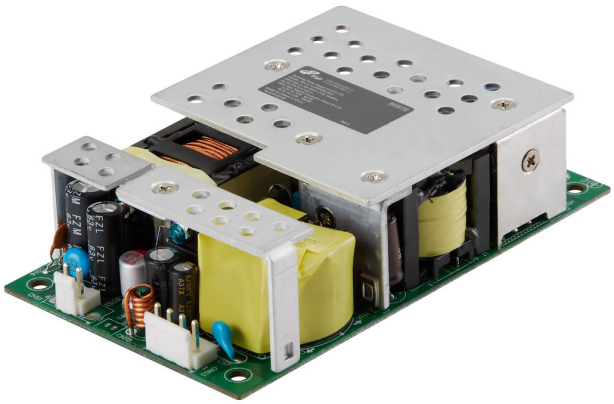
TECHNICAL DATASHEET

200W PoE OPEN FRAME

FSP200-2H35-A54H



FSP200-2H35-A54H

FEATURES

- Class-I design
- Meet EN 55032 and FCC Class B
- Isolated between +12V & +54V outputs
- Isolated between PE and RETURN
- High altitude 5000 meters operation

SAFETY STANDARD APPROVAL

c UL us
E190414

DESCRIPTION

This AC-DC switching power supplies in a package of 127 x 76.2 x 32 mm (above PCB) is an isolated dual outputs 54V & 12V PSU that suitable for PoE Switch & Network application. This PSU is capable of delivering 200 watts continuous power with 7 CFM forced air cooling conditions.

INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	2.2 A (rms) for 115 VAC 1.2 A (rms) for 230 VAC
Earth leakage current:	1.5 mA max. @ 264 VAC, 63 Hz

OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Total output power:	200W
Protection:	
Over voltage:	Set at 110~135% of nominal output voltage and auto-recovery
Short circuit & Over current:	Output protected to short circuit condition and auto-recovery
Over temperature:	Detected by thermistor and auto-recovery
Temperature coefficient:	All outputs ±0.04% /℃ maximum
Transient response:	Maximum excursion of 5% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change

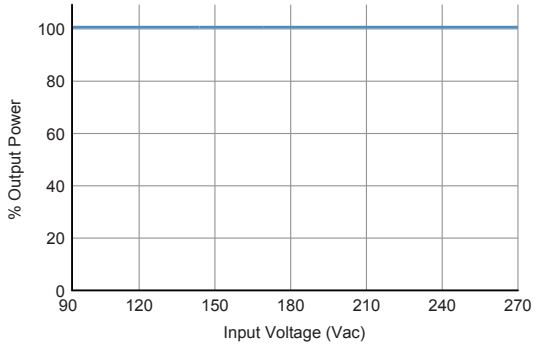
ENVIRONMENTAL SPECIFICATIONS

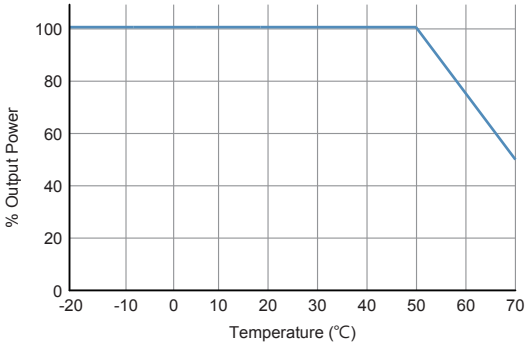
Operating temperature:	-20℃~+70℃
Storage temperature:	-40℃~+85℃
Relative humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50℃ linearly to 50% at +70℃, applicable to both convection and forced-air cooling conditions

GENERAL SPECIFICATIONS

Power factor:	0.98 min at 100% load and 115VAC 0.95 min. at 100% load and 230VAC
Efficiency:	86% minimum
Hold-up time:	10 ms minimum at 115 VAC
Power on time:	2 Sec maximum
Line regulation:	±1% maximum at full load
Inrush current:	Under component stress and no damage to PSU
Withstand voltage:	3000 VAC from input to output, 1500 VAC from input to ground, 1500 VAC from output to ground
MTBF:	250,000 hours minimum at full load at 25℃ ambient, calculated per TELCORDIA SR-332
EMC Performance	
EN55032	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, class D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, ±8 KV air and ±4 KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, ±1 KV
EN61000-4-5:	Surge, ±2 KV diff, ±4 KV com
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 3 A/m
EN61000-4-11:	Voltage dip immunity, 30% reduction for 500 ms >95% reduction for 10 ms >95% reduction for 5000 mS

OUTPUT POWER DERATING CURVE



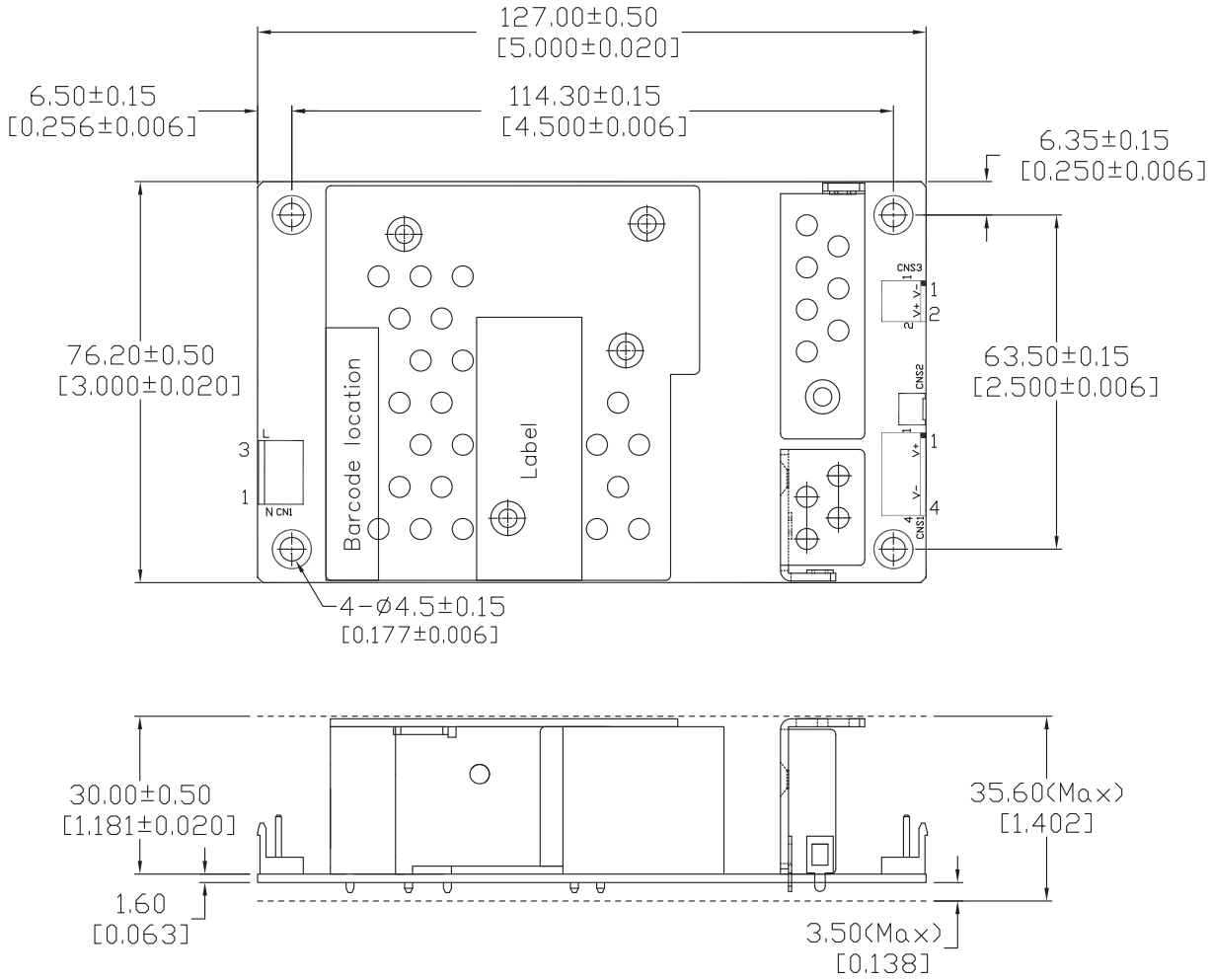


OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output Voltage	Min. Load	Max. Load (7 CFM)	Output Power	Ripple & Noise	Load Regulation	Efficiency 115 / 230 Vac
FSP200-2H35-A54H	54 V	0 A	3.0 A	200W	400 mV	±3%	89 / 91%
	12V	0 A	5.0 A		250 mV	±3%	

NOTES:
1. Output voltage tolerance is measured at connector terminal
2. Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 10 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

MECHANICAL SPECIFICATIONS



Pin assignment:
Input connector (CN1):

Pin No.	Function	Wafer
1	Neutral	JWT A3963WV2-3P or EQU
2	NC	
3	Line	

Pin assignment of (CNS1):

Pin No.	Function	Wafer
1	+54V	JWT A3963WV2-4P
2	+54V	
3	+54V_RTN	
4	+54V_RTN	

Output connector CNS3:

Pin No.	Function	Wafer
1	+12V_RTN	JWT A3963WV2-2P or EQU
2	+12V	

NOTES:
1. Dimension (L*W*H): 127 x 76.2 x 32 mm
2. To ensure compliance with level B emissions, connect the four PCB mounting holes with metallic standoffs to the chassis.
3. Weight: 410 grams / 0.90 lbs. approx.