ARTESYN AGF800-48D SERIES

800 Watts



Advanced Energy's Artesyn AGF800 series of isolated DC-DC converters is designed for RF applications such as high power wireless base stations that use both 28V for LDMos and 48V for gallium nitride (GaN) technology for increased power density and efficiency

SPECIAL FEATURES

- 2:1 wide input range
- Delivering up to 23.3 A for 30 V and 20 A for 5 V
- Extra wide trim range
- Optimised for high density, small space applications
- Low ripple and noise
- Fixed switching frequency
- Super high efficiency
- High capacitive load capability
- Basic insulation system
- Aluminium substrate
- Power good
- Auxiliary power rail

SAFETY

- TUV/CE 62368-1
- UL/cUL 60950-1

DATA SHEET

Total Power:

800 Watts

Input Voltage:

36 - 75 V

# of Outputs:

Dual

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ELECTRICAL SPECIFICATIONS

Input	
Input range	36 - 75 Vdc
Efficiency	93.5%
Max input voltage - Continuous	80 Vdc
Max input voltage - Non-continuous	100 Vdc for 100 mSec
Output	
Output 1 voltage	30 V nominal
Output 1 current	23.3 A
Output 1 trim range	22 V - 33 V
Output 2 voltage	5 V nominal
Output 2 current	20 A
Output 2 trim range	3 V - 6V
Voltage tolerance	+/-1%
Line regulation	0.5%
Load regulation	30 Vo: 0.5% 5 Vo: 1%
Noise/ripple	30 Vo: 250 mV 5 Vo: 100 mV
OVP, OCP	Hiccup
Overtemperature protection	Auto restart
Switching frequency	290 KHz
Temperature co-efficient	±0.02/°C
Isolation	
I/O isolation	1500 VDC min.

ENVIRONMENTAL SPECIFICATIONS

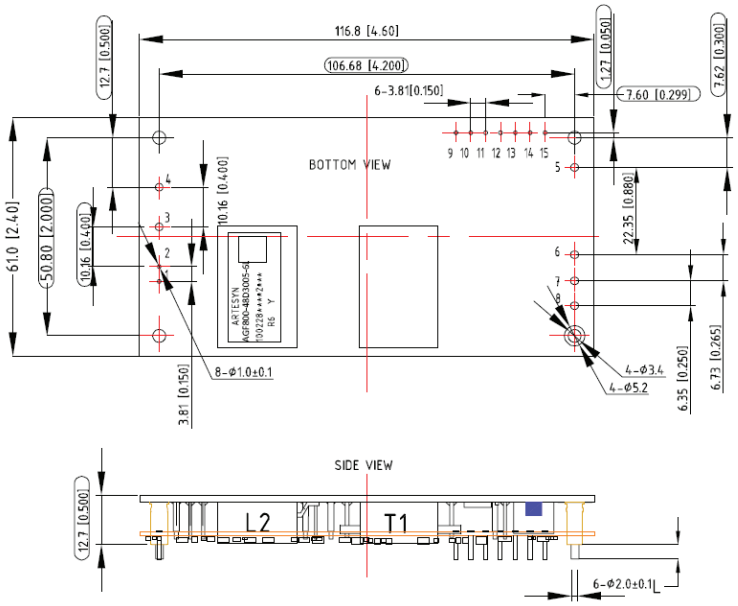
Operating ambient temperature range	-40 °C to + 85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	2.8 Million hours
RoHS Compliant	

ORDERING INFORMATION

Model number	Input voltage	Output voltage	Power
AGF800-48D3005-6L	36 - 75 Vin	30 V @ 23.3 A 5 V @ 20 A	800 W

Standard version is negative enable
"-6" = 3.8 mm pin length
"-L" = RoHS 6 compliance
"/M" = Thread mounting hole

MECHANICAL DRAWING



UNIT: mm[inch] PIN: L=3.8±0.25mm

TOLERANCE: X.Xmm±0.5mm[X.XX in.±0.02in.]
X.XXmm±0.25mm[X.XXX in.±0.01in.]

PIN ASSIGNMENTS

Pin #	Name	Function
1	+On/Off	Remote control
2	-On/Off	Remote control
3	Vin+	Positive input voltage
4	Vin-	Negative input voltage
5	Vo1+	Positive output voltage of output 1
6	Vo1-	Negative output voltage of output 1
7	Vo2-	Negative output voltage of output 2
8	Vo2+	Positive output voltage of output 2
9	Trim 2	Trim terminal of output 2
10	AUX	Auxiliary voltage
11	IOG	Inverter operation good of output 1
12	+S2	Remote sensing + of output 2
13	Trim 1	Trim terminal of output 1
14	+S1	Remote sensing + of output 1
15	-S1	Remote sensing – of output 1

Notes:
1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.
4. The rated voltage of output1 is 30 V. The rated voltage of output2 is 5 V.

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

For international contact information,
visit advancedenergy.com.

powersales@aei.com (Sales Support)
productsupport.ep@aei.com (Technical Support)
+1 888 412 7832

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