

VXT-EPS-150-24

1U Ultra-Thin Enclosed Switching Power Supply

24V DC | 6.5A | 156W



Product Overview

The VXT-EPS-150-24 is a 156W single output enclosed switching power supply with a 1U ultra-thin 30mm low-profile design. Featuring 110/220VAC selectable input via slide switch, metal mesh housing for superior heat dissipation, and fanless operation, it is ideal for industrial automation, LED lighting, and embedded system applications.

Key Features

- ✓ Selectable AC input: 85-132VAC / 170-264VAC (via switch)
- ✓ DC input capable (240-370VDC)
- ✓ High efficiency up to 89% (typical)
- ✓ 1U ultra-thin profile: only 30mm height
- ✓ Metal mesh housing for superior heat dissipation
- ✓ Fanless operation: -30°C to +70°C
- ✓ Ultra-low no-load consumption (< 0.3W)
- ✓ Overload, overvoltage & short circuit protection
- ✓ 5G vibration resistance
- ✓ Output voltage adjustable via trim pot ($\pm 10\%$)
- ✓ Compact size: 159 x 97 x 30 mm

Applications

Industrial Automation • LED Lighting & Signage • CCTV & Security Systems • Embedded Systems • PLC & Control Panels • CNC Machines • Packaging Machinery • Building Automation • Telecom Equipment

Technical Specifications

OUTPUT	
DC Output Voltage	24V DC
Rated Output Current	6.5A
Rated Output Power	156W
Ripple & Noise (max)	< 200mV p-p
Voltage Accuracy	$\pm 1\%$
Output Voltage Adj. Range	$\pm 10\%$ (via trim pot)
Load Regulation	$\pm 0.5\%$
Line Regulation	$\pm 0.5\%$
Start Up Time	< 500ms @ 230VAC / < 500ms @ 115VAC (full load)
Hold Up Time (typical)	40ms @ 230VAC / 35ms @ 115VAC (full load)
INPUT	
Input Voltage Range	85 - 132VAC / 170 - 264VAC (select by switch) / 240 - 370VDC
Input Frequency	47 - 63 Hz

Input Current (typical)	< 2A @ 115VAC / < 1.3A @ 230VAC
Efficiency (typical)	> 89% @ 230VAC full load
Inrush Current	Cold start: 60A @ 230VAC
PROTECTION	
Overload Protection	110% - 130% rated output, hiccup mode, auto recovery
Overvoltage Protection	115% - 145% rated output, output shuts down, auto restart and recovery
Short Circuit Protection	Output voltage drops to undervoltage point, output closes
ENVIRONMENT	
Operating Temperature	-30°C to +70°C
Operating Humidity	20% - 90% RH (non-condensing)
Storage Temperature	-40°C to +85°C
Storage Humidity	10% - 95% RH (non-condensing)
SAFETY & EMC	
Withstand Voltage	I/P - O/P: 4kVAC / I/P - FG: 2kVAC / O/P - FG: 1.25kVAC (1 minute)
Isolation Resistance	I/P - O/P, I/P - FG, O/P - FG: 500VDC / 100MΩ @ 25°C 70% RH
Leakage Current	< 1mA @ 240VAC
Safety Standards	EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1, GB4943
MECHANICAL	
Dimensions (L x W x H)	159 x 97 x 30 mm
Net Weight / Gross Weight	480g / 513g
Mounting	Screw mounting / Enclosed chassis
Casing Material	Metal mesh enclosed housing
Output Connections	Screw terminals (-V, +V)
Input Connections	Screw terminals (L, N, Earth)

Ordering Information

Model Number	Output	Power
VXT-EPS-150-24	24V DC / 6.5A	156W

Notes

1. All specifications are measured at 230VAC input, rated load, and 25°C ambient temperature unless otherwise noted.
2. Ripple & noise measured using 12" twisted pair with 0.1μF and 47μF capacitors in parallel at terminal, 20MHz bandwidth.
3. Starting time measured under cold start. Fast and frequent startup/shutdown may increase starting time.
4. When operating altitude is higher than 2000 meters, derate operating temperature by 5°C per 1000 meters.
5. No-load power consumption is less than 0.3W.
6. Ensure the 110V/220V selector switch is set to the correct position before powering on. Incorrect setting may damage the unit.
7. Specifications are subject to change without prior notice. Please contact Voxintech for latest specifications.