connected sensors and sampling frequency. In the testing phase with a sampling rate of 120 sec and an SDI-12 sensor with 3 parameters, the duration was more than 41 days.

## ENVIRONMENTAL CONDITIONS

<b>Working temperature</b>	0° ~ 60°C*  *Limited by the operating range of the Li-Ion 3.7V battery.
<b>Humidity</b>	5% ~ 95% (without condensation)

## CONSTRUCTION FEATURES

<b>Dimensions</b>	162x82x55mm (W/H/D)
<b>Material Box</b>	Polycarbonate
<b>Type of mounting</b>	Superficial installation  IP67
<b>Degree of protection</b>	355g without battery 417g with battery

## INFORMATION ABOUT ORDERS

<b>Minimum order</b>	1
<b>Order reference</b>	Mex03L

## CERTIFICATES AND DECLARATIONS

<b>Rules</b>	EN 61000-6-2:2019 EN 61000-6-3:2007 + A1:2011 RF estándar ETSI EN 300 220, EN 54-25
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This product is compatible with the RoHS (2011/65/UE)