

# TAMURA Corporation of America

**Model**

# PAM150

150 Watts<sub>max</sub> output power

Power Factor Correction

Single Output

**Switch Mode Power Supply**



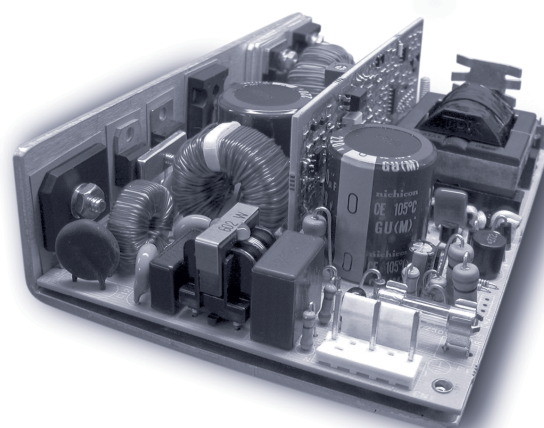
Medical Grade  
Certifications

**H.A.L.T.**  
TESTED

Highly  
Accelerated  
Life  
Testing

## Electrical Specifications

Input Voltage:	85-132/180-264 VAC, 47-63 Hz, 1 phase
Input Current:	<3.2A RMS @ 115 VAC @ full load <1.6A RMS @ 230 VAC @ full load
Inrush Current:	<25A, pk @ 132 VAC @ cold start <50A, pk @ 265 VAC @ cold start
Power Factor:	Meets Class A requirements
Harmonic Distortion:	Meets EN61000-3-2 for Class A
EMI Filtering:	Meets CISPR 11 and 22 and FCC Part 15 Class B (conducted)
Input Protection:	Internal AC line fuse; 250 VAC, 6.3A
Surge Withstand:	Meets EN61000-4-5 Level 3
Output Power:	150W with 15CFM air; 80W Convection
Line Regulation:	± 0.3%
Load Regulation:	± 0.5%
PARD:	<1% or 50mV; 20MHz bandwidth
Hold-up Time:	20 ms @ full load (120 VAC)
Output Polarity:	Output is floating
Minimum Load:	0% of rated load
Transient Response:	3% for 25% load change @ 1A/μs; 50% duty cycle 50/60 Hz
Output Rise Time:	<100 ms (10% to 90%)
Current Limit:	105-130% of rated current; Hiccup
Remote Sense:	Compensates for up to 250mV of total cable drop
Remote On/Off:	Optional
Leakage Current:	< 300 μA



Thermal Shutdown	Standard
DC OK:	Standard; Open Collector
Turn-on Delay:	<1 second after application of AC Input
Stability:	<0.1% for 8 hours after 1/2-hour warm up
Isolation:	>20 MΩ @ 100 VDC between output terminals and chassis ground
AC Power Fail:	TTL <sub>LOW</sub> logic "0" at least 2 ms before output drops 5%; Open Collector
Overvoltage Protect:	Factory set, 125% ±5%, cycle AC to reset
Reverse Voltage:	Output has reverse voltage protection; Reverse current limited to 100% of output rating
Efficiency:	Up to 85%
MTBF:	MIL-STD-HDBK 217E >200,000 hours @ 25°C Highly Accelerated Life Testing

## Available Voltage Outputs\*

Voltage Codes	Voltages (Volts)	Continuous Current (Amps)
-2	3.3	30
-3	<b>5.0</b>	<b>30</b>
-4	<b>12.0</b>	<b>12.5</b>
-5	<b>15.0</b>	<b>10.5</b>
-6	<b>24.0</b>	<b>6.5</b>
-7	28.0	5.5
-8	36.0	4.5
-9	<b>48.0</b>	<b>3.5</b>

\* Consult factory for other voltages and OEM quantities.

Note: Standard models are shown **bold**

## PART # STRUCTURE:

**MODEL** - **VOLTAGE CODE** - **OPTION CODES** (See sheet 2)

**PAM150** - **X** - **ABC....**

Example: Part Number **PAM150-6-CK**= 150W Power Factor Corrected, 24V @ 6.5A with a fan assembly and a Molex connector.

[CLICK HERE TO SEE THE PAM150 CODE TABLE AND AVAILABLE OPTIONS.](#)

# TAMURA Corporation of America

**Model**

# PAM150

**Options (code)**

12V@0.5A Aux./Fan Drive (A) Droop Current Share  $\pm 10\%$  (B)  
 Fan Assembly (C) DC OK Invert (E)  
 PF Invert (F) Field-Configurable (G)  
 Single Wire Current Share  $\pm 5\%$  (I) Square Current Limit (J)  
 Molex Connector (K) Metric Mounting (M)  
 OR-ing Diode (O) Remote On/Off (R)  
 Remote On/Off Invert (S)

## Certifications

NRTL\*\*\* Recognition to UL60601-1  
 CSA C22.2 No. 601-01  
 BAUART Certification to EN60601-1  
 CB Test Report in Accordance with IEC60601-1  
 CE Declaration to Low Voltage Directive 72/23/EEC

\*\*\* Nationally Recognized Test Laboratory

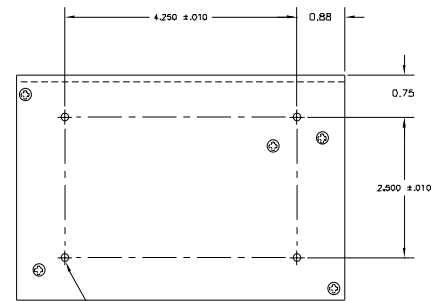
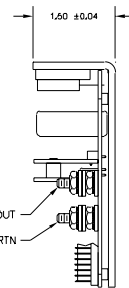
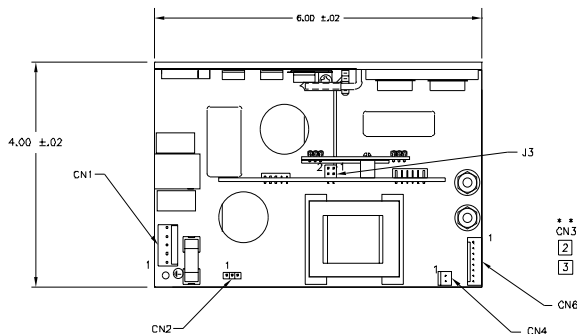


## Compliance

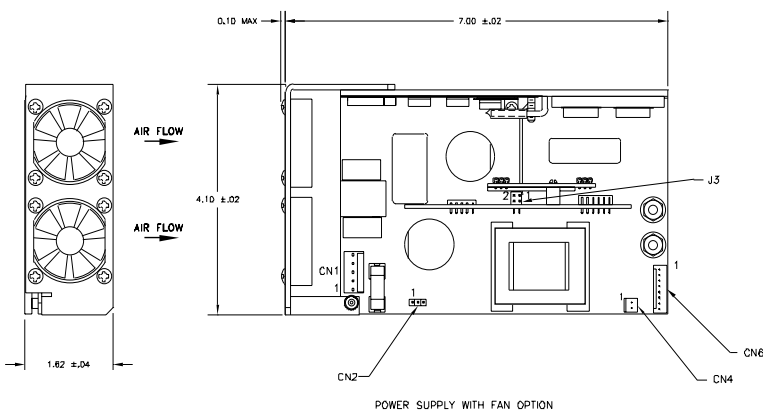
EN61000-4-5 Level 3 EN61000-4-2 Level 2  
 EN61000-3-2 for Class A EN61000-4-2 Level 3 (Air Only)  
 EN61000-4-4 Level 3 EN61000-4-11  
 CISPR 11 and 22 FCC Part 15 Class B (conducted)

## Physical Specifications

Dimensions: (HxWxL) 1.5" x 4.0" x 6"  
 Operating Temp: 0 to 70°C; rated power to 50°C  
 derate linearly to 50% at 70°C.  
 Relative Humidity: 5% to 90%, non-condensing  
 Storage: -50 to 85°C/20-90% RH  
 Altitude: 10,000' operating;  
 40,000' storage



FOR MOUNTING  
 USE 6-32 UNC  
 MAX SCREW PENETRATION  
 0.125, 4PL  
 BOTTOM SURFACE ONLY



PIN NO.	CN1
1	GROUND
2	"PIN REMOVED"
3	NEUTRAL
4	"PIN REMOVED"
5	LINE

MOLEX CONNECTOR  
 26-60-4050  
 MATES WITH 2139

PIN NO.	CN3
1	+VOUT
2	RTN

#8 SCREW  
 OR  
 MOLEX CONNECTOR  
 26-62-4030  
 CENTER PIN REMOVED  
 MATES WITH 2139

PIN NO.	CN4
1	AUX OUT
2	AUX RTN

MOLEX CONNECTOR  
 22-23-2021  
 MATES WITH 2695

PIN NO.	CN6
1	CURRENT SHARE
2	POWER FAIL
3	REMOTE ON/OFF
4	REM ON/OFF RTN
5	DC OK
6	RTN
7	-REMOTE SENSE
8	+REMOTE SENSE

MOLEX CONNECTOR  
 22-23-2081  
 MATES WITH 2695

'G' OPTION CN2, J3 CONFIGURATION	
CN2/CONNECTOR JUMPER ON C01 PWB	J3/CONNECTOR JUMPER ON C02 PWB
1-2 HICCUP MODE 2-3 SQUARE CURRENT MODE	1-2 DROOP SHARE 3-4 SINGLE WIRE SHARE

UNIT WEIGHT	
1.5 LBS (WITHOUT FAN OPTION)	1.6 LBS (WITH INSTALLED FAN OPTION)

- [3] OPTIONAL- MOLEX CONNECTOR (OPTION 'K'-LIMITED TO 7A) MAY BE SPECIFIED FOR CN3 INSTEAD OF STANDARD OUTPUT STUDS.  
 [2] DO NOT EXCEED 17 INCH-LBS (MAX TORQUE) WHEN TIGHTENING TOP NUTS ON OUTPUT STUDS.  
 1. FOR CLARITY NOT ALL ITEMS ARE SHOWN IN EACH VIEW.  
 NOTES: UNLESS OTHERWISE SPECIFIED

- \* **WARNING:** DAMAGE WILL OCCUR IF REMOTE SENSE LEADS (CN6-7 & CN6-8) ARE REVERSED OR USED WITH LOAD DISCONNECTED FROM OUTPUT (CN5).  
 \* **NOTE:** FOR PROPER REGULATION OF AUX OUTPUT, APPLY AT LEAST 10% OF RATED LOAD TO VOUT.

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TAMURA CORPORATION OF AMERICA  
 43352 Business Park Drive, Temecula, CA 92590-6624  
 (951) 699-1270 / Fax: (951) 676-9482  
 (800) 472-6624 www.tamuracorp.com



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