Switching Power Supply

680 WATT / SINGLE OUTPUT

KEY FEATURES:

- 680 Watts Output Power
- 12 VDC Single Output
- Hot Swap package measuring 2.16” x 12.8” x 1.57”
- High Density in excess of 17W/in^3
- 90% Efficiency typical
- I^{2}C
- High Reliability in excess of 200,0000 Hours
- International Safety Approvals
- Class B Radiated and Conducted Emissions
- 3 Year Warranty

MODEL	Output Voltage (V)	Regulation	Maximum Current (A)	Ripple/Noise (mVp-p)	Standby (Vsb)
ARM-6811-03	+12.0	+/- 3%	56.0	120	+3.3V/2A
ARM-6811-05	+12.0	+/- 3%	56.0	120	+5V/2A

INPUT SPECIFICATIONS

Input Voltage	90 – 264 VAC
Input Frequency	47 – 63 Hz
Input Current	Maximum 7.8A @ 100 VAC
Inrush Current	40A @ 240 VAC
Input Protection	Fuse
Leakage Currrent	Maximum 1 mA
Power Factor Correction	Active PFC to meet or exceed EN61000-3-2

ENVIRONMENT SPECIFICATIONS

Operating Temperature	0 ^{o}C to +70 ^{o}C Derate linearly above 50 ^{o}C to 50% load @ 70 ^{o}C
Storage Temperature	-40 ^{o}C to +85 ^{o}C
Internal Fan Cooling	With fan speed control
MTBF	200 kHrs to MIL-HDBK-217F at 25 ^{o}C
Shock	Storage: 30G , 11ms, 1/2 sine wave pulse, 6 axis Operation: 5G , 11ms, 1/2 sine wave pulse, 6 axis
Vibration	2G rms, 5Hz to 500kHz, 3 axis

OUTPUT SPECIFICATIONS

Setpoint Accuracy	+/- 1%
Total Output Power	680W
Hold-up Time	12ms @ 100% load
Efficiency	90% typical
Minimum Load	No minimum load
Isolation (HiPot)	1500 VAC Input to Ground
Remote Sense	Compensates for up to 0.5V drop
EPOW#	Goes low (<0.4V) at least 2ms before output drops in the event of an AC input failure
Enable#	Turns on the output when signal is pulled low (<0.4V).
DC_Good	Goes high (> 2.4V) within 100ms - 500ms of output in regulation. Goes low (<0.4V) at least 1ms before output out of regulation.

PROTECTION

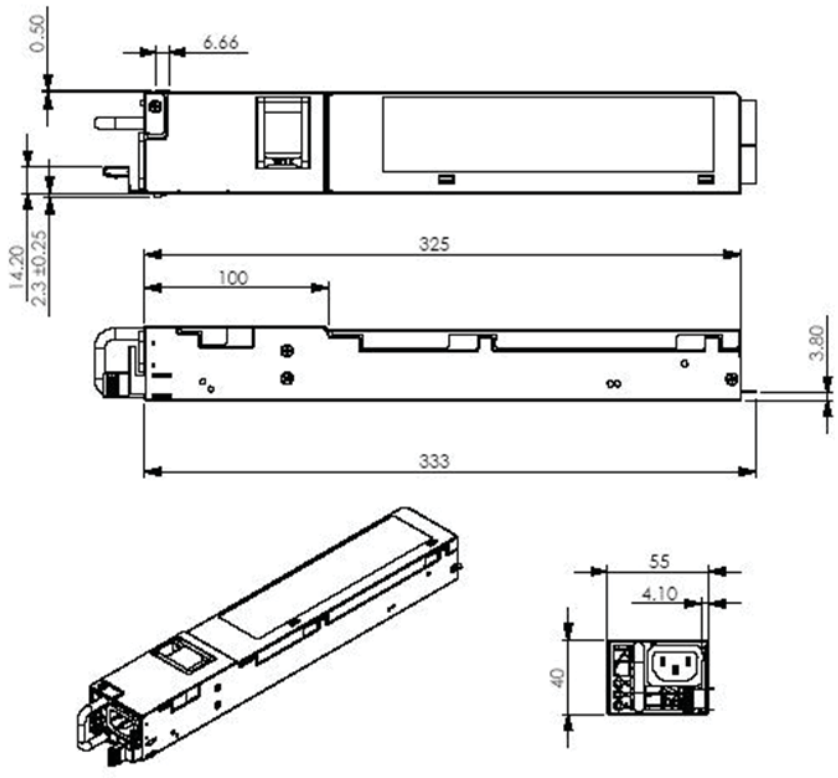
Overvoltage	Latch-mode (Cycle AC input or Enable# to reset)
Overpower	Latch-mode (Cycle AC input or Enable# to reset)
Short Circuit	Latch-mode (Cycle AC input or Enable# to reset)
Thermal	Auto-recovery

COMPLIANCE

EMI	FCC Class B / EN55022 Class B under all rated input and load conditions
Electrostatic Discharge	EN61000-4-2: Contact Discharge- Contact discharge in 2kV increments to 6kV for metallic surfaces including connector bodies. 10 discharges pretest point at each voltage: 5 positive polarity and 5 negative polarity. Air discharge – Air discharge in 2kV increments to 8kV for scams and non-metallic user accessible surfaces. 10 discharges pretest point at each voltage: 5 positive polarity and 5 negative polarity.
Radiated Susceptibility	EN61000-4-3: Electromagnetic Field Strength 3V/m
EFT / Bursts	EN61000-4-4: Direct Coupling Line to Ground Reference Plane: 1KV increments up to 2kv for a minimum of 1 min. at each voltage. Direct Coupling Neutral to Ground Reference Plane: 1kV increments up to 2kV for a minimum of 1 min. at each voltage. Direct Coupling Ground to Ground Reference Plane: 1kV increments up to 2kV for a minimum of 1 min. at each voltage
Surges	EN61000-4-5: The peak value of the bi-directional surge waveform shall be 2kV for common mode and 1kV for differential modes of transient surge injection. No unsafe operation or no user noticeable degradation is allowed under any condition.
Conducted Immunity	EN610000-4-6: 0.15~800MHz, 10V, 80% AM
Voltage Dips	EN61000-4-10: 95% Dip & 10ms, 30% Dip & 500mS
Voltage Interruptions	EN61000-4-11, 95% reduction, 5s
Fluctuations & Flicker	EN61000-3-3
Harmonic Distortion	EN61000-3-2 Class D
Safety Certifications	cTUVus UL60950-1, CB Report IEC 60950-1 (pending)

Typical Outline Drawing:

(REFER TO PRODUCT MECHANICAL DRAWING FOR COMPLETE INFORMATION)



SIGNALS CONNECTOR

Pin	Signal	Pin	Signal
A1	SCL	B1	Present#
A2	GND	B2	Enable#
A3	SDA	B3	DC_Good
A4	GND	B4	EPOW#
A5	I^2C_Int#	B5	+5Vsb
A6	I^2C_Reset#	B6	Ishare
A7	A0	B7	+Vsense
A8	FFS#	B8	-Vsense

DERATING