12Vdc 10A Power Series

MODELS:

TPS12-10DC TPS12-10DC-B TPS12-10DC-BD10 TPS12-10DC-BD20 TPS12-10DC-ME TPS12-10DC-MED10 TPS12-10DC-MED20 TPS12-10DC-MED40

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Installation Manual





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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.

General

These power supplies are designed for indoor use only.



Dangerous Voltages Inside !

Do not remove covers No user serviceable parts inside



TPS12-10DC models are high performance, extremely low noise, Dual Channel Switch Mode power supplies offering 12Vdc at 10A 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 @ 13.8Vdc (total supply output current 11.4A)

In the event of mains failure, battery voltage is clamped to 12Vdc 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

TPS12-10DC
TPS12-10DC-BSingle 10A Output - Supply only - no cabinet (273L x 145W x 80H)
Single 10A Output - Medium steel enclosure (340W x 436H x 145D mm)TPS12-10DC-BD1010 x 1A Outputs - Medium steel enclosure (340W x 436H x 145D mm)TPS12-10DC-BD2020 x 500mA Outputs - Medium steel enclosure (340W x 436H x 145D mm)TPS12-10DC-ME10 x 1A Outputs - Medium steel enclosure (482W x 470H x 185D mm)TPS12-10DC-MED1010 x 1A Outputs - Large steel enclosure (482W x 470H x 185D mm)TPS12-10DC-MED2020 x 500mA Outputs - Large steel enclosure (482W x 470H x 185D mm)TPS12-10DC-MED2020 x 500mA Outputs - Large steel enclosure (482W x 470H x 185D mm)TPS12-10DC-MED2020 x 500mA Outputs - Large steel enclosure (482W x 470H x 185D mm)TPS12-10DC-MED4040 x 250mA Outputs - Large steel enclosure (482W x 470H x 185D mm)

Connection

10-way removable terminal block provides the following: (See over the page for a layout)	12Vdc Output is via individually fused outputs (10, 20 or 40)				
* 12)/dc Output	10-way removable terminal block provides the following: (See over the page for a layout)				
* 12Vdc Output * 13.8Vdc Output for SLA (Sealed Lead Acid) Batteries	* 13.8Vdc Output for SLA (Sealed Lead Acid) Batteries				
* Battery Test load (not used on this model)	* Battery Test load (not used on this model)				
* AC OK Relay Output (SPST)	* AC OK Relay Output (SPST)				
* Battery Fault/Low Battery Relay Output (SPST)	* Battery Fault/Low Battery Relay Output (SPST)				

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

Multi-Output Models TPS12-10DC Module Face (e.g. TPS12-10DC-BD10) Α. TPS12-10DC В 12VDC 10A POWER SUPPLY POWER 1 KRH EFFICIENCY BWTCHMOOL DEBGN 1 С Battery Test Load Battery AC OK D. П E FGHI

A	Output Terminals (Multi Output models only)	В	PDM Input (Multi Output models only) - "I" below				
С	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	Н	- Battery + (Connect Sealed Lead Acid Battery)				
I	- Output 12Vdc + (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)				
м	AC Mains OK LED (Green $ON = OK$)	Ν	Reverse Battery LED (Red ON = Fail)				
0	240V IEC Mains Socket	Р	Compliance / Date of Manufacture Label				



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Specifications:

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

	10DC	10DC-B	10DC-BD10	10DC-BD20	10DC-ME	10DC-MED10	10DC-MED20	10DC-MED40		
Output Voltage	12 Vdc									
Output Current	10A Continuous									
Output Channels	1	1	10	20	1	10	20	40		
Output per Channel	10A	10A	1A	500mA	10A	1A	500mA	250mA		
Input Voltage	240 V ac (+6% / -10%) 50Hz									
Input Current	1.4A @ full load									
Input In-Rush Current	<20A (25 ⁰ C cold start up)									
Battery Charger	13.8Vdc / 1.4A									
Low Battery Indicator	1 x SPST relay & Red LED									
AC Input Indicator	1 x SPST Relay & Green LED									
Weight	<2Kg	<5Kg	<5Kg	<5Kg	<12Kg	<12Kg	<12Kg	<12Kg		
Dimensions	273L x 145W x 80H	340W x 436H x 145D mm			482W x 470H x 185D mm					
Efficiency	83% at rated load									
Overload Protection	Constant current limiting, short circuit shutdown, auto recovery									
Load Regulation	< 1% from open to full load									
Line Regulation	< 0.2%									
Output Ripple	25mV p-p @ full load									
Working Temperature	0 - 50 ⁰ C									
Revision										
Safety Standards	AS NZS 60950:2003									
EMC Standards	AS/NZS CISPR 11:2004 (Class B Conducted and Radiated)									



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