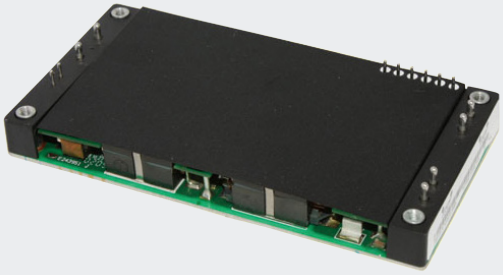
ARTESYN AGF600-024 SERIES

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.

AT A GLANCE

Total Power

600 Watts

Input Voltage

18 to 36 VDC

# of Outputs

Single

RoHS

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
- CE and UKCA Mark

©2023 Advanced Energy Industries, Inc.

ELECTRICAL SPECIFICATIONS

Input	
Input Voltage Range	18 to 36 VDC
Efficiency	93.5%
Output	
Output Voltage Tolerance	+/-1%
Output Line Regulation	28 mV
Output Load Regulation	56 mV
Output Voltage Trim Range	14 to 33VDC
Output Ripple and Noise	200 mV
Overvoltage Protection	Hiccup
Overtemperature Protection	Auto restart
Switching Frequency	230 KHz
Temperature co-efficient	±0.02/°C
Isolation	
I/O Isolation	1500 VDC min.

ENVIRONMENTAL SPECIFICATIONS

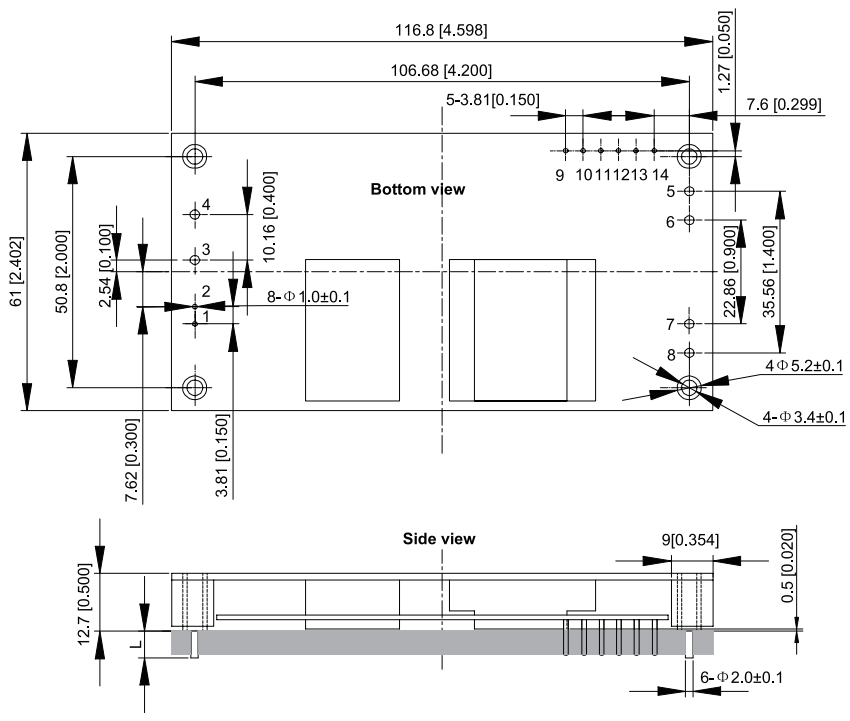
Operating ambient temperature range	-40°C to + 85°C
Storage Temperature	-55°C to + 125°C
Humidity	5% to 95% (non-condensing)
MTBF	1.5 Million hours
RoHS Compliant	

ORDERING INFORMATION

Model number	Input voltage	Output voltage	Power
AGF600-24S28-6L	18 to 36 Vin	28 V @ 21.5 A	600 W

Standard version is negative enable
"-6" = 3.8 mm pin length
"-L" = RoHS 3.0 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
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

For international contact information,
visit advancedenergy.com.

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

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2023 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, AE® and Artesyn™ are U.S. trademarks of Advanced Energy Industries, Inc.

ENG-AGF600-024-235-01 02.09.23