

Switching Power Supply

1050 WATT / SINGLE OUTPUT

KEY FEATURES:

- 1050 Watts Output Power
- 12 VDC Single Output
- Hot Swap package measuring 3.15" x 7.7" x 1.57"
- 1+1 Redundant
- High Density in excess of 27W/in³
- 90% Efficiency typical
- PMBus
- High Reliability in excess of 200,0000 Hours
- International Safety Approvals
- Class A Radiated and Conducted Emissions



MODEL	Output Voltage (V)	Regulation	Maximum Current (A)	Ripple/Noise (mVp-p)	Standby (Vsb)
ARM-1021-12	+12.0	+/- 3%	87.5	120	+12V/2A

INPUT SPECIFICATIONS	
Input Voltage	90 – 264 VAC
Input Frequency	47 – 63 Hz
Input Current	Maximum 12A @ 100 VAC
Inrush Current	40A @ 240 VAC
Input Protection	Fuse
Leakage Current	Maximum 1 mA
Power Factor Correction	Active PFC to meet or exceed EN61000-3-2

ENVIRONMENT SPECIFICATIONS	
Operating Temperature	0 °C to +50 °C
Storage Temperature	-40 °C to +85 °C
Internal Fan Cooling	With fan speed control
MTBF	200 kHrs to MIL-HDBK-217F at 25 °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	1050W
Hold-up Time	11ms @ 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



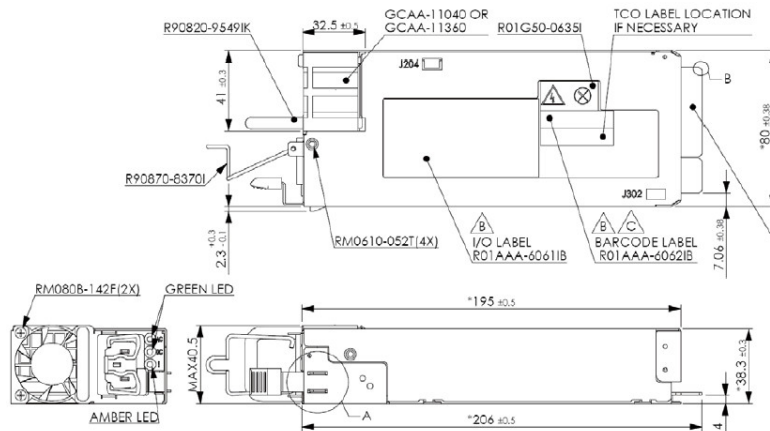
COMPLIANCE

EMI	FCC Class A / EN55022 Class A 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	EN61000-4-6: 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	UL/cUL UL60950-1, CB Report IEC 60950-1 (pending)

Typical Outline Drawing:

(REFER TO PRODUCT MECHANICAL DRAWING FOR COMPLETE INFORMATION)

OUTLINE DRAWING



Unit:mm

SIGNALS CONNECTOR

Pin	Signal	Pin	Signal
S1	UNUSED	S13	SMBus_ Reset#
S2	UNUSED	S14	GND
S3	+Vsense	S15	ADDR
S4	UNUSED	S16	GND
S5	UNUSED	S17	ENABLE
S6	DC_Good	S18	EPOW
S7	PRESENT#	S19	FR
S8	SMBus_ Alert#	S20	THROTTLE
S9	ISHARE	S21	UNUSED
S10	GND	S22	-Vsense
S11	SDA	S23	GND
S12	SCL	S24	UNUSED

