ARTESYN AGF600-48S50P SERIES

600 Watts



Advanced Energy's Artesyn AGF600 series of isolated DC-DC converters is designed for RF applications such as medium power wireless base stations.
This series of converters offers two wide input range models. The AGF600-24 accepts an 18 to 36 Vdc input, while the AGF600-48 accepts a 36 to 75 Vdc input. Both models provide a regulated low noise 28 Vdc output that can deliver up to 21.5 amps. Rated at 600 watts, they can operate over an ambient temperature range of -40 to 85˚C, continuing to deliver full power up to a baseplate temperature of 100˚C. The converters use a 320 kHz fixed frequency switching to minimize EMI filtering needs.

DATA SHEET

Total Power:

600 Watts

Input Voltage:

36 - 75 V

# of Outputs:

Single

RoHS 6/6 COMPLIANT

SPECIAL FEATURES

- Delivering up to 12 A output
- Ultra-high efficiency 94.3% typ. at full load
- Wide input range: 36 V ~ 75 V
- Excellent thermal performance
- No minimum load requirement
- Fixed frequency operation
- RoHS 6 compliant
- Remote control function
- Remote output sense
- Trim function: 50% ~ 114%
- Input undervoltage protection
- Output overcurrent protection
- Output overvoltage protection
- Overtemperature protection
- Industry standard full-brick pin-out outline
- With aluminum baseplate
- Pin length optional

SAFETY

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

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ELECTRICAL SPECIFICATIONS

Input	
Input range	36 - 75 VDC
Efficiency	94.3%
Output	
Output voltage	50 Vdc
Output current	12 A
Voltage tolerance	+/-1%
Line regulation	14 mV
Load regulation	56 mV
Noise/ripple	160 mV
Overvoltage protection	Hiccup
Overtemperature protection	Auto restart
Switching frequency	290 kHz
Temperature co-efficient	±0.02/°C
Isolation	
I/O isolation	1500 VDC min.

ENVIRONMENTAL SPECIFICATIONS

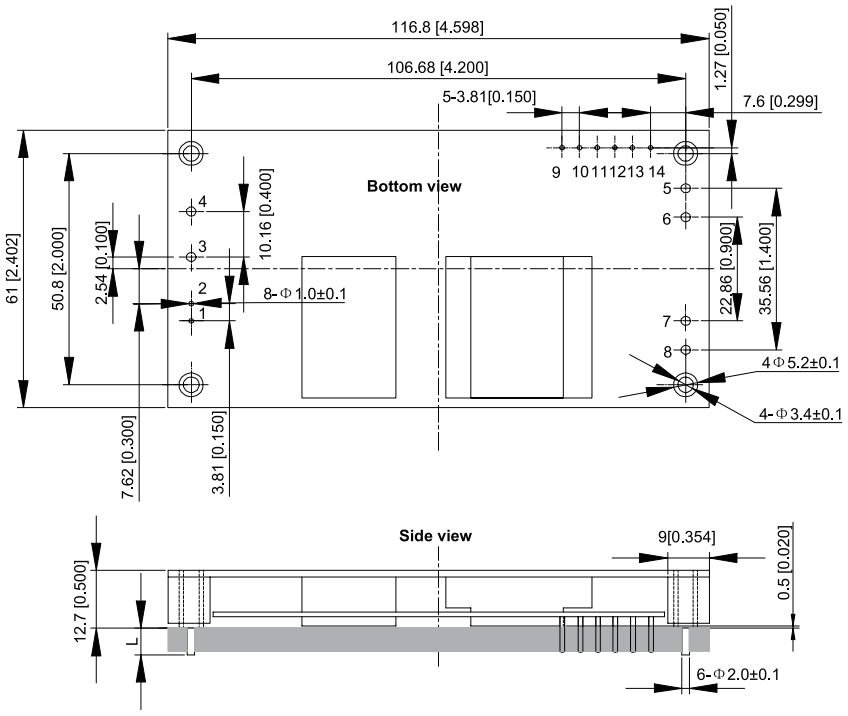
Operating ambient temperature range	-40 °C to + 85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	1.5 Million hours
RoHS Compliant	

ORDERING INFORMATION

Model number	Input voltage	Output voltage	Power
AGF600-48S50P-6L	36 - 75 Vin	50 V @ 12 A	600 W

"-6" = 3.8 mm pin length
"-L" = RoHS 6 compliance

MECHANICAL DRAWING



Unit: mm[inch]

Bottom view: pin on upside

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

PIN ASSIGNMENTS

Pin #	Function
Pin #	Function
1	+On/Off
2	-On/Off
3	Vin+
4	Vin-
5,6	Vo-
7,8	Vo+
9	AUX
10	IOG
11	NC
12	Trim
13	+S
14	-S

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.

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

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