12Vdc 5A Series



Eco Range

MODELS:

TPS12-5DC

TPS12-5DCB

TPS12-5DC-BD10

TPS12-5DC-BX

TPS12-5DC-BXD10

TPS12-5DC-BXD20

TPS12-5DC-ME

TPS12-5DC-MED10

TPS12-5DC-MED20

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DESIGNED & MANUFACTURED

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

General



These power supplies are part of the Tactical ECO Range and are designed for **indoor use only.**

TPS12-5DC models are high performance, extremely low noise, Dual Channel Switch Mode power supplies offering 12Vdc at 5A continuous.

When operating from mains, these models provide an output of 12Vdc (to power connected equipment) and are configured with a separate 13.8Vdc battery charging channel. Available battery charge current is 1.4A Peak @ 13.8Vdc (total supply output current 6.4A)

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

TPS12-5DC TPS12-5DCB TPS12-5DC-BD10	Single 5A Output + 1.4A battery charger, supply only - no cabinet (225L x 120W x 60H) Single 5A Output + 1.4A battery charger, in small steel enclosure ($250W \times 310H \times 100D \text{ mm}$) 10 x 500mA Outputs + 1.4A battery charger, in small steel enclosure ($250W \times 310H \times 100 \text{ mm}$)
TPS12-5DC-BX TPS12-5DC-BXD10 TPS12-5DC-BXD20	Single 5A Output + 1.4A battery charger, in medium steel enclosure ($340W \times 436H \times 145D$ mm) 10×500 mA Outputs + 1.4A charger, in medium steel enclosure ($340W \times 436H \times 145D$ mm) 20×250 mA Outputs + 1.4A charger, in medium steel enclosure ($340W \times 436H \times 145D$ mm)
TPS12-5DC-ME TPS12-5DC-MED10 TPS12-5DC-MED20	Single 5A Output + 1.4A battery charger, in large steel enclosure (482W x 460H x 185D mm) 10 x 500mA Outputs + 1.4A charger, in large steel enclosure (482W x 460H x 185D mm) 10 x 500mA Outputs + 1.4A charger, in large steel enclosure (482W x 460H x 185D mm)

Connection

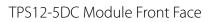
Single Output Models	Multiple Output Models			
10-way removable terminal block provides the following: (See over the page for a layout)	12Vdc Output is via individually fused outputs (10 way)			
	10-way removable terminal block provides the following:			
* 12Vdc Output	(See over the page for a layout)			
* 13.8Vdc Output for SLA (Sealed Lead Acid) Batteries	* 13.8Vdc Output for SLA (Sealed Lead Acid) Batteries			
* AC OK Relay Output (Relay is NC when mains is OK)	* AC OK Relay Output (Relay is NC when mains is OK)			
* Battery Fault / Low Battery Relay Output (SPDT)	* Battery Fault / Low Battery Relay Output (SPDT)			
(This relay is NO when Battery is OK, going NC when Battery voltage drops below approx. 10.5V during AC Fail)	(This relay is NO when Battery is OK, going NC when Battery voltage drops below approx. 10.5V during AC Fail)			

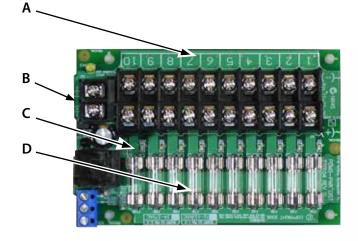
Caution when handling batteries:

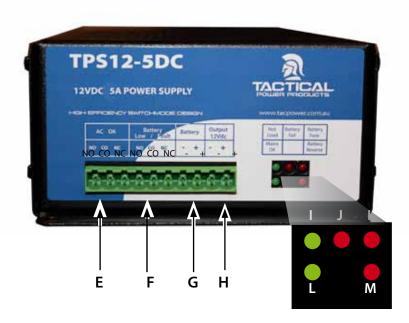
Exercise care when terminating and connecting batteries. Mishandling or short circuit of SLA batteries can cause severe damage and fire.

LAYOUT









Α	Output Terminals (Multi Output models only)		PDM Input(Multi Output models only)
С	Individual Circuit Status LEDs (Multi Output Models)		Individual Circuit Fuses(Multi Output models only)
E	AC Mains OK Output (NO / COM / NC)		Battery Low / Fault Output(NO / COM / NC)
G	- Battery + (Connect Sealed Lead Acid Battery)		- Output 13.5Vdc + (Connect to load or PDM)
I	Not used in this model		Battery Test Fail LED (Red ON = Fail)
K	Battery Fuse Fail LED (Red ON = Fail)	L	AC Mains OK LED (Green ON = OK)
М	Reverse Battery LED (Red ON = Fail)		240V IEC Mains Socket
0	Compliance / Date of Manufacture Label	~	





12Vdc5A Series



Specifications:

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

Eco Range®	5DC	5DCB	5DC-BD10	5DC-BX	5DC- BXD10	5DC- BXD20	5DC-ME	5DC- MED10	5DC- MED20	
Output Voltage	12 Vdc									
Output Current	5A Continuous									
Output Channels	1	1	10	1	10	20	1	10	20	
Output per Channel	5A	5A	500mA	5A	500mA	250mA	5A	500mA	250mA	
Input Voltage	240 V ac (+6%/-10%) 50Hz									
Input Current	0.8A @ full load									
Input In-Rush Current	<20A (25° C cold start up)									
Battery Charger	13.8Vdc / 1.4A (Max)									
Low Battery Indicator	1 x SPDT relay & Red LED									
AC Input Indicator	1 x SPDT Relay & Green LED									
Weight (Approx)	1.2Kg 4Kg			6Kg			<14Kg			
Dimensions (mm)	226 x 123 x 60	250W x 31	10H x 100D	340W x 436H x 145D			482W x 460H x 185D			
Overload Protection	Hysteretic thermal shutdown with automatic fault recovery									
Load Regulation	< 1% from open to full load									
Line Regulation	< 0.2%									
Output Ripple	<50mV p-p @ full load									
Working Temperature	50° C Max									
Safety Standards	AS NZS 60950:2011									
EMC Standards	AS/NZS CISPR 11:2004(Class B Conducted and Radiated)									



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