

# AAD130 Series

130 Watt Single Output Switching Power Supply

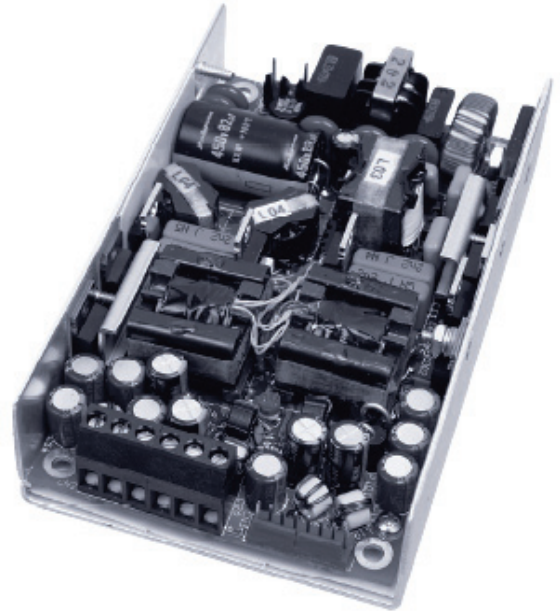
Tamura

General Purpose Switching Power Supplies

Dimensions: 5.00 x 3.14 x 1.25"

## Features:

- Small Size (only 5.00 x 3.14 x 1.25")
- Universal AC Input (90-264 VAC / 47-63Hz)
- Active PFC for EN61000-3-2 Class D Equipment
- Industrial Grade Components for High Reliability
- Single Wire Current Share , Remote Sense and AC Power Fail
- Highly Accelerated Life Test (HALT)
- > 200k Hours MTBF per MIL-STD-HDBK 217E
- International Safety Approvals
- CB Report & CE Mark (LVD)
- 2 Year Warranty



## Input Specifications:

Input Range	Universal VAC (90-264 VAC)
Input Frequency	47-63 Hz or DC
Inrush Current	<35A @ 110VAC / <75A @ 220VAC max (cold start)
Input Current	2.0A @ 110 VAC / 1.0A @ 220 VAC Maximum RMS (Full Load)
Efficiency	Up to 88%
Hold-up Time	>16ms @ 120 VAC and full load
Leakage Current	<750 $\mu$ A maximum @ 264 VAC
Harmonics	EN61000-3-2 Class D

## Output Specifications:

Adjustment Range	$\pm$ 5% minimum
Minimum Load	V1 & V2 = 500mA, V3 & V4 = 100mA
Regulation	Line: $\pm$ 0.3% Line / Load: V1 & V2 = $\pm$ 1%, V3 & V4 = $\pm$ 5%
Ripple / Noise	$\pm$ 1% or 50mV pk-pk max (20MHz), whichever is greater
Set-Point Accuracy	$\pm$ 2% (maximum)
Over Current Protection	105-150% of rated current, foldback
Over Voltage Protection	120-130%, of setpoint

## Status & Control Signals:

- Remote Sense (Compensates for <0.5 drop, V1 & V2 Only)
- Power Fail (Open Collector)
- Current Share (Single Wire, +/- 5% accuracy, V1 & V2 Only)

## Electromagnetic Compatibility:

Electrostatic Discharge	EN61000-4-2, $\pm$ 4KV Contact / $\pm$ 8KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, $\pm$ 2KV
Surges	EN61000-4-5, $\pm$ 2KV Line-Earth, $\pm$ 1KV Line-Line
Conducted Immunity	EN61000-4-6, 0.15-800MHz, 10V, 80% AM
Voltage Dips	EN61000-4-11, 95% Dip & 10ms, 30% Dip & 500ms
Voltage Interruptions	EN61000-4-11, 95% Reduction, 5s
Fluctuations & Flicker	EN61000-3-3

## Environmental Specifications:

Operating Temp	0 ~50°C (De-Rate 2.5%/1°C Rise To +70°C)
Storage Temp	-50 ~ +85°C
Cooling	15 CFM for full load, 80 Watts Convection Cooled
Humidity	5 to 95% RH Non-Condensing
Vibration	3 Axes 1 Oct/min, 5 min at 4 Res. 0.75G Pk, 5-500Hz
Shock	20G Peak Acceleration
Reliability	>200k hours MTBF (Full Load and 25°C Operation)

## Safety & Emissions:

- UL 60950-1
- CSA 22.2 No. 60950-3
- BAUART EN60950-1
- CB Test Report (IEC60950-1)
- CE Mark (LVD)
- FCC Class B
- CISPR 11 / CISPR22 Class B

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**TAMURA**

General Purpose Switching Power Supplies

### Output Models:

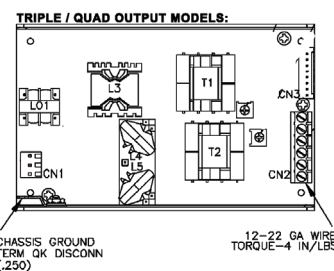
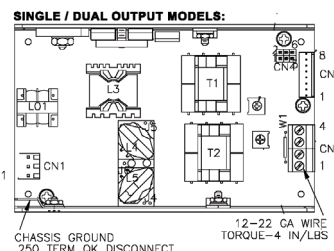
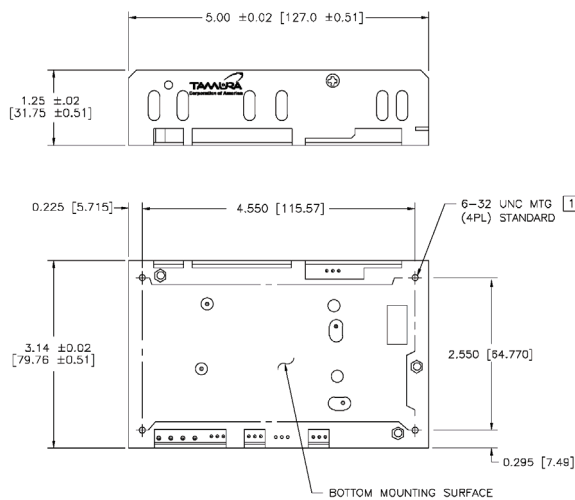
AAD130SD-20*	3.3V	32A			
AAD130SD-30*	5.0V	26A			
AAD130SD-40*	12V	12A			
AAD130SD-50*	15V	9A			
AAD130SD-60*	24V	6A			
AAD130SD-70*	28V	5A			
AAD130SD-80*	36V	4A			
AAD130SD-90*	48V	3A			
AAD130-3404	5V	14A	+12V	5A	-12V 1.5A
AAD130-3244	5V	14A	3.3V	16A	+12V 1.5A -12V 1.5A
AAD130-3255	5V	14A	3.3V	16A	+15V 1.5A -15V 1.5A
AAD130-3264	5V	14A	3.3V	16A	+24V 1.5A -12V 1.5A
AAD130-3464	5V	14A	12V	6A	+24V 1.5A -12V 1.5A

\* All single output models are truly dual output power supplies with the current share and remote sense functions tied together internally to enable single output behavior. Consult us for tying remote sense & current share externally.

### Options:

- A = Single Wire Current Share (V1 & V2 only)
- B = Power Fail Invert
- C = Through Hol Mounting (Request Drawing)

### Mechanical Specifications:



Weight (pounds): 0.72

Input Connector: Molex 26-60-4030

#### Input Pin Assignmtns:

CN1-1	Line
CN1-2	Neutral
CN1-3	Field Ground

#### Output Terminal Strip:

Pin:	Single/Dual	Triple/Quad
CN2-1	V2	V3
CN2-2	RTN	V2
CN2-3	RTN	RTN
CN2-4	V1	RTN
CN2-5	-	V1
CN2-6	-	V4

#### Status / Control Connector: Molex 22-23-2081

CN3-1	V2 SHARE
CN3-2	V1 SHARE
CN3-3	POWER FAIL
CN3-4	RETURN
CN3-5	- SENSE V1
CN3-6	+ SENSE V1
CN3-7	+ SENSE V2
CN3-8	- SENSE V2

Soft Copy of this specification:

<http://www.powergatellc.com/pdf/AAD130.pdf>

Factory Specification (Single / Dual Output Models):

<http://www.tamuracorp.com/clientuploads/pdfs/engineeringdocs/AAD130SD.pdf>

Factory Specification (Triple / Quad Output Models):

<http://www.tamuracorp.com/clientuploads/pdfs/engineeringdocs/AAD130.pdf>