

TSP-BCM24 Battery Controller Module

This module provides a professional battery management system to charge and monitor an external lead-acid battery. Together with a power supply of the TSP series, a perfect DC-UPS system can be configured. The connected battery will be charged and held in charged mode by the power supply. In the event of a mains power failure the battery will supply the output power until the battery is discharged. As a consequence, the output voltage of the system is equivalent to the battery voltage. To avoid overcharging the battery, an external temperature sensor adjusts the battery voltage automatically to the required end of charge voltage. This can extend the battery life.

The battery is protected against deep discharge. Mains power and battery status are monitored regularly and failures indicated by corresponding LED's and alarm outputs. The module also provides an external On/Off input to switch-off both, power supply and battery.

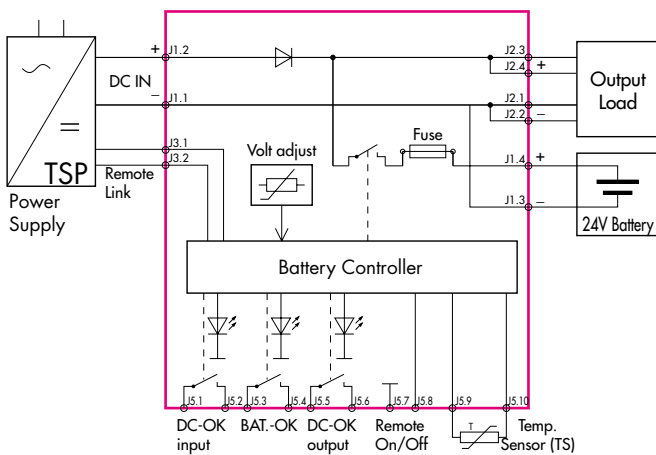


Models

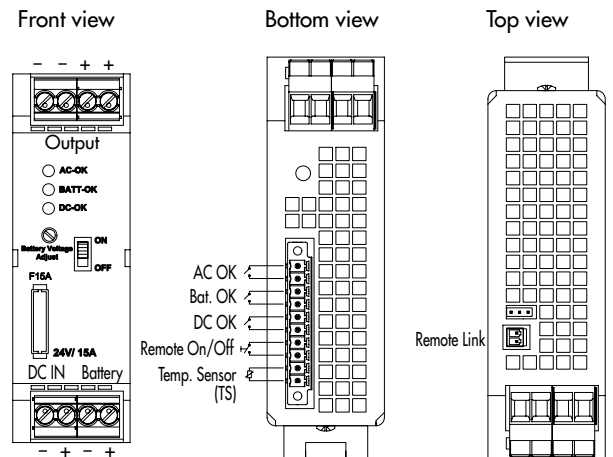
Order code (includes terminal plugs)	Inputs	Input Power max	Output Voltage nom.	*Output Power max.
TSP-BCM24	24 VDC Power Supply and 24 VDC Battery	360 W	24 VDC	360 W
TSP-BCM24H		600 W		600 W

*reduce max. output current by battery charging current

Function Diagram



Connector Positions



Specifications

Operating temperature	- 25°C to 70 °C max. (-13 °F to +158 °F) derating above 40 °C (104 °F): 1.5 %/K
Electromagnetic compatibility	in correspondence to connected units (no internal switching device)
Battery protection	against over voltage, deep discharge, overcharge, short circuit and reverse connection (built-in fuse)
Status signals	DC OK input, DC OK output, BAT OK all relay contact closed at status OK
Rating per relay contact	30 VDC/1.0 A max.
Dimensions	see page 10
Remote link cable (0.5 m)	1 cable included with TSP-BCM24 module
Remote On/Off	by ext. contact: contact open = On, contact closed = Off
Installation instructions	www.tracopower.com/products/tsp-bcm_inst.pdf

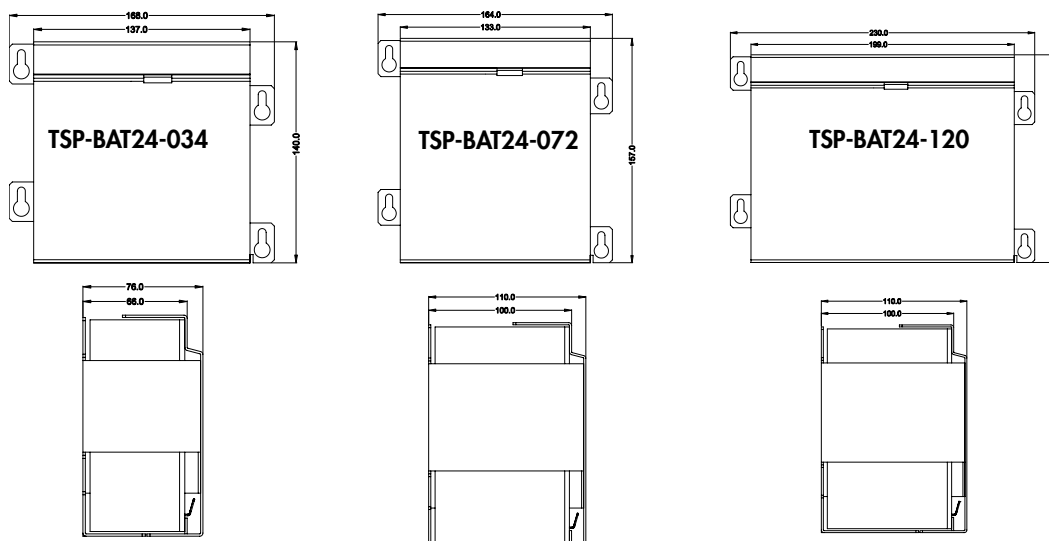
TSP-BAT Battery Pack

The TSP battery packs are designed to build, in connection with the TSP-BCM battery controller module, a complete DC-UPS system. The entire range utilizes 12 V maintenance free VRLA (valve regulated lead acid) batteries made by PANASONIC. These are not spillable lead gel type batteries. Two 12 V batteries are connected in series and assembled into a stainless steel enclosure, with integrated connector and connection cable.



Models

Order code (includes mating connectors)	Nominal Voltage	Charge current max.	Nominal Capacity (at 25°C, 77°F)
TSP-BAT24-034	24 VDC	0.80 A	3.4 Ah
TSP-BAT24-072		1.75 A	7.2 Ah
TSP-BAT24-120		3.00 A	12.0 Ah



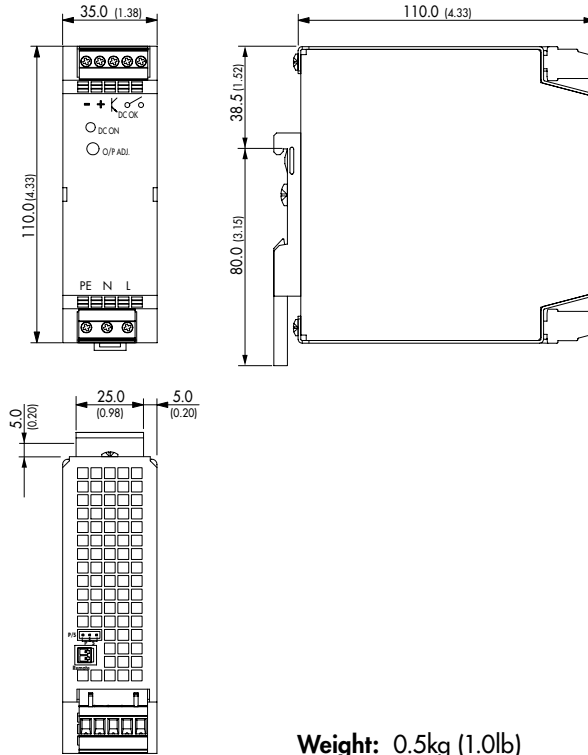
Detailed drawings in process

Specifications

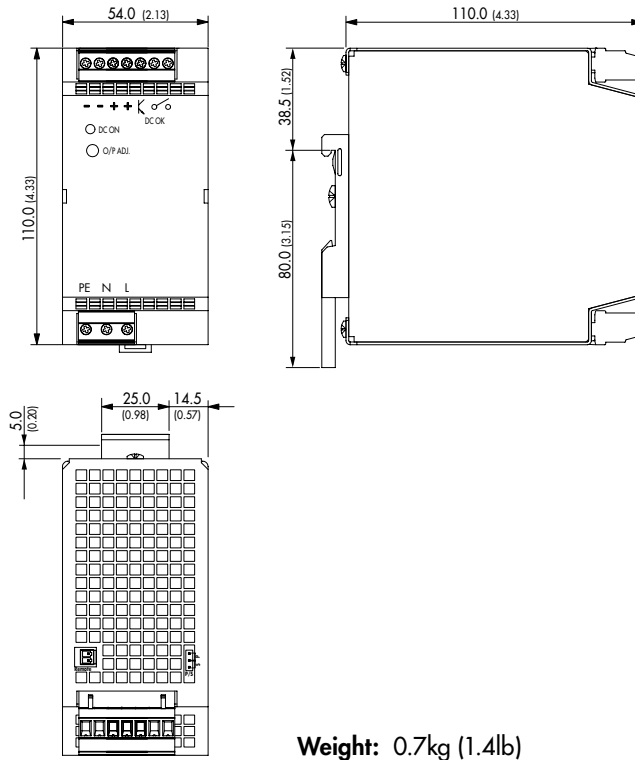
Temperature ranges (max)	– during discharge – when charging / charged – storage	-15 °C to +50 °C max. (5 °F to +122 °F) 0 °C to +40 °C max. (32 °F to +104 °F) -15 °C to +40 °C max. (5 °F to +104 °F)
Battery lifetime		3-5 years see general battery information for details: www.tracopower.com/products/tsp-panas_gen.pdf
Remote link cable		1 cable (0.5m) included
Weight	TSP-BAT24-034 TSP-BAT24-072 TSP-BAT24-120	3.2kg (7.1lb) 5.8kg (12.9lb) 9.0kg (20.0lb)
Battery datasheets	TSP-BAT24-034 TSP-BAT24-072 TSP-BAT24-120	www.tracopower.com/products/tsp-panas_034.pdf www.tracopower.com/products/tsp-panas_072.pdf www.tracopower.com/products/tsp-panas_120.pdf

Outline Dimensions

Models:
TSP 070/090
TSP-REM360
TSP-BCM24



Models:
TSP 140/180
TSP-REM600
TSP-BCM24H
TSP-BFM24



Dimensions in [mm], () = inch
Tolerances: ± 0.5 mm (± 0.02)