

- Special, buffered power supply (UPS) for professional series of MT telemetry modules (MT-025, MT-151, MT-156, MT-102, MTX-2050)
- Wide range of battery capacities from 2,4 Ah to 9Ah
- Max. output current 1,5 A
- Can be supplied from a photovoltaic cell (max. effect due to voltage adjustment)
- Microprocessor controlled charging of battery
- Integrated circuit for battery protection
- 6 diagnostic LED diodes
- Fast DIN rail mounting
- IP40 protection class
- 3 year warranty



MT-UPS-1 is a modern, digitally controlled buffered power supply acting as an UPS for telemetry modules and external receivers when main supply fails. The module can cooperate with any mains supply delivering 24 V DC (main power source) and an external SLA battery (backup power source) with 12 V nominal voltage. It can be used for batteries with 2,4 Ah to 9 Ah capacity. The module has a special output to warn of main supply failure – a classic UPS function. The circuit charges and maintains the battery when main supply is active (mains or a photovoltaic cell). The algorithm for auto-adjustment for photovoltaic cell uses the energy delivered by photo voltaic cell under poor light conditions.

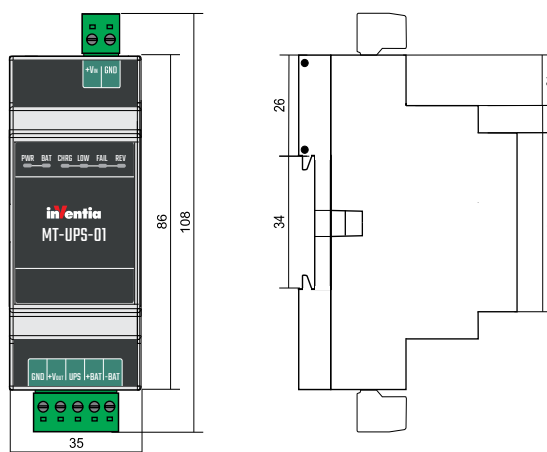
Functionality:

- LED diagnostic diodes reflect the current unit status. Detachable terminals with clear marking
- UPS compatible signal output for attachment of MT series telemetry modules
- Independent of supply source stabilising of output voltage, secures performance under transmission (higher energy consumption)
- Support for photovoltaic cells with max. effect at 16–18 V voltage
- Step-up and step-down microprocessor controlled converter
- Short circuit protection at inputs and outputs
- Parametrising of voltages threshold protects the battery
- Adapted to 12 V SLA batteries with 2,4 Ah to 9 Ah capacity
- Wide operating temperature range -20 to +55 °C
- Main supply voltage from 21,6 V DC

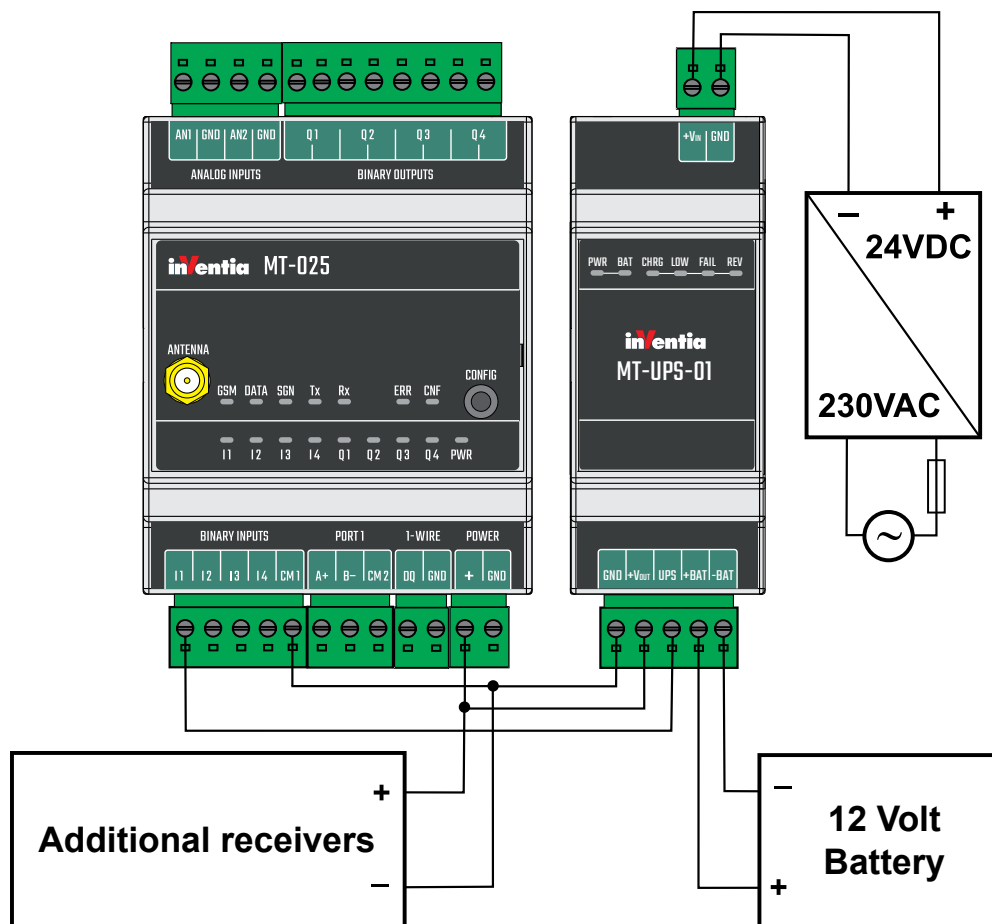
Technical data:

Input voltage (main supply)	24 V DC $\pm 10\%$
Charging current	from 0,25 A to 0,9 A
Nominal output voltage	24 VDC (21 VDC from battery)
Nominal output current	0,5 A
Highest output current	1,5 A (max 10 s)
Battery cut off voltage	<10,5 V
Ripple (between peaks)	<1 %
Operating temperature	-20 – 55 °C
Storage temperature	-25 – 70 °C
Dimensions (mm)	86 x 35 x 58
Protections class	IP20

Drawings and dimensions (all dimensions in millimeters)



An example of connection of MT-UPS-1 to MT-101 telemetry module



MT-UPS-1 Status LED diodes

