

**User Manual** 

## 1. Description.

The **BOX PPSM1** power supply kit is made by a 10 W polycrystalline photovoltaic panel with a mounting bracket, fixed to a plastic case in which the **MWDG-GSM basestion** is housed. The case contains also GSM/GPRS and WSN antennas, the battery charger, a 12V 9Ah sealed lead acid battery and a 2.6A switching power supply to assure a dual power supply.

The kit is designed to supply enough power to guarantee a daily data sending to the **Service Center** <u>www.winecap.it</u> using the GSM connection in normal climatic conditions, also during winter.



Picture 1 - Product Image







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### 2. How to install.

For best results, also during winter, the solar panel must be installed facing SOUTH and the box must be placed vertically to hold the solar panel inclination to 60°.



Picture 2 - Installation layout





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# 3. Technical Information.

Box material	ABS
Bracket material	Opaque polycarbonate
Box dimensions	382x282x131mm
Bracket dimensions	384x545x5mm
Collar pitch	minimum: 52mm - maximum: 60mm
6A-12/24V charge controller - Nominal working voltage	12/24V
6A-12/24V charge controller - Maximum current	6.6A
6A-12/24V charge controller - Sealing	IP22
6A-12/24V charge controller - Dimensions	85x98x34mm
6A-12/24V charge controller - Weight	108g
6A-12/24V charge controller - Ambient temperature	from -25 to +50°C
6A-12/24V charge controller - Self-consumption	6mA
Battery - Type	Lead-calcium
Battery - Features	9Ah-12V
Battery - Case material	ABS
Photovoltaic panel - Nominal power	10W
Photovoltaic panel - Vmp	17.9V
Photovoltaic panel - Imp	0.56A
Photovoltaic panel - Voc	22.41V
Photovoltaic panel - Isc	0.61A
Photovoltaic panel - Dimensions	33.7x20.5x1.5cm
Photovoltaic panel - Weight	0.80Kg
Switching power supply - Outputs	1
Switching power supply - Output voltage	13.8V
Switching power supply - Output current	2.6A
Switching power supply - Output type	<ul><li>Fixed</li><li>Adjustable</li></ul>
Switching power supply - Nominal power	35.9W
Switching power supply - Input voltage	<ul> <li>85V (minimum)</li> <li>100÷240VAC (nominal)</li> <li>264V (maximum)</li> </ul>
Switching power supply - Isolation voltage	3kV
Switching power supply - Case	Metallic
Switching power supply - Terminal type	Clamp in a row
Switching power supply - Efficiency	83%
Switching power supply - Medium time between two faults ( <i>MTBF</i> )	523,300h
Switching power supply - Ripple and noise (V)	120mV
Switching power supply - Operating temperature	<ul> <li>-20°C (minimum)</li> <li>+60°C (maximum)</li> </ul>
Switching power supply - Dimensions	99x97x36mm



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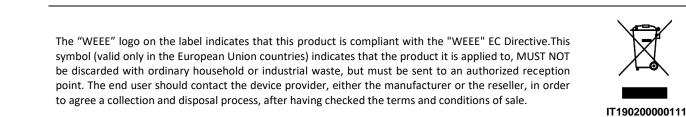
### 4. Reference standards.

EN 61010 -1

For electromagnetic compatibility

EN 61000 - 3 - 2 EN 61000 - 3 - 3 EN 300 220 -2 EN 301 489 - 03 EN 61000 - 6 -1

This symbol indicates that this product is compliant with the European Directive 2011/65/CE that restricts the use of substances in the manufacturing of electronic devices.



The features shown may be subject to change without notice.



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RoHs

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