12Vdc 2.5A Series

TACTICAL POWER PRODUCTS

Eco Range

MODELS:

TPS12-2.5DC TPS12-2.5DC-B TPS12-2.5DC-BD10 TPS12-2.5DC-BX TPS12-2.5DC-BXD10



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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.**



NOTE: DO NOT connect loads which exceed the output rating of the supply (2.5A) Failure to observe this precaution can lead to output failure, requiring factory service.

TPS12-2.5DC models are high performance, extremely low noise, Dual Channel Switch Mode power supplies offering 12.4Vdc at 2.5A 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. Battery charge current is approximately 700mA @ 13.8Vdc (total supply output current 3.2A)

In the event of mains failure, battery voltage is clamped to 12.4Vdc and instantaneously powers the load - this is particularly useful for powering voltage sensitive loads such as CCTV cameras.. 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

TPS12-2.5DC Single 2.5A Output + battery charger, supply only - no cabinet (225L x 120W x 60H)
TPS12-2.5DC-B Single 2.5A Output + battery charger, in small steel enclosure (250W x 310H x 100D mm)
TPS12-2.5DC-BD10 10 x 250mA Outputs + battery charger, in small steel enclosure (250W x 310H x 100 mm)

TPS12-2.5DC-BX Single 2.5A Output + battery charger, in medium steel enclosure (340W x 436H x 145D mm) **TPS12-2.5DC-BXD10** 10 x 250mA Outputs + battery charger, in medium steel enclosure (340W x 436H x 145D mm)

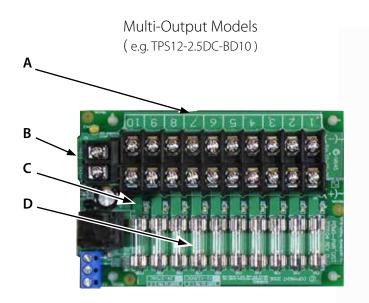
Connection

Single Output Models	Multiple Output Models		
10-way removable terminal block provides the following:	12Vdc Output is via individually fused outputs (10 way)		
(See over the page for a layout)			
	10-way removable terminal block provides the following:		
* 12.4Vdc 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	(This relay is NO when Battery is OK, going NC when Battery		
voltage drops below approx. 10.5V during AC Fail)	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)	В	PDM Input(Multi Output models only)	
С	Individual Circuit Status LEDs (Multi Output Models)	D	D Individual Circuit Fuses (Multi Output models only)	
E	AC Mains OK Output(NO / COM / NC)	F Battery Low / Fault Output (NO / COM / NC)		
G	- Battery + (Connect Sealed Lead Acid Battery)	Н	- Output 12.4Vdc + (Connect to load or PDM)	
ı	Not used in this model	J	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)	N	240V IEC Mains Socket	
0	Compliance / Date of Manufacture Label	~		





12Vdc2.5A Series



Specifications:

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

	2.5DC	2.5DCB	2.5DC-BD10	2.5DC-BX	2.5DC-BXD10			
Output Voltage			12.4 Vdc					
Output Current	2.5A Continuous							
Output Channels	1	1	10	1	10			
Output per Channel	2.5A	2.5A	250mA	2.5A	250mA			
Input Voltage	240 V ac (+6% / -10%) 50Hz							
Input Current	0.4A @ full load							
Input In-Rush Current	<20A (25° C cold start up)							
Battery Charger	13.8Vdc / 700mA (Max)							
Low Battery Indicator	1 x SPDT relay & Red LED							
AC Input Indicator	1 x SPDT Relay & Green LED							
Weight (Approx)	1.2Kg	4	⟨g	6Kg				
Dimensions (mm)	226L x 123W x 60H	250W x 310H x 100D		340W x 436H x 145D				
Overload Protection	Hysteretic thermal shutdown with automatic fault recovery. Additional fuse for overload/over voltage							
Load Regulation	< 1% from open to full load							
Line Regulation	< 0.2%							
Output Ripple	25mV p-p @ full load (Typical)							
Working Temperature	0 - 50° C							
Revision	D							
Safety Standards	AS NZS 60950:2003							
EMC Standards	AS/NZS CISPR 11:2004(Class B Conducted and Radiated)							



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