

# 12Vdc 10A Power Module

PART No. :

TPS12-10DC



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## Engineered for CCTV

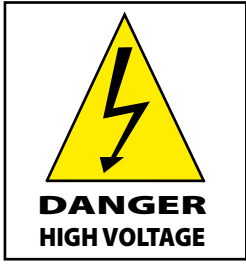


TPS12-10DC, Medium Kit and 2 x PDM Shown



# 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*



## General

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

TPS12-10DC is a 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

The TPS12-10DC ships as a single power module, additional enclosures are available to accomodate power module, power distribution module and SLA battery. Models listed below

- TPS12-10DC** Single 10A Output + 1.4A battery charger, supply only - no cabinet ( 275L x 143W x 83H )
- TPS-MEDIUM KIT** Medium steel enclosure ( 340W x 436H x 145D mm ) will house 12V 17AH SLA Battery and 2 PDM
- TPS-LARGE KIT** Large steel enclosure ( 480W x 470H x 185D mm ) will house 12V 55AH SLA Battery and 4 PDM

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

## Connection

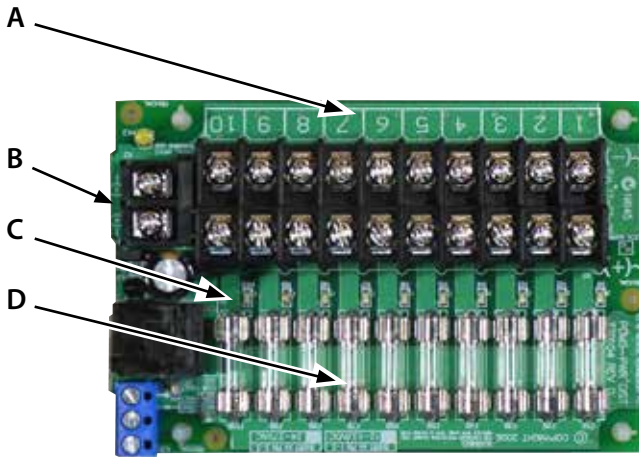
Single Output Models	Multiple Output Models
10-way removable terminal block provides the following: ( See over the page for a layout )	12Vdc Output is via individually fused outputs ( 10, 20 or 40 )
<ul style="list-style-type: none"> <li>* 12Vdc Output</li> <li>* 13.8Vdc Output for SLA (Sealed Lead Acid) Batteries</li> <li>* Battery Test load (not used on this model)</li> <li>* AC OK Relay Output ( SPST )</li> <li>* Battery Fault/Low Battery Relay Output ( SPST )</li> </ul>	10-way removable terminal block provides the following: ( See over the page for a layout )
	<ul style="list-style-type: none"> <li>* 13.8Vdc Output for SLA (Sealed Lead Acid) Batteries</li> <li>* Battery Test load (not used on this model)</li> <li>* AC OK Relay Output ( SPST )</li> <li>* Battery Fault/Low Battery Relay Output ( SPST )</li> </ul>

### Caution when handling batteries:

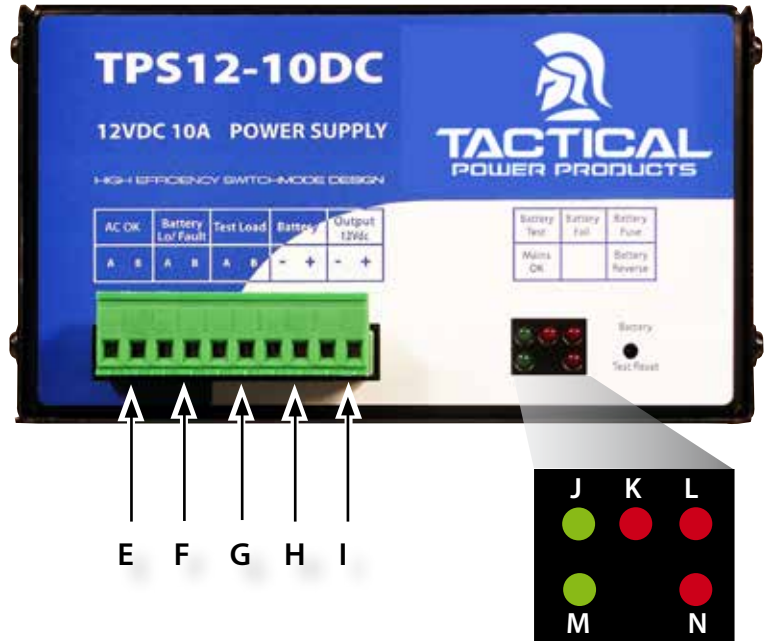
Exercise care when terminating and connecting batteries. Mishandling or short circuit of SLA batteries can cause severe damage and fire.

# LAYOUT

Multi-Output Models



TPS12-10DC Module Face



<b>A</b>	Output Terminals ( Multi Output models only )	<b>B</b>	PDM Input ( Multi Output models only ) - " 1 " below
<b>C</b>	Individual Circuit Status LEDs ( Multi Output Models )	<b>D</b>	Individual Circuit Fuses ( Multi Output models only )
<b>E</b>	AC Mains OK Output ( COM / NC )	<b>F</b>	Battery Low / Fault Output ( COM / NC )
<b>G</b>	Not used in this model	<b>H</b>	- Battery + (Connect Sealed Lead Acid Battery)
<b>I</b>	- Output 12Vdc + ( Connect to load or PDM )	<b>J</b>	Not used in this model
<b>K</b>	Battery Test Fail LED ( Red ON = Fail )	<b>L</b>	Battery Fuse Fail LED ( Red ON = Fail )
<b>M</b>	AC Mains OK LED ( Green ON = OK )	<b>N</b>	Reverse Battery LED ( Red ON = Fail )
<b>O</b>	240V IEC Mains Socket	<b>P</b>	Compliance / Date of Manufacture Label



# 12Vdc 10A Series

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## Specifications :

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

	10DC	10DC+Medium Kit	10DC+Medium Kit + PDM5-1A	10DC+Medium Kit 2 PDM5-500	10DC+Large Kit	10DC+Large Kit + PDM5-1A	10DC+Large Kit + 2 PDM5-500	10DC+Large Kit + 4 PDM5-250
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 <sup>0</sup> 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 83H	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 <sup>0</sup> C without derating							
Revision	E							
Safety Standards	Safety Standard AS NZS 62368:1.2022 Certificate of Compliance EESS-240724-0							
EMC Standards	AS/NZS CISPR 11:2004 ( Class B Conducted and Radiated )							



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