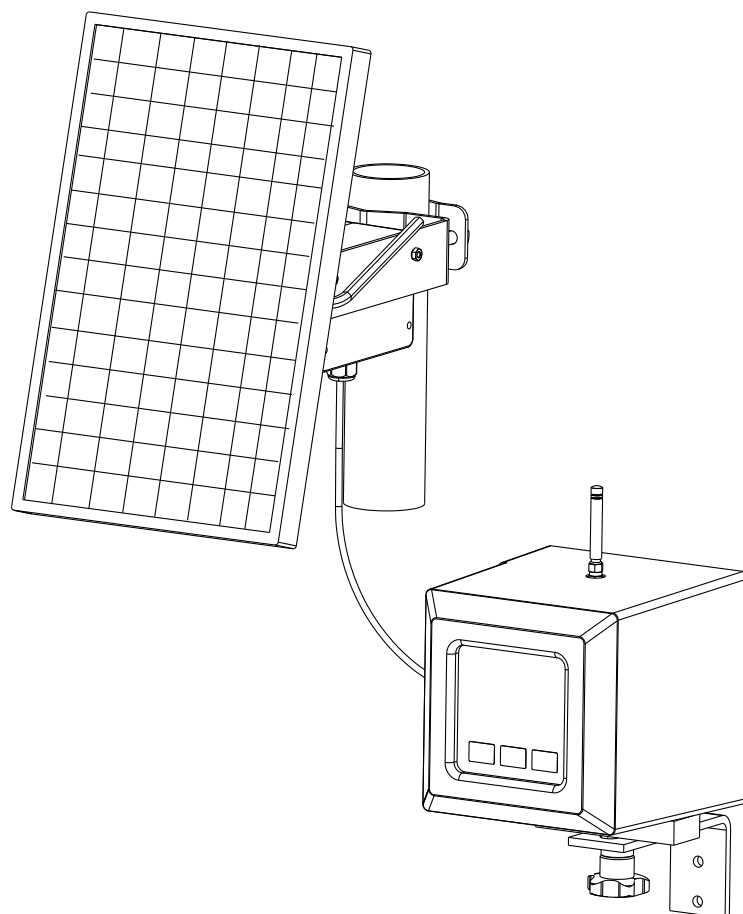


ISOMAG ™

The friendly magmeter

APL

SOLAR POWER SUPPLY MODULE FOR Flowiz™



Warranty conditions are available on this website:
www.isomag.eu only in English version

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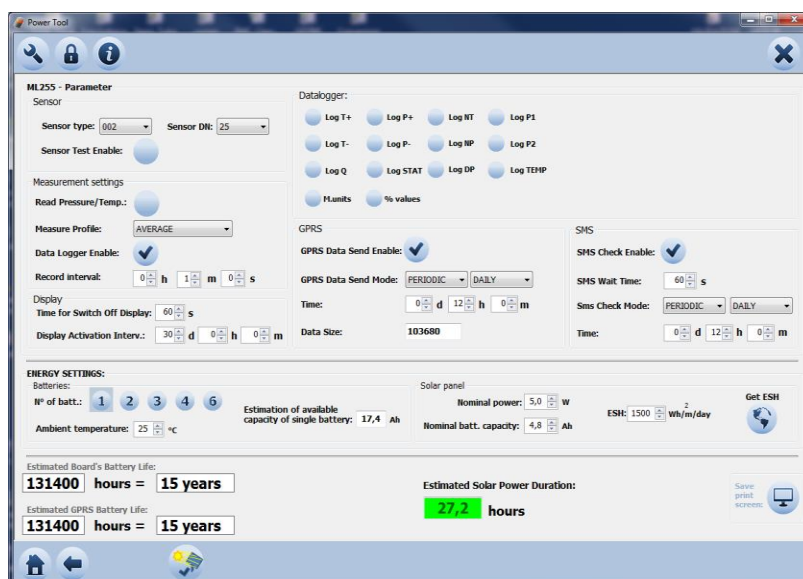
HOW TO ORDER8

GENERAL DESCRIPTION

APL allows the powering of converters in the Flowiz™ family using a photovoltaic module. The system is composed of a solar panel that converts sunlight into the electrical energy and an electronic circuit that controls and regulates the energy provided by the module. The energy is saved in a rechargeable battery located inside a metallic box and used by the Flowiz™ converter as required.

For a specific photovoltaic panel, the battery charging and subsequently the capacity of the APL module to power the Flowiz™, depends on the ESH level (Equivalent Sun Hours), which is the average level of sun irradiance. This value varies according to the geographical location. Once the configuration of Flowiz™ is defined, the ESH value can be easily find through one of the many web page that provide this data, the Power Tool software can be used to calculate the capacity of APL to power up the Flowiz™ converter without the requirement for it to use it's on board lithium batteries. The on board batteries remain available as a back up supply.

Once the APL cable is connected to the Flowiz™ main board connector (example aside), the flow meter detects the presence of module and, automatically switches in "CONTINUOUS" measure mode, whatever is the measure profile set; this solution allows accurate measurements (flow/ pressure) even if they vary continuously. Moreover, if the converter is equipped with GPRS module, the APL allows the modem can be continuously connected to the network, resulting in an "almost real time" communications device. When the APL power source is not available the meter will return to its initial measure profile state.



On the left a screen-short of Power Tool.

A simple graphical interface allows the characteristics of the panel to be introduced, and the ESH value; once this data is introduced, the software calculates the capacity of the APL to power up the device in continuous mode, and, according to the GPRS configuration, if the energy conditions allow the converter will be permanently connected to the network.

The background colour of the cell "Estimated Solar Power Duration" allow to easily evaluate the "energy condition" :

- Color **GREEN** ($E > 24h$) : the produced energy is enough to power up the device
- Color **RED** ($E < 24h$): the produced energy is **NOT** enough to power up the device

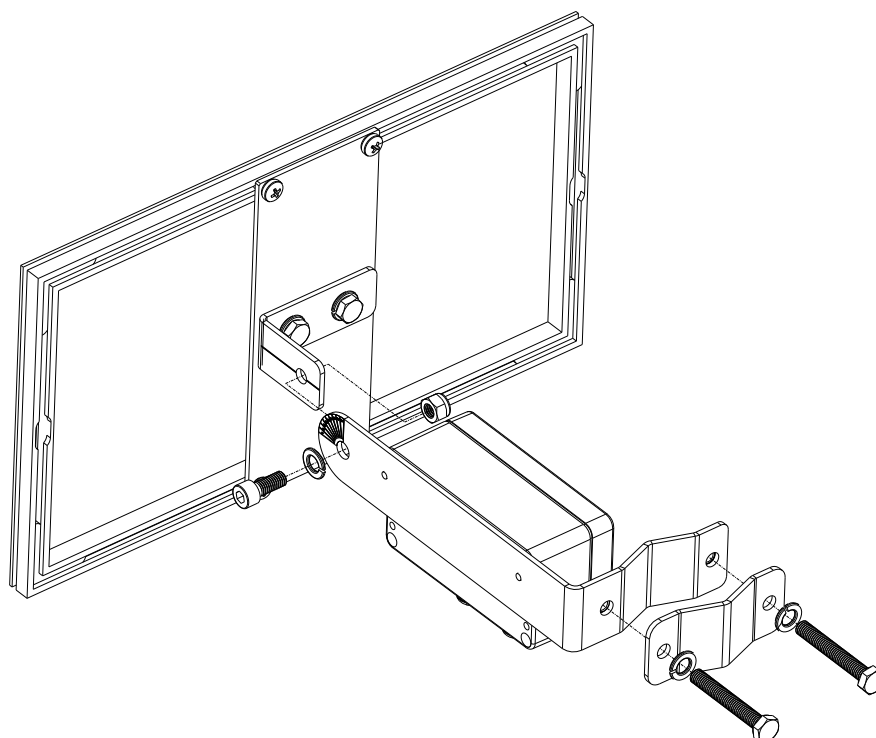
In the second case, for the period between the given time (provided by Power Tool) and 24 h, the Flowiz™ will use its own batteries.

APL is supplied complete with all accessories, except for the fixing rod .

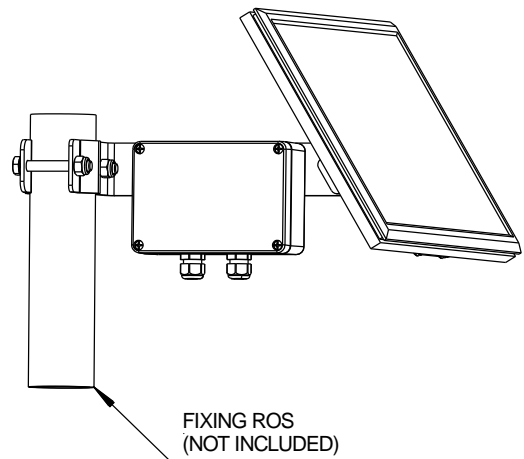
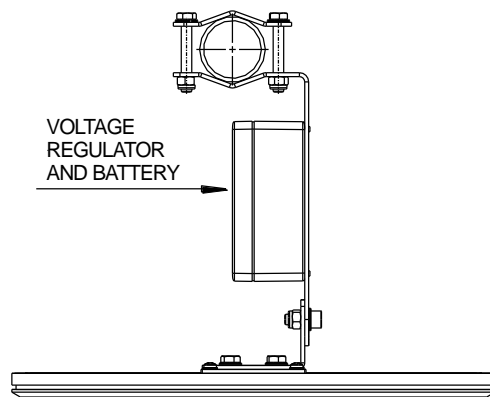
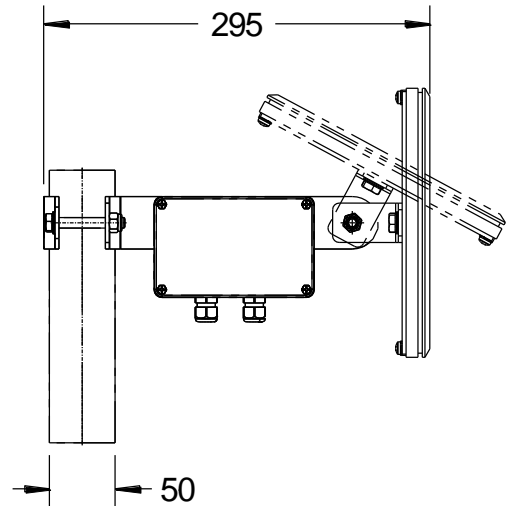
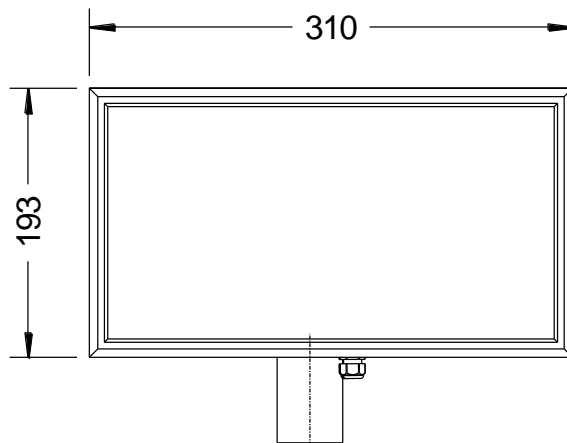
TECHNICAL DATA

Nominal Power Of Panel	<input type="checkbox"/> 5 W
Nominal Capacity Of Rechargeable Battery	<input type="checkbox"/> 5,2 Ah
Battery Recharge Cycles	<input type="checkbox"/> 300 (discharged @ 20% of nominal value)
Cable Length (APL- Flowiz™)	<input type="checkbox"/> 10 m
Fixing Rod Dimensions	<input type="checkbox"/> 40 ... 50 mm
Short Cut Protection	<input type="checkbox"/> YES

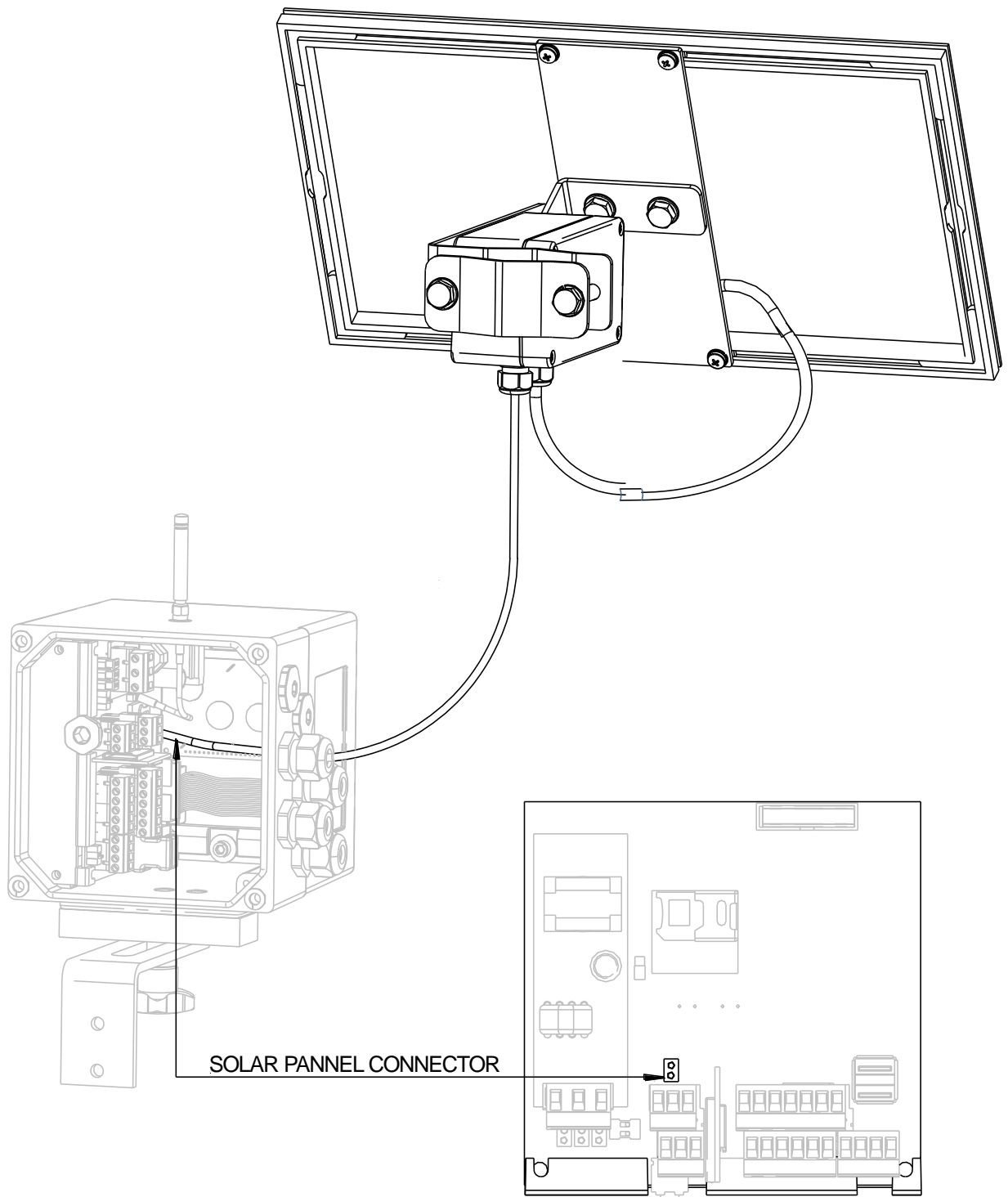
COMPONENTS



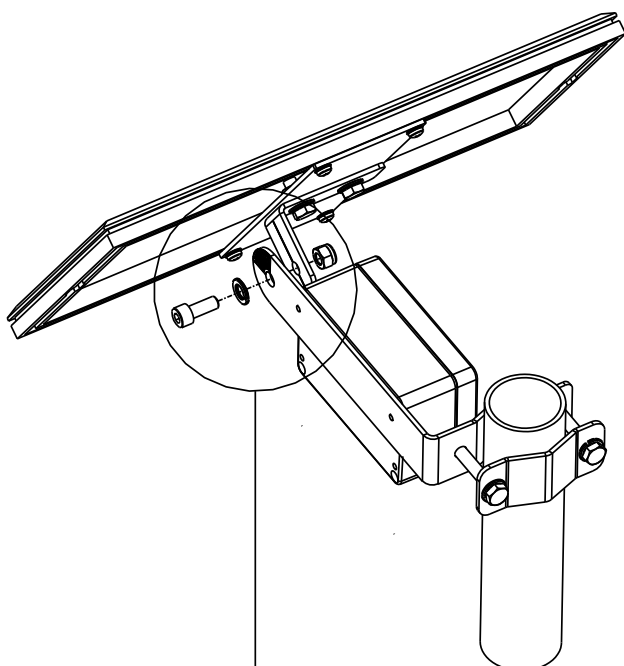
OVERALL DIMENSIONS



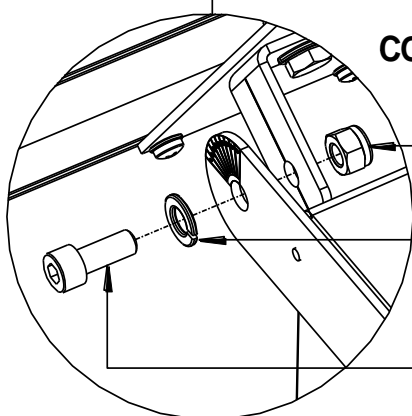
ELECTRICAL CONNECTIONS



PANEL MOUNTING AND ORIENTATION



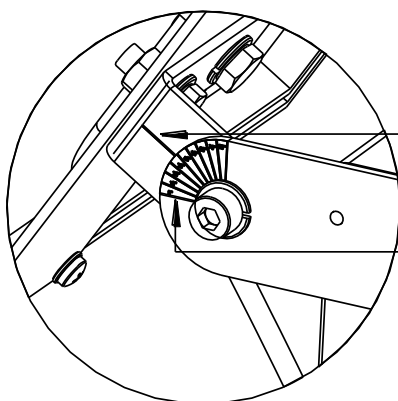
COMPONENTS DETAIL



SELF-LOCKING NUT

WASHER Ø 8

SCREW M8X20



PANEL ORIENTATION
REFERENCE

INCLINATION
DEGREE

HOW TO ORDER

APL	
	MODEL
1	5 W solar panel
2	to be define
	SUITABLE FOR
A	ML 145/255
APL	1 A Fill all the digits to be sure of right code



APL-1A (Complete code example for order)

Due to the constant technical development and improvements of its products, the manufacturer reserves the right to make changes and / or modify the information contained in this document without notice. Information contained herein is not binding.