POWER

AGQ500 Series
500 Watts

Data Sheet

Total Power:	500 Watts
Input Voltage:	36 - 75 Vdc
# of Outputs:	Single

SPECIAL FEATURES

- Delivers up to 500 W output current
- Ultra-high efficiency 94% typ. at full load
- Wide input range: 36 V ~ 75 V
- Excellent thermal performance
- No minimum load requirement
- Basic isolation
- High power density
- Low output noise
- Wide trim range

SAFETY

- UL, cUL: UL62368
- TUV/CE: IEC/EN62368

RoHS 6/6 COMPLIANT

Electrical Specifications

Input	
Input range	36 - 75 VDC
Efficiency (50% load condition)	95% (AGQ500-48S50); 94% (AGQ500-48S28)

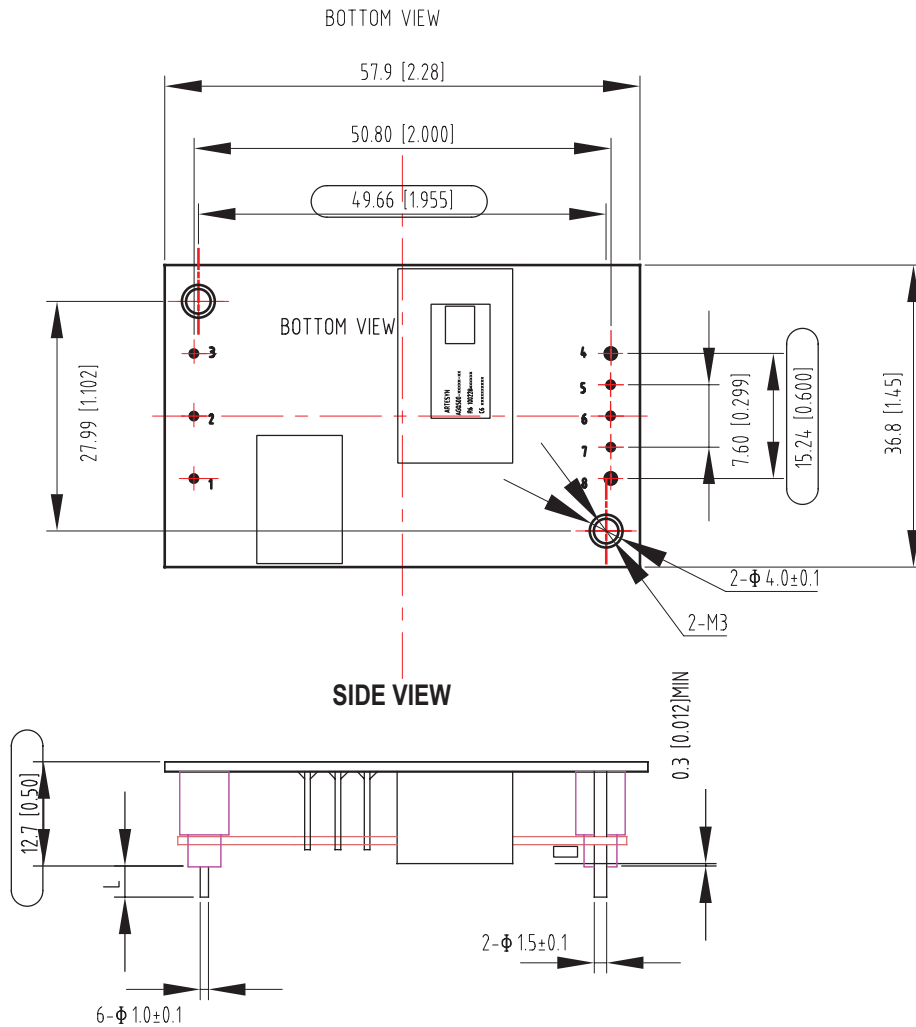| Output	
Output voltage	50 Vdc @ 10 A (AGQ500-48S50); 28 Vdc @ 18 A (AGQ500-48S28)
Voltage tolerance	+/-1%
Line regulation	0.5%
Load regulation	0.5%
Noise/ripple	100 mV
Over voltage protection	Latch
Over temperature protection	Auto-restart
Switching frequency	340 KHz
Temperature coefficient	±0.02/°C

Isolation	
I/O isolation	2250 Vdc (input to output)

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	Yes

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Mechanical Drawing

BOTTOM VIEW

57.9 [2.28]

50.80 [2.000]

49.66 [1.955]

BOTTOM VIEW

27.99 [1.102]

3
2
1

4
5
6
7
8

ARTESYN
AGQ500-xxxx-xx
Rb M0229xxxxxx
CE xxxxxxxxx

7.60 [0.299]

15.24 [0.600]

36.8 [1.45]

2-Φ 4.0±0.1

2-M3

SIDE VIEW

0.3 [0.012]MIN

12.7 [0.50]

L

6-Φ 1.0±0.1

2-Φ 1.5±0.1

UNIT: mm [inch]   L= 3.8 ± 0.5 mm

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

Notes: Dimensions within the box are critical dimensions.

Pin Assignments

Pin #	Name	Function
1	Vin+	Positive input voltage
2	CNT	Remote ON/OFF control
3	Vin-	Negative input voltage
4	Vo-	Negative output voltage
5	S-	Negative output sense
6	Trim	Output voltage trim
7	S+	Positive output sense
8	Vo+	Positive output voltage

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.

Ordering Information

Model number	Input voltage	Output voltage	Power
AGQ500-48S28-6L	36 - 75 Vin	28 V @ 18 A	500 W
AGQ500-48S28P-6L	36 - 75 Vin	28 V @ 18 A	500 W
AGQ500-48S50-6L	36 - 75 Vin	50 V @ 10 A	500 W
AGQ500-48S50P-6L	36 - 75 Vin	50 V @ 10 A	500 W

- Standard version is negative enable
- "-6" = 3.8 mm pin length
- "-L" = RoHS 6 compliance
- " -P" = Positive enable

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