

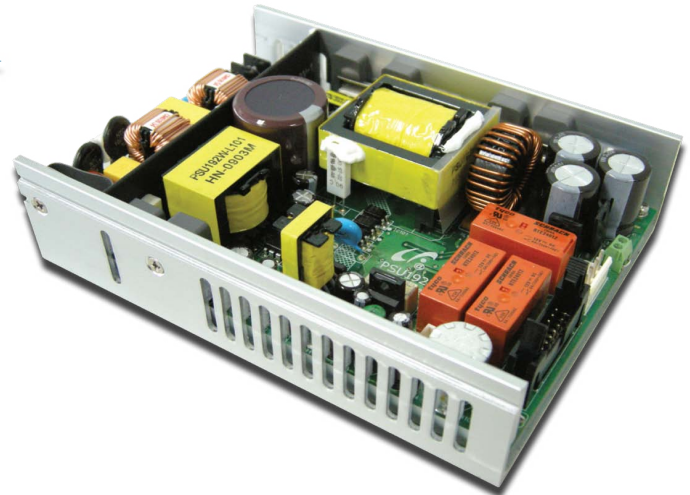


REV: 06072010

ITE / EMBEDDED POWER SUPPLY

## PRODUCT FEATURES:

- **Universal AC Input: (90VAC to 264VAC)**
- **Remote Voltage Margining Range of 12 ~ 32 VDC**
- **Current Sensing Output Voltage**
- **5VSB @ 1A for Control Circuits**
- **Compact Size 3.88" x 6.0"**
- **Low Profile 1.50" height**
- **High Efficiency > 81%**
- **Convection Cooling**
- **Low-cost U Frame Design**
- **Meets FCC & EN Class B EMI**
- **International Safety Approvals**
- **Conformal Coating for Humid Environments**



## INPUT SPECIFICATIONS:

VOLTAGE	Universal AC Input (90 ~ 265 VAC)
FREQUENCY	47 ~ 63 Hz
INRUSH	<20 @ 230 VAC Input Range (Max Cold Start)
CURRENT	2A @ 115 VAC (Max. Continuous)
PROTECTION	Single 6.3A Fuse / 250 VAC
LEAKAGE	210uA Max @ 264 VAC
HOLD-UP	16ms @ 115 VAC / ms Minimum (230 VAC, Full Load)
EFFICIENCY	±81%
HARMONICS	EN61000-3-2 Class D Compliant (>95PF)

## OUTPUT SPECIFICATIONS:

OUTPUT VOLTAGE	12V ~ 33V based on Control Voltage
OUTPUT CURRENT	None
LINE REGULATION	±1% Max over entire input range
LOAD REGULATION	±1% maximum
RIPPLE	±1% pk-k max, 20MHz BW .1uF & 47uF
EXCURSION	±5% Max for 25% Step Load
RECOVERY	100ms max
OVER-CURRENT	8.8A to 10A (Auto-Recovery)
OVER VOLTAGE	36V to 40VDC (recycle input to reset)
SHORT CIRCUIT	Yes with Auto-Recovery

## STATUS & CONTROL SPECIFICATIONS:

VOLTAGE MARGINING	0 ~ 5VDC control voltage (See Table)
CURRENT SENSING	See Table
AUXILIARY OUTPUT	5V / 1A
FAN OUTPUT	5V / .250A
FAN TEMPERATURE SENSE	Fan on ≥ 40°C, off ≤ 30°C

## GENERAL SPECIFICATIONS:

OPERATING TEMPERATURE	-20°C ~ +70°C (Derate 2.5% per °C above 50°C)
STORAGE TEMPERATURE	-40°C ~ +85°C
OPERATING HUMIDITY	Convection
STORAGE HUMIDITY	5% ~ 95% (non-condensing)
VIBRATION	10-55Hz, 2G, 3Min Period, / 60 min each (3 axes)
SHOCK	20G Peak Acceleration
RELIABILITY	>100K Hours (Per Mil STD 217F)
SIZE (INCHES)	3.88" x 6" x 1.5" (W x L x H)

## EMISSIONS:

EMISSIONS	EN 55014-1, EN 55014-2
ESD	EN61000-4-2, 4kV Contact / 8kV Air
RADIATED SUSCEPTIBILITY	EN61000-4-3, 26-1000MHz, 10V/M, 80%AM
EFT/BURSTS	EN61000-4-4, 2kV
SURGES	EN61000-4-5, 2kV Earth, 1kV Line-Line
CONDUCTED IMMUNITY	EN61000-4-6, 0.15-800MHz, 10V 80%
VOLTAGE DIPS	EN61000-4-10, 95% Dip & 10ms, 30% Dip & 500ms
VOLTAGE INTERRUPTIONS	EN61000-4-11, 95% reduction, 5ms
FLUCTUATIONS & FLICKER	EN61000-3-3

## SAFETY STANDARDS:

UL / cUL	1450
CE MARK	Low Voltage Directive
CB	EN60950-1



Output Models:	VDC	A (Min)	A (Max)	VDC	A (Min)	A (Max)
PSU-192	12~33	0	6	5	0	1

### NOTE:

Output Voltage Controlled by Input Control Voltage. See Voltage Control table. 5V output always on bias supply.

#### PSU-192 Output Voltage Control

Vin	0V	1V	2V	3V	4V	5V
Vout	0V	12V	17V	22V	27V	32V

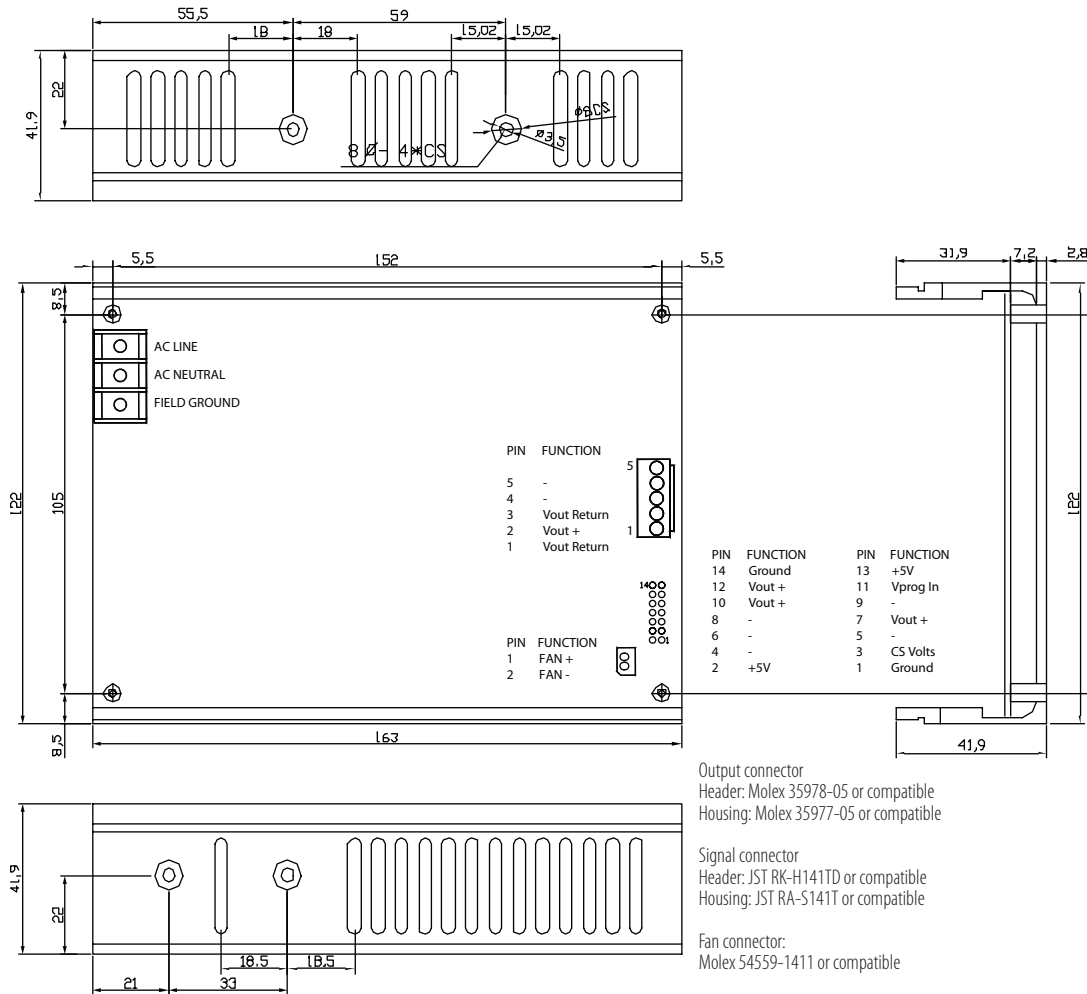
Note1: Vout Voltage  $\pm 0.5V$   
Note2: Vout will be off until Vin equals 1V

#### PSU-192 Current Sense Voltages

Output Current	0A	1A	2A	3A	4A	5A	6A
Vout	0V	0.51V	1.10V	1.7V	2.3V	2.9V	3.50V

Note CS Voltages tolerance  $\pm 0.05V$

### OUTLINE DRAWING:



Output connector  
Header: Molex 35978-05 or compatible  
Housing: Molex 35977-05 or compatible

Signal connector  
Header: JST RK-H141TD or compatible  
Housing: JST RA-S141T or compatible

Fan connector:  
Molex 54559-1411 or compatible

