

...the broadest narrowband money can buy



Solar power supply

The MORSE system is often installed at locations where neither mains nor any other form of electrical energy is available. For such cases RACOM has developed and manufactures the **MSU120** power supply which allows MORSE system components to be supplied from solar energy.

The design of the MSU120 is taken from the proven MS2000 and therefore has a similarly high level of intelligence for regulating consumption from the power supply and controlling the charging of batteries. The charging characteristic ensures the maximum charging speed and protection against over-charging, as well as protection against total discharge (by disconnecting from the load). The design has been electrically and mechanically (metal case) adapted so that the power supplies can be used in demanding industrial applications.



Typical areas of use


- In areas where **coverage is not provided** by the standard **infrastructure**
- For **supplying MORSE system components**: all types of radio modems, GPRS modem and other accessories
- For using together with a **12 V** lead back-up **battery** with a capacity of **20–150 Ah** and with a **50–120 W / 12 V** solar panel

Benefits

- **Battery charged with the optimum current** – the voltage at the output of the power supply is regulated according to the momentary battery voltage
- **Regulation of charging** – limits output voltage to max. 14.7 V
- **Automatic disconnection of the battery** for a voltage lower than 10.5 V (prevents the battery from totally discharging)
- Maximum current and output voltage from the solar panel up to 7 A or 25 V

Technical parameters

Regulation of the charger output voltage	10.5 V to 14.7 V according to battery
Voltage of back-up battery	12 V nominal
Capacity of back-up battery	20–150 Ah
Output power of solar panel	50–120 W
Voltage of solar panel	25 V max.
Maximum current from solar panel	7 A max.
Temperature compensation range of end charging voltage	-10 °C to +60 °C

 This project is supported by European Regional Development Fund and Ministry of Industry and Trade of The Czech Republic.

RACOM s.r.o. • Mírová 1283 • 592 31 Nové Město na Moravě • Czech Republic
Tel.: +420 565 659 511 • Fax: +420 565 659 512 • E-mail: racom@racom.eu

www.racom.eu