AstrodyneTDI
Now you have power.

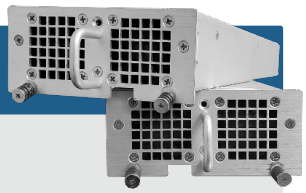
ASXMicro

1200W AC-DC/DC-DC CONVERTER MULTI-OUTPUT POWER SUPPLY

ASXMicro Multi-Output power supplies are ideal for DC systems in industrial, semiconductor, and medical applications requiring multiple low-power DC outputs. They provide high operating efficiency, excellent reliability, compact size, and easy maintainability. The converter features a high-speed digital control interface, facilitating prognostic features for optimized system uptime.

MAIN CHARACTERISTICS:

- ✓ Output power up to 240W per output, 1,200W total
- ✓ High Efficiency: up to 94% power conversion efficiency
- ✓ Forced air-cooled
- ✓ High Reliability: 100% HASS Tested
- ✓ SEMI-F47 compliant and designed to NAVSO P-3641A
- ✓ Successfully integrates into Semi S2 systems
- ✓ AC or DC input
- ✓ Full PFC - High Power Factor when operating from AC power – Low Input Current THD
- ✓ Medical certified Modules – 2MOPP



HOW TO ORDER

ASXM-XX XX XX XX XX

- DC OUTPUT VOLTAGE #5
- DC OUTPUT VOLTAGE #4
- DC OUTPUT VOLTAGE # 3
- DC OUTPUT VOLTAGE #2
- DC OUTPUT VOLTAGE #1
- OUTPUT POWER: 1200W
- SERIES: ASXMicro

Note: Reference table on page 3 for part generation.

FEATURES

INPUT VOLTAGE RANGE
80-264 VAC, 50-60Hz, single phase - or 120-380 VDC

OUTPUT VOLTAGE RANGE
Up to 5 DC Outputs: 5V, 12V, 15V, 24V, 48V, 56V

ISOLATION:
Input to Output: 3000VAC
Input to Earth 1500VAC
Output to Earth 500VAC

DIGITAL COMMAND / STATUS
CANBUS Controls & Alarms

PARALLEL AND REDUNDANT OPERATION
Automatic current sharing, output fault isolation device, and hot-swap compatible

OPERATING TEMPERATURE RANGE
-20°C - +40°C

COOLING
Forced air cooled / airflow from front to back

PROTECTION FEATURES:
Over-voltage, electronic current limit, thermal monitoring circuit shut down

DIMENSIONS (INCHES) 40.6 x 105.9 x 396.3mm

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SPECIFICATIONS

INPUT SPECIFICATIONS	
INPUT VOLTAGE	80-264 VAC, 50-60Hz, single phase - or 120-380 VDC ***Consult factory for model designations***
INPUT CURRENT	Less than 12.0A DC at 120VDC input, with a maximum load of 5 x 240W watt converters Less than 9.8A DC at 120VDC input with maximum load being 4 x 240W watt converters
INRUSH CURRENT	Less than 60A peak per embedded converter, or 300A peak for module
POWER FACTOR	>0.98
EFFICIENCY	90% typical input to output (output power >50% rated)
HARMONIC DISTORTIONS	Less than 10% total harmonic distortion at full load and less than 5% for each harmonic
SEMI F47	All outputs will meet requirements of SEMI F47-0706 – criteria A
HOLDUP TIME	>20ms at full load
ISOLATION	Input to Output: 3000VAC for 1 minute Input to Ground: 1500VAC for 1 minute Output to Ground: 1500VDC for 1 minute Input to Control: 3000VAC for 1 minute
OUTPUT SPECIFICATIONS	
OUTPUT VOLTAGE	Fixed output voltage – all outputs fully galvanic isolated from each other and earth ground ***Up to 5 outputs – configurable to 5V, 12V, 15V, 24V, 48V or 56V***
POWER	Up to 240W per output
LINE REGULATION	Constant Voltage Mode Regulation: ± 0.50%
LOAD REGULATION	Constant Voltage Mode Regulation: ± 1.5%
RIPPLE AND NOISE	<18V: 1.5% pk-pk max 18V to 36V: 1.25% pk-pk max >36V: 1.0% pk-pk max (20MHz measurement bandwidth) All are limited to 20MHz measurement bandwidth
TEMPERATURE COEFF.	Less than ± 0.025%/°C
TRANSIENT RESPONSE EXCURSION	Less than 5% for load change of 20% rated output. (Recovery to within regulation band within 0.5ms)
LEAKAGE CURRENT	<1.5mA
ENVIRONMENTAL CONDITIONS	
COOLING	Forced air cooled / airflow from front to back
AMBIENT TEMPERATURE	-20 to +40°C
STORAGE TEMPERATURE	-40 to +85°C (coolant lines purged)
HUMIDITY	0 to 95% non-condensing, operating and storage
PROTECTION FEATURES	
OUTPUT OVER-VOLTAGE	Outputs protected with over-voltage shutdown circuitry
OUTPUT OVER-CURRENT	Automatic electronic current limit circuitry
OVER-TEMPERATURE	Internal thermal monitoring circuits shut down the unit if temperatures exceed safe limits. The unit will automatically power back on after cooling down
ALARMS AND CONTROLS	
AC GOOD/ DC GOOD/FAULT	Multi-colored LED
CONTROL & ADMIN	All alarms and controls available via CANBUS. Signals: Voltage Command, AC Input OK, DC Output Enabled, Temperature Fault, DC Output Voltage, DC Output Current, Sub-Assemblies OK

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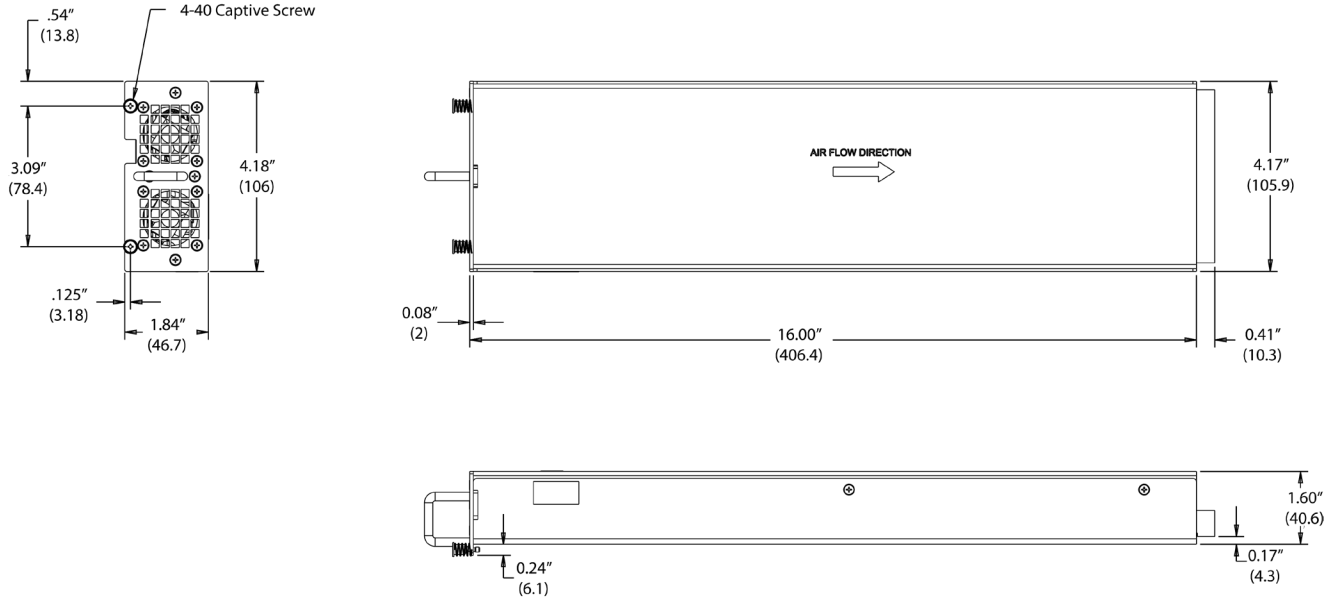
MECHANICAL SPECIFICATION	
DIMENSIONS (MODULE)	40.6 x 105.9 x 396.3mm (1.60 x 4.17 x 15.6")
CONNECTOR	Blind-mate connector for shelf mounting (Optional terminal block for bulkhead mounting – consult factory)
ALTITUDE	Operating: 0 to 3048m (10,000ft) Transport/Storage: 30,000 ft
VIBRATION	2Grms, 5Hz-500Hz, 3-axis, 30 minutes
AGENCY/ COMPLIANCE	EN61000-4-4 1995 Electrical Fast Transient/Burst - Severity Level 3; EN61000-4-5 1995 Surge - Severity Level 4; SEMI F47-0706 - Criteria A; EMI: CISPR 11 Class A Group 1 2004; EN/IEC/UL62368-1/A11:2017; EN/IEC/UL60601-1 3rd Edition(Modules); CE Marked

MICRO ASX DRAWING



ASXMicro PART SELECTION

ASXM-XX|XX|XX|XX|XX

Code	Voltage (VDC)	Current	Power @ 90-264VAC
05	5V	20A	100
12	12 - 13.5V	20 - 17.77A	240
15	13.6 - 16.5V	17.64 - 14.54A	240
19	16.6 - 21.5V	14.46 - 11.17A	240
24	21.6 - 26.5V	11.11 - 9.05A	240
28	26.6 - 31.5V	9.02 - 7.61A	240
36	31.6 - 42.5V	7.59 - 5.64A	240
48	42.6 - 50.0V	5.63 - 4.80A	240
56	50.1 - 56.0V	4.79 - 4.28A	240
XX	Blank Slot	-	-

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