

AGQ100-S Quarter Brick Series

48V Input, Single Output

Features

- Standard quarter brick(open frame/baseplate):
1.45" x 2.28" x 0.4"/0.5"
(36.8mm x 57.9mm x 10.2mm/12.7mm)
- 2:1 input voltage: 36-75V
- Output power: 14.4W-100W
- Isolated output: 2.5V, 3.3V, 5V, 12V
- Super high efficiency: 90%
- Remote control, trim, sense function
- Basic Isolation

Environmental

- Operating temperature range:
-40°C to 70°C
- Over Temperature Protection:
106°C to 125°C
- Storage temperature:
-55°C to 125°C
- MTBF: > 2 million hrs

Safety

UL	UL60950
CSA	CSA22.2-60950
TUV/CE	IEC/EN60950

Electrical Specifications

Input

Input Range 36 to 75 Vdc

Output

Voltage Setpoint Accuracy	± 40mV max. for 2.5Vout ± 50mV max. for 5V, 3.3Vout ± 50mV max. for 5Vout ± 120mV max. for 12Vout
Voltage Adjust	80% to 110% Vo
Line Regulation	12V:12mV;5V-2.5V:5mV
Load Regulation	12V:25mV;5V-2.5V:10mV
Ripple and Noise	180mVpp max. for 12V 120mVpp max. for 5V 100mVpp max. for 3.3V,2.5V
Transient Response	4%Vo max. ; (25% step load change from 50%Io)
di/dt : 1A/μs	recovery < 400uSec max.for 5V-2.5V < 700uSec max.for 12V 200mV max.for 3.3V,2.5V
di/dt : 1A/μs	recovery < 400uSec max.for 3.3V,2.5V

control

Control Voltage	
Positive logic	
High=on	3.5 to 12 Vdc
Low=off	-0.7 to 0.8 Vdc
Negative logic	
Low=on	-0.7 to 0.8 Vdc
High=off	3.5 to 12 Vdc
Control Current	1 mA max.



Ordering Information

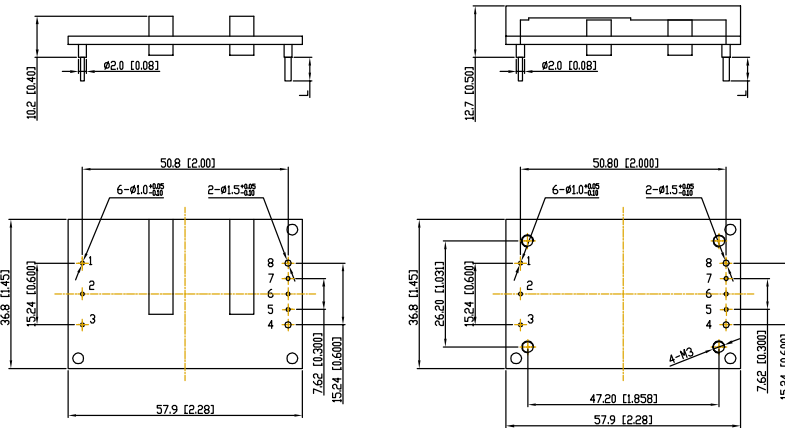
Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	2.5V	25A	88%	AGQ100-48S2V5
48V	3.3V	25A	89.5%	AGQ100-48S3V3
48V	5V	20A	90%	AGQ100-48S05
48V	12V	8.33A	90%	AGQ100-48S12

Suffix with:

- B: with baseplate omitting is open frame
- N: negative logic(low = on, open/high = off),omitting is negative logic
- P: positive logic(low = on, open/high = off).

Dimensions

Top view



Notes:M3 hole is only for 3.3V,5V

Pin Assignments

- | | |
|----------|-----------|
| 1. +Vin | 5. -Sense |
| 2. CNT | 6. Trim |
| 3. -Vin | 7. +Sense |
| 4. -Vout | 8. +Vout |

Pin Length

- | | |
|-------|------|
| 4.8mm | -4 |
| 3.8mm | -6 |
| 2.8mm | -8 |
| 5.8mm | None |

Notes: 1. "Top view" means the logo face to viewer.

2. The detail and recommended hole pattern layout is available in the Application Manual.