

24Vdc 3A & 6A Power Modules

PART No :

TPS24-3DC

TPS24-6DC



TACTICAL POWER PRODUCTS

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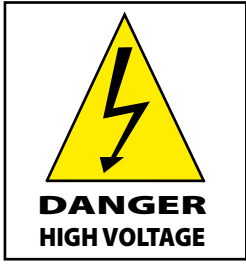


TPS24-6DC, Medium Kit and 2 PDM's Shown



Installation Manual

CAUTION



Dangerous internal voltages exceeding 400 Volts - **DO NOT REMOVE COVERS!**

Equipment must be installed & serviced by suitably qualified service personnel in a restricted access area.

Dangerous Voltages Inside!

Do not remove covers

No user serviceable parts inside

WARNING: THE POWER SUPPLY IS FOR USE WITH ITE EQUIPMENT ONLY.

General

These power supplies are designed for **indoor use only**.



TPS24-DC Series models are high performance, extremely low noise, Dual Channel Switch Mode power supplies offering 24Vdc at 3A or 24Vdc 6A (model dependant).

When operating from mains, these models provide an output of 24Vdc (to power connected equipment) and are configured with a separate 27.6Vdc battery charging channel. Available battery charge current is 700ma @ 27.6Vdc (approx) for TPS24-3DC Models (total output 3.7A) & 1.4A @ 27.6Vdc (approx) for TPS24-6DC Models (total output 7.4A) In the event of mains failure, battery voltage is clamped to 24Vdc and instantaneously powers the load. When the mains voltage is restored, batteries are disconnected from the load and recharging commences automatically.

Output short-circuit and overload protection are provided . Removal of the fault / short circuit condition will return the power supply to normal operation (Auto-Reset).

Model Variants

TPS24-3DC Single 3A Output - Supply only - no cabinet (273L x 145W x 80H)
TPS24-6DC Single 6A Output - Supply only - no cabinet (273L x 145W x 80H)

The TPS24-35DC and TPS24-6DC ship as a single power module, additional enclosures are available to accomodate power module, power distribution module and SLA battery. Models listed below

TPS-MEDIUM KIT Medium steel enclosure (340W x 436H x 145D mm) will house 2 x 12V 7AH SLA Battery and 2 PDM
TPS-MEDIUM-X KIT Medium steel enclosure (340W x 436H x 185D mm) will house 2 x 12V 17AH SLA Battery and 2 PDM
TPS-LARGE KIT Large steel enclosure (480W x 470H x 185D mm) will house 2 x 12V 33AH SLA Battery and 2PDM

All enclosures are supplied with mounitng hardware, tamper switches and battery leads.

Connection

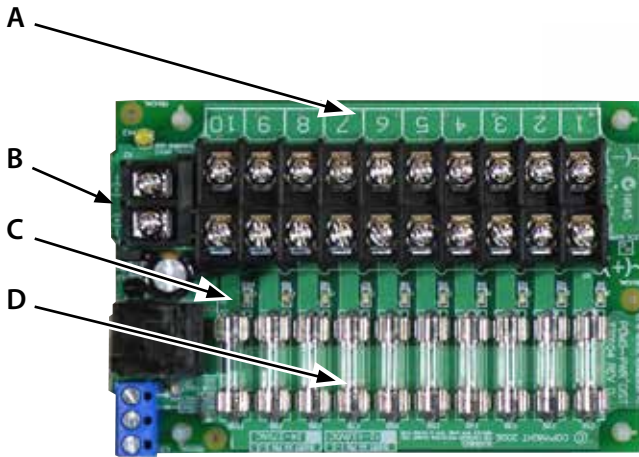
Single Output Models	Multiple Output Models
10-way removable terminal block provides the following: (See over the page for a layout) * 24Vdc Output * 27.6Vdc Output for SLA (Sealed Lead Acid) Batteries * Battery Test load (not used on this model) * AC OK Relay Output (SPST) * Battery Fault/Low Battery Relay Output (SPST)	24Vdc Output is via individually fused outputs (10 or 20) 10-way removable terminal block provides the following: (See over the page for a layout) * 27.6Vdc Output for SLA (Sealed Lead Acid) Batteries * Battery Test load (not used on this model) * AC OK Relay Output (SPST) * Battery Fault/Low Battery Relay Output (SPST)

Caution when handling batteries:

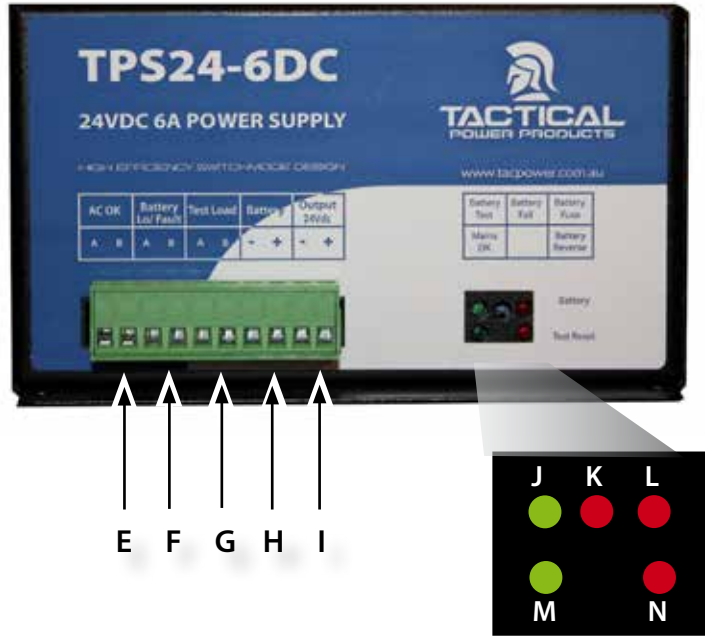
Before connecting two 12V SLA batteries in series to this power supply, ensure both are fully charged to 13.8V, this will ensure the batteries are charged evenly via the 27.6v charging circuit. Excercise care when terminating and connecting batteries. Mishandling or short circuit of SLA batteries can cause severe damage, burns and fire.

LAYOUT

Multi-Output Models



TPS24-6DC Module Face



A	Output Terminals (Multi Output models only)	B	PDM Input (Multi Output models only) - " I " below
C	Individual Circuit Status LEDs (Multi Output Models)	D	Individual Circuit Fuses (Multi Output models only)
E	AC Mains OK Output (COM / NC)	F	Battery Low / Fault Output (COM / NC)
G	Not used in this model	H	- Battery + (Connect Sealed Lead Acid Batteries)
I	- Output 24Vdc + (Connect to load or PDM)	J	Not used in this model
K	Battery Test Fail LED (Red ON = Fail)	L	Battery Fuse Fail LED (Red ON = Fail)
M	AC Mains OK LED (Green ON = OK)	N	Reverse Battery LED (Red ON = Fail)
O	240V IEC Mains Socket	P	Compliance / Date of Manufacture Label



24Vdc

3A & 6A Series



Specifications : (In the interests of product improvement, Tactical reserves the right to change specifications without notice)

	3DC	3DC-ME Kit	3DC-LGE Kit	3DC-LGE + 2PDM	6DC	6DC-ME Kit	6DC-LGE Kit	6DC-LGE Kit + PDM	6DC-LGE Kit+2PDM
Output Voltage	24Vdc								
Output Current	3A				6A				
Output Channels	1		20		1		10		20
Output per Channel	3A		150mA		6A		600mA		300mA
Input Voltage	240 V ac (215V - 255V) 50Hz								
Input Current	0.8A at full load				1.6A at full load				
Input In-Rush	<20A (25° C cold start up)								
Battery Charger	27.6Vdc / 0.7A				27.6Vdc / 1.4A				
Low Battery Indicator	1 x SPST Relay & Red LED								
AC OK Indicator	1 x SPST Relay & Green LED								
Weight	< 2Kg	< 5Kg	< 12Kg		< 2Kg	< 5Kg	< 12Kg		
Dimensions (mm)	273L x 145W x 80H	340W x 436H x 145D	482W x 470H x 185D		273L x 145W x 80H	340W x 436H x 145D	482W x 470H x 185D		
Efficiency	80% Typical								
Overload Protection	Constant current limiting, short circuit shutdown, auto recovery								
Load Regulation	< 1% from open to full load								
Line Regulation	< 0.2%								
Output Ripple	<50 mVp-p @ full load								
Working Temperature	0 - 45 ° C without derating								
Revision	K								
Safety Standards	Safety Standard AS NZS 60950:2015 Certificate of Compliance SAA20063								
EMC Standards	AS / NZS CISPR 11:2004 Class B (Conducted & Radiated)								



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