

NOA301

Single Phase 60Hz 120Vac Input Triple Output, 705W Max Total

120VAC 60Hz Input
Triple Output Power Supply

(Document Rev A01, 09/21/16)

Market: Military, Industrial

Application: Electronic Equipment Rack

Features

- 120Vac $\pm 10\%$, 57-63Hz.
- Triple Output, 705W Total.
- Designed to meet portions of MIL-STD-810F Environmental *
- Designed to meet portions of MIL-STD-461E EMI *
- Totally enclosed metal case.

* Designed to meet portions of this particular standard. Contact AEGIS Power Systems for specific details.

Table 1: Maximum Ratings

Parameter	Rating	Unit	Notes
Vin max range	108 to 132	Vac	120Vac $\pm 10\%$
Temperature range	-40 to +54	$^{\circ}\text{C}$	Operational Range
Output power	705	W	
Input power	1007	W	
+6.5Vdc output	30	W	Refer Table 2 (Outputs)
+15Vdc output	75	W	
+48Vdc output	600	W	

Product Highlights

This robust filtered ac-dc power supply has three factory configured outputs (+6.5Vdc, +15Vdc, and +48Vdc) with a total of 705W combined power available at the outputs. This COTS solution works well for industrial and Military applications and is designed to meet portions of MIL-STD-810F vibration and shock, and MIL-STD-461E EMI requirements.

AEGIS Power Systems, Inc. specializes in the front end design, development, and manufacture of Rapid Response Custom Switching Power Supplies for defense, industrial, telecomm, aircraft, shipboard, rack mount, electric powered vehicle, and Mil-Cots military power supply applications. Contact Aegis for specific details on what portions of a particular military standard is offered for this power supply or what we can do for you with your particular industrial or mil-cots military power supply application.

Specifications: (25°C, nominal line, 100% load unless otherwise specified).

Input Voltage: 120VAC +/- 10%, 57-63 Hz.

Input Power Factor: 0.95 Nominal.

Input Line Current: 8.3 Amps Nominal.

Efficiency: >70% at 50% Load.

Input Power: 907W Nominal (955VA).

Startup Time: 1.5 Seconds.

Outputs: 6.5VDC, 15VDC, and 48VDC. See Table 2.

Output Current Limit: Short Circuit protected with automatic recovery.

Regulation: Temperature: +/- 0.01% per degree C.

Line/Load: +/- 1%.

Setpoint: +/- 0.5%.

Output Ripple: See Table 2.

Current Limit: Short Circuit Protected, Auto Restart.

Temperature: Operational: -40°C to +54°C.

Storage: -62°C to +60°C.

Cooling: Internal, forced air fans. Field replaceable. Order Aegis P/N NOA301FT.

Temperature Warnings: Hi Temp @ +65°C, Hi Temp Critical @ +75°C.
20mA sink, Open Collector, Off = Fault.

Dimensions: 9.0" L x 12.5" W x 5" H Maximum.

Weight: 16 lbs maximum.

Material Finish: Clear Chemical Film, RoHS, MIL-C-5541 Class 3, IAW MIL-DLT-81706 TYPE II Class 3, Paint Black, Powder Coat, White Text.

Connectors: DC Output: MS3122E16-8S.

AC Input: MS3122E12-3P.

MTBF: >166,000 (Without Fan Tray). Ground Benign @ 25 °C.

Shock and Vibration: Designed to meet Mil-Std-810F, Ground Mobile Equipment.

EMI: Designed to meet MIL-STD-461F CE102 Emi specification.

Other Environmental: Designed to meet the Mil-Std-810F environmental conditions below:

Altitude: 0-3300 m MSL.

Humidity: 15 - 95% Non-condensing (Operating and Storage).



Fungus: free of materials that support growth of fungus or mildew.

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Specifications subject to change without notice.

Table 2: Voltage Outputs

NOA301	V1	V2	V3
Voltage	+6.5Vdc	+15Vdc	+48Vdc
Current	4.5A	5A	12A
Power	30W	75W	600W
Ripple	65mV pk-pk	150mV pk-pk	480mV pk-pk

Table 3: Connector Information

<p>3 Pin Input Connector (J1)</p>  <p>Panel Mount Plug: P/N MS3122E12-3P</p>	<p>J1 Input Connector Pin Out</p> <ul style="list-style-type: none"> A. 120VAC Line B. 120VAC Neutral C. Chassis Ground
<p>8 Pin Output Connector (J2)</p>  <p>Panel Mount Socket: P/N MS3122E16-8S</p>	<p>J2 Output Connector Pin Out</p> <ul style="list-style-type: none"> A. +48VDC B. +48VDC C. +6.5VDC D. +15VDC E. Temp Warning (Open Collector) F. Critical Warning (Open Collector) G. Ground H. Ground

