

## ADQ800 Series

800 Watt Quarter Brick DC-DC Converter

### Data Sheet

**Total Power:** 800 Watt  
(11.8 V @ 70 A)  
**Input Voltage:** 40 - 60 V  
**# of Outputs:** Single  
(11.8 V Nom)



### SPECIAL FEATURES

- Delivering up to 70A output
- Ultra-high efficiency  
96.0% typ. at 50% load
- Parallel and Droop current sharing
- Pre-bias startup: 0% Vout ~ 95% Vout
- Excellent thermal performance
- No minimum load requirement
- RoHS 6 compliant
- Remote control function
- Input undervoltage lockout
- Input overvoltage lockout
- Output overcurrent protection
- Output overvoltage protection
- Overtemperature protection
- Industry standard quarter-brick pinoutoutline
- Baseplated
- Pin length option: 4.6 mm
- Two year warranty (consult factory for extended terms)

### SAFETY

- EN62368
- UL/CSA62368
- CE

### Electrical Specifications

Input	
Input voltage	40 - 60 Vdc
Input surge	80 V / 100 mSec
Efficiency	96% (11.8 V @ 100% load) 96% (11.8 V @ 50% load)
I/O insulation	Basic insulation
I/O isolation	1500 Vdc
Output	
Output voltage	11.8 V nominal
Output current maximum	70 A
Noise/ripple	100 mV pk-pk typ.
Overtemperature protection	Baseplate: 110 °C
Overvoltage protection	Auto restart
Overcurrent protection	Hiccup
Control	
Enable	TTL compatible (negative logic)
Switching frequency	175 KHz

### Environmental Specifications

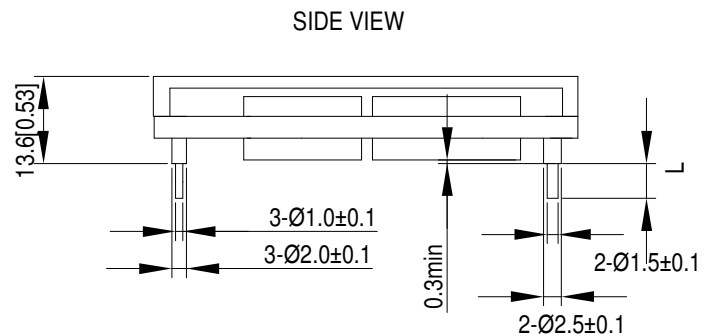
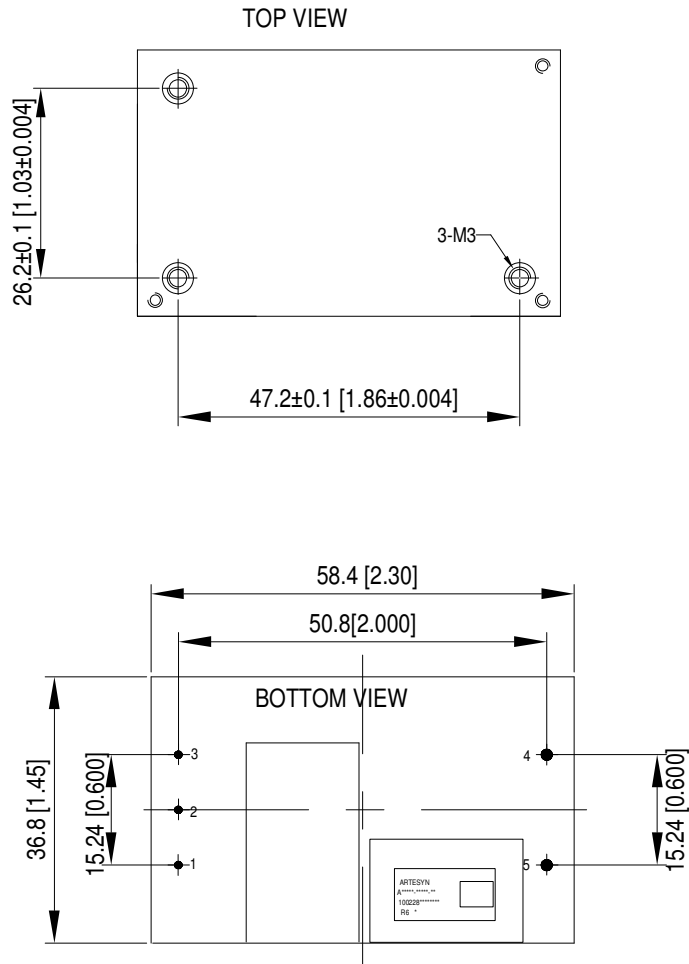
Operating ambient temperature range	-40° C to +85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 90% (non-condensing)
MTBF	1 Million hours (target)
RoHS compliant	6/6

### Ordering Information

Model number	Input voltage	Output voltage set point	Output current	Structure
ADQ800-48S12B-4L	36 - 60 Vdc	11.8 Vdc	70 A	Open frame with baseplate

“B” = Baseplate

### Mechanical Drawing



### Pin Length Options

Device code suffix	L
-4	4.6 mm ± 0.25 mm
-6	3.8 mm ± 0.25 mm
-8	2.8 mm ± 0.25 mm
None	5.8 mm ± 0.25 mm

### Pin Designations

Pin Number	Name	Function
1	Vin+	Positive input terminal
2	Remote ON/OFF	ON/OFF control terminal
3	Vin-	Negative input terminal
4	Vo-	Negative output terminal
5	Vo+	Positive output terminal

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