

ARTESYN

AGF600-048 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.

SPECIAL FEATURES

- 2:1 wide input range
- 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
- Functions
- Power good
- Auxiliary power rail

SAFETY

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

DATA SHEET

Total Power:

600 Watts

Input Voltage:

36 - 75 V

of Outputs:

Single



ELECTRICAL SPECIFICATIONS

| Input | |
|----------------------------|---------------|
| Input range | 36 - 75 VDC |
| Efficiency | 94.5% |
| Output | |
| 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

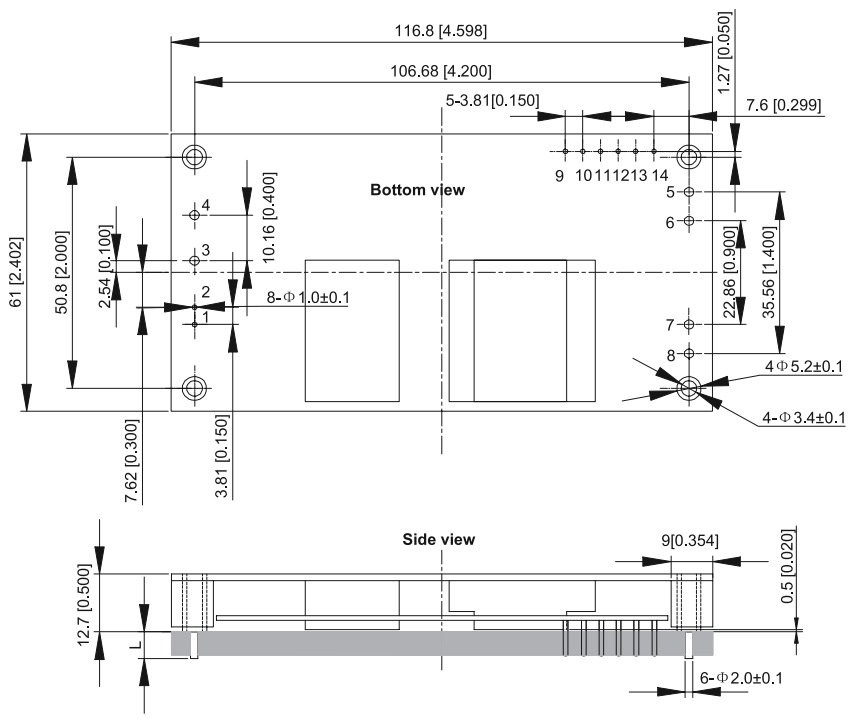
| | |
|-------------------------------------|----------------------------|
| Operating ambient temperature range | -40 °C to + 85 °C |
| Storage temperature | -55 °C to +125 °C |
| Humidity | 5% to 95% (non-condensing) |
| MTBF | 1.5 Million hours |
| RoHS Compliant | |

ORDERING INFORMATION

| Model number | Input voltage | Output voltage | Power |
|-----------------|---------------|----------------|-------|
| AGF600-48S28-6L | 36 - 75 Vin | 28 V @ 21.5 A | 600 W |

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

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 |
|-------|----------|
| 1 | +On/Off |
| 2 | -On/Off |
| 3 | Vin+ |
| 4 | Vin- |
| 5,6 | Vo- |
| 7,8 | Vo+ |
| 9 | AUX |
| 10 | I OG |
| 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.



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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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