

MIL-STD RUGGED POWER SUPPLY based on SYNQOR Module

Description

The MIL-PS Family is a Rugged Power supply unit based on Ps20A-Ps35A Buck /Boost power modules.

Up to 3 Regulated Power outputs are available in single unit.

The MIL-PS Family is designed for accurate efficient and reliable power delivery in demanding environments with excellent performance.

Designed to meet the most challenging and harsh environment challenges for fast and easy deployment in Military and Civilian Air, Ground and Naval equipment, and other Defense, Homeland Security and Emergency services. Robotic and Unmanned Vehicles.



Key Features

- Technology Based on SYNQOR Buck /Boost Technology, able to both step-up or step-down voltages while offering high Output voltage regulation accuracy and efficiency across a wide range of input and output voltages.
- Up to 3 Power Output channels in single unit.
- Delivers 5A (*up to 35A) of output current per channel.
- Input Voltage Range: 9-40Vdc (*up to 60V)
- Output Voltage Range: 0-40V (*up to 60V or negative output), factory set according to users request.
- High efficiency, Up 96% at full rated load current.
- No minimum load requirement means no preload resistors required
- *factory Adjustable output current limit available.
- *current monitor available.
- *Power Switch with locking lever available.
- *Input Protection Thermal Auto reset Fuse or Klixon Protection Fuse available.
- *LED indicators Power/Status /Over Temperature available.



MIL-PS

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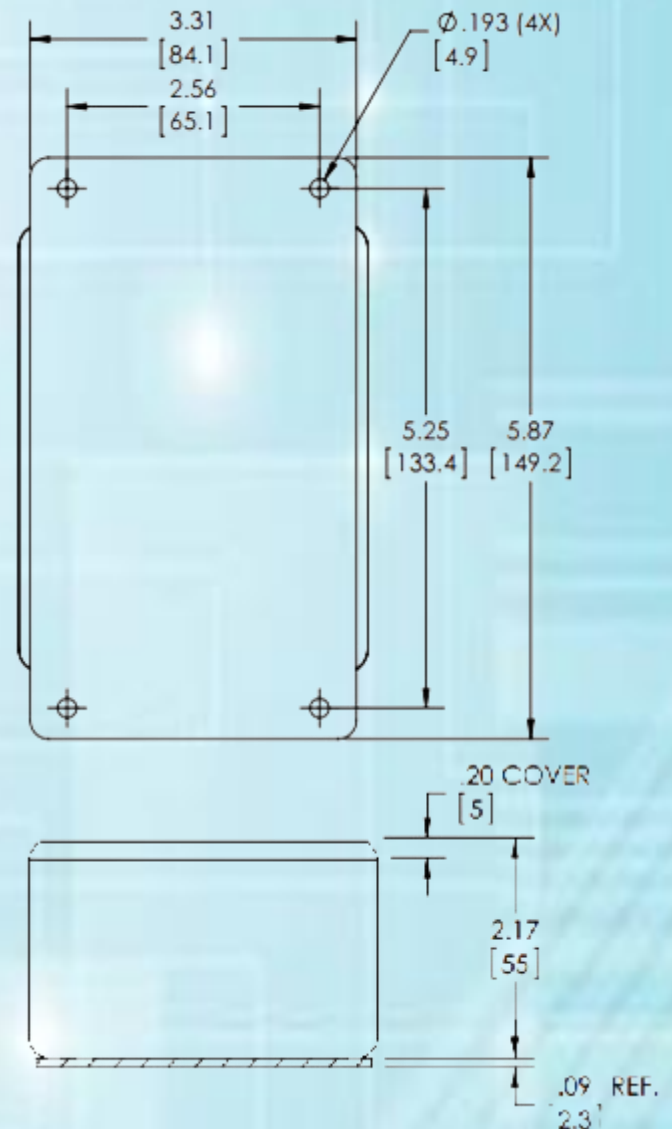
- *MIL- 38999 rugged MIL-Spec connectors available.
- Massive IP66 Waterproof Die cast Aluminum enclosure with powder coated Black for extra atmospheric and marine corrosion protection.
- *Any Color option available,*MIL - 810 SPEC approved finish and paint available.
- Enclosure equipped with mounting bracket for easy vehicle installation
- Enclose Offers basic EMC protection,*EMI sealing available.
- *On-board MIL-STD-461 and MIL-STD-1275 input and output filtering available.
- *Environmental mil-810 available.

*Features marked with * or "available" are not included in base part number and must be ordered separately

Documentation (Click Link)

- [Alon-Eng Site](#)
- [MIL-PS Family Datasheet](#)
- [Ps20A-Ps35A Family Datasheet](#)

Dimensions:



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Specifications	
Input Power:	+9 to +40V DC , *MIL-STD-704 & MIL-STD-1275 Standards available
Output Power:	0 to +40V DC - 5A , up to 3 outputs at 35A available ,
Connectors:	* Up to 3 x D38999 MIL Circular connectors available
Weight (approx.):	750g - 1400g
Dimensions mm (L x W x H)(approx.):	115 x 90 x 60 mm basic enclose without connectors & mounting bracket 149 x 90 x 63 mm basic enclose with mounting bracket 149 x 110 x 63 mm basic enclose with connectors & mounting bracket
Material:	Die cast Aluminum
Color :	Black , *any color option and MIL SPEC Paint approved available
Environmental and physical specifications	
Dust/Rain Sealing Level :	IP66
Temperature:	-40 to +60 °C operational, Passive Cooling, No Fan needed -40C to +85C storage
Humidity:	Operating: 5 to 95 % at +25 °C, non-condensing
Vibration	Operating acceleration amplitude up to 2.5g (3-500 Hz)
Shock:	Maximum peak shock acceleration up to 40g ,11mS
Cards Coating	*All internal cards are coated with Conformal coating cording to MIL-I-46058 available
Mil Standards:	*MIL-STD-810 , MIL-STD-461 ,MIL-STD-704 , MIL-STD-1275 Standards available
Optional Capabilities	
I/O Options	* Up to 3 control and monitor signals available for every power module: <ul style="list-style-type: none"> • output enable signals (Open/Gnd) • Current monitor • Power good signal

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Orderable Part numbers:

Family Product	Type 2	Vout 1	Type 2	Vout 2	Connector	Options
MIL-PS: Military spec Rugged Power supply PS: Rugged sealed Power supply	-5A: 5A -10A:10A -20A:20A -35A:35A	-V.V: Output Voltage 1	-5A: 5A -10A:10A -20A:20A -35A:35A	-V.V: Output Voltage 2	-38999: 38999 connectors -W: 16# WIRES 40cm from PG	S: Sealed From Water and Dust IP66 -B: Base Plate for Vehicle Assembly -SW: /OFF Switch on Enclosure -L: :LED on Enclosure -F1: MIL461 Filtering -F2: MIL 461&MIL 1275 Filtering

Single Output Part Number Examples:

- P/N: PS-20A-8.2V-W-B-S-SW : Rugged sealed power supply 8.2Vup to 20A with 16# WIRES Base Plate for Vehicle Assembly and Switch.
- P/N: PS-20A-12-38999-B-S-SW-L : Rugged sealed power supply 12Vup to 20A with 38999 Military Connectors Base Plate for Vehicle Assembly ,On/Off Switch and LED

Dual Output Part Number Examples:

- P/N: MIL-PS-20A-19.2V-20A-12V-W-B-S-SW: Military spec Rugged Power supply 19.2V, 12Vup to 20A with 16# WIRES Base Plate for Vehicle Assembly and Switch..
- P/N: PS-20A-19.2V-5A-12V-B-S-2SW-L : Rugged sealed power supply 19.2V,12Vup to 5A with 38999 Military Connectors Base Plate for Vehicle Assembly ,2On/Off Switch and LED

