



PS-UPS40

Specifications



Features:

- Battery controller for DIN Rail UPS system
- Parallel connection to DC BUS
- Suitable for 24V system up to 40A
- Installed on DIN Rail TS35/ 7.5 or 15
- Built-in battery test function
- Battery polarity protection
- Relay contact signal output and LED indicator for DC BUS OK,
- Battery fail, and battery discharge
- Cooling by free air convection
- 3 year warranty

DC INPUT/ DC BUS

BATTERY IN / OUTPUT

FUNCTION

ENVIRONMENT

SAFETY & EMC

OTHERS

Cat. No.

PS-UPS40

DC VOLTAGE (Typ.)
RATED CURRENT

24 ~ 29V
40A

VOLTAGE RANGE (Typ.)
CURRENT RANGE
CHARGE CURRENT (Typ.)
EXTERNAL BATTERY (Typ.)

21 ~ 29V
0 ~ 40A
2A
4 / 7 / 12AH / 24V

RELAY CONTACT RATING (max.)
DC BUS OK

30VDC, 1A
Relay contact: Short when DC voltage between 21 ~ 29V ($\pm 3\%$), relay contacts
LED (Green): DC BUS OK: light; DC BUS fail: dark

BATTERY FAIL

Relay contact: Short when battery failure is observed through the battery test function, relay contacts
LED (Red): Battery over- discharge warning or battery broken: light; Battery OK: dark
Every 25 seconds, unit will send out test signal through Battery Fail relay contact and LED indicator once the battery is fail.

BATTERY DISCHARGE

Relay contact: Short when battery in discharge condition, relay contacts
LED (Yellow): Battery discharging: light; Battery is not discharging or discharging current $\leq 2.0A$: dark

WORKING TEMP.
WORKING HUMIDITY
STORAGE TEMP., HUMIDITY
VIBRATION
MOUNTING

-20 ~ +70°C
20 ~ 90% RH
-20 ~ +85°C, 10 ~ 95% RH
10 ~ 500Hz, 2G 10min./1cycle, 60 min. each long X,Y, Z axes
Compliance to IEC60068-2-6

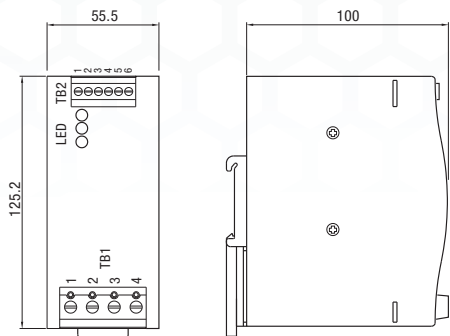
WITHSTAND VOLTAGE
ISOLATION RESISTANCE
EMI CONDUCTION & RADIATION
EMS IMMUNITY

Terminal- Chassis: 0.5KVAC, Relay Contacts- Terminal: 0.5KVAC
Terminal- Chassis: $\geq 100M \Omega$ / 500VDC (25°C; 70% RH)
Compliance to EN55022 (CISPR22) Class B
Compliance to EN61000-4-2,3,4,5,6,8; ENV50204; heavy industry level; criteria A

MTBF
DIMENSION
PACKING

161.9Khrs min. MIL-HDBK-217K (25°C)
55.5x125.2x100mm (WxHxD)
0.55Kg; 20pcs / 12Kg / 1.29CUFT
All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature.

Mechanical Specification



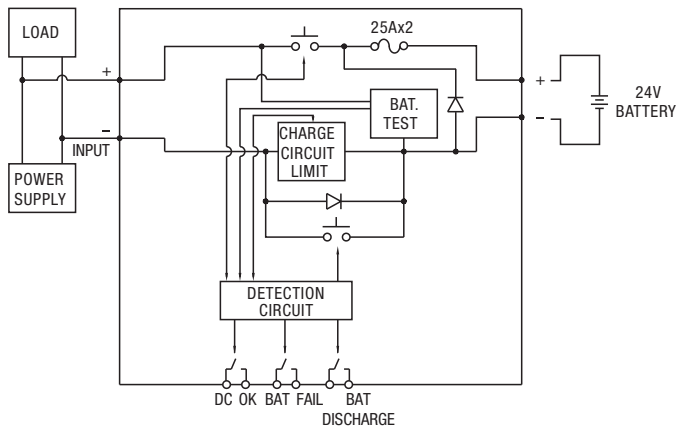
Terminal Pin. No Assignment (TB1)

Pin No.	Assignment
1	BATTERY INPUT +
2	BATTERY INPUT -
3	DC INPUT -
4	DC INPUT +

Terminal Pin. No Assignment (TB2)

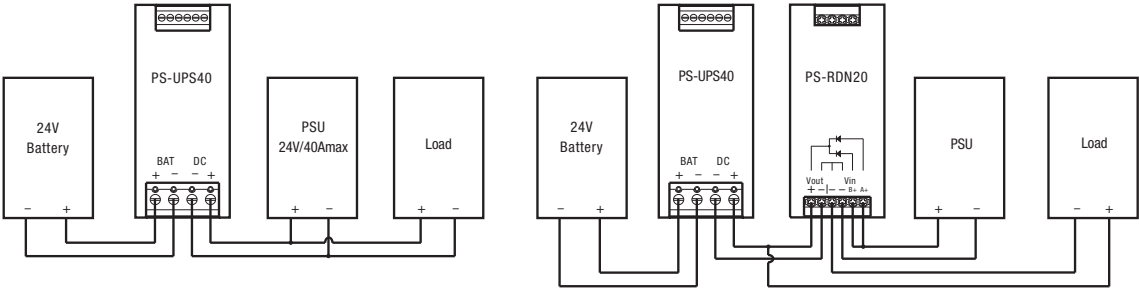
Pin No.	Assignment
1	BAT DISC 1
2	BAT DISC 2
3	BAT OK 1
4	BAT OK 2
5	DC OK 1
6	DC OK 2

Block Diagram

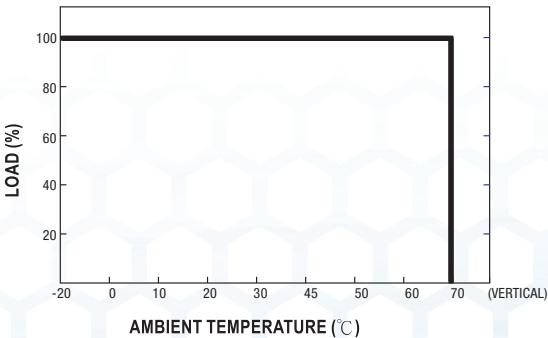


Applications

- 1. Backup connection for AC interruption
- 2. Combine redundancy module (PS-RDN20) to back up AC interruption or failure of PSU



Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

PSC Class 2 Series
Compact Housing

PSA Flex Series
1 Phase

PSB Flex Series
2 & 3 Phase

PS-S Slim Series
Plastic Housing

PS Low Profile Series
Plastic Housing

PS Industrial Series
1, 2 & 3 Phase

PS C & W Series
1 and 2 Phase

CBI Type
DC UPS Systems

CB Type
Battery Chargers

Accessories

Appendix

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Altech:](#)

[PS-UPS40](#)