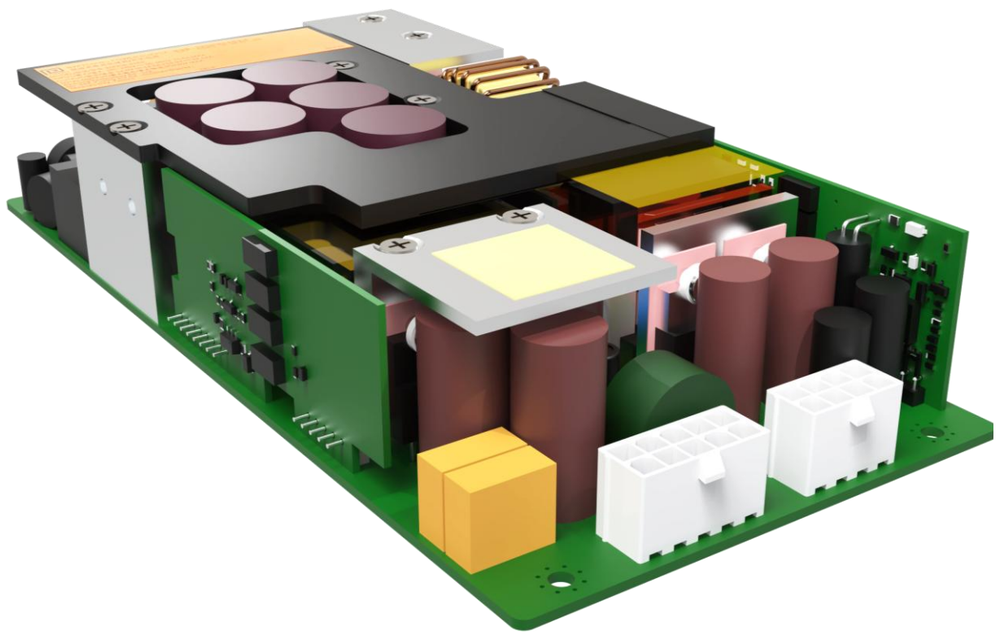
PHIHONG

BF950-234A-R

950W Open-Frame PSU

Quality Management & Industry Standards



This specification describes the performance of a 950W AC-DC switching power supply model with 54.5V(800W) and 12V(150W) DC output. The PSU can afford maximum load with 54.5V(800W) and 12V(150W) at following conditions which mark the “Max Load” but only the rated load is specified on PSU label.

Features

- Class I Design
- Class B EMI
- High Efficiency Performance
- OVP, OCP, SCP, OTP Protections
- Operating Altitude: 5,000M

Applications

PoE&IoT

Certifications & Compliance

UL / CUL /CB 62368-1 3rd

FCC / CE / BSMI / CCC

Technical Summary

Parameter	Value
Input Voltage	100-240Vac
Output Voltage	12Vdc / 54.5Vdc
Max Power	950W
Efficiency	80 Plus Gold
Dimensions	L190 x W90 x H39.1 mm
Weight	700g

BF950-234B-R Serial
950W AC-DC switching power supply model

TECHNICAL DATA

Input

AC input voltage range	90-264V
AC input voltage rating	100-240V
AC input frequency	50~60Hz
AC input current	14A@90Vac
Leakage current	3.25mA
Inrush current	< 30A at 115Vac and 60Hz / < 60A at 230Vac and 50Hz at 25℃ cold start.

Output

DC Output voltage	12Vdc / 54.5 Vdc
DC Output Voltage Regulation	12Vdc +/-5% / 54.5Vdc +/-5%
Noise Ripple	12Vdc 500mVp-p / 54.5Vdc 500mVp-p *Note:* *1) Differential-mode noise is measured with a resistor load (not an electronic load).* *2) Measurement is made with a high impedance probe connected across the decoupling capacitance.* *3) The 54.5V output is decoupled with up to 100uF bulk electrolytic and 0.1uF ceramic capacitor.* *4) The 12V output is decoupled with up to 500uF bulk electrolytic and 0.1uF ceramic capacitor.* *5) Measurement frequency range is 500Hz to 1MHz.* *6) The ripple and noise measured across 12V and 54.5V outputs will be measured with 100MHz BW.*
Load Regulation	12Vdc +/-5% / 54.5Vdc +/-5%

Overall Performance

Output Power	950W
Efficiency	80 Plus Gold *Note:* *(After warming up 0.5hr by rated load; measured at the end of PCB board).*
Overshoot	12Vdc <5% / 55Vdc <5%
Undershoot	12Vdc <5% / 55Vdc <5%
Hold Up Time	12Vdc 10ms Min. / 55Vdc 10ms Min.
Turn on Time	2.5 Sec Max.

Protection

Short Circuit Protection	Auto Recover
Output Voltage Protection	Latch off
Output Current Protection	Auto Recover
Over Temperature Protection	Auto Recover

Environmental Requirements

Shock Test (Non-Operating)	Half sine wave shock – 140G, 2ms duration, half sine wave shock in each direction of three mutually perpendicular axes. There shall be one shock input in each direction of three mutually perpendicular axes for a total of six shock inputs. Square wave shock – 40G, 166 in/sec velocity change, square wave shock in each direction of three mutually perpendicular axes. There shall be one shock input in each direction of three mutually perpendicular axes for a total of six shock inputs.
Vibration (Operating)	Sinusoidal Vibration - 0.25 G zero-to-peak, 10 to 500 Hz, 0.25 oct/min in each of three mutually perpendicular axes. The test duration shall be one sweep from 10 to 500 to 10 Hz in each of three mutually perpendicular axes. Random Vibration - 0.002 G2/Hz, 10 to 500 Hz, nominal 1.0 Grms in each of three mutually perpendicular axes.The test duration shall be one hour/axis for total test duration of 3 hours.

Safety and EMC

EMI	Class B
Harmonic	Class A
Immunity (EMS)	CS Class A EFT Class A Surge Class A DIP EN 61000-4-11 / EN 55035 ESD Class A PFMF IEC 61000-4-8

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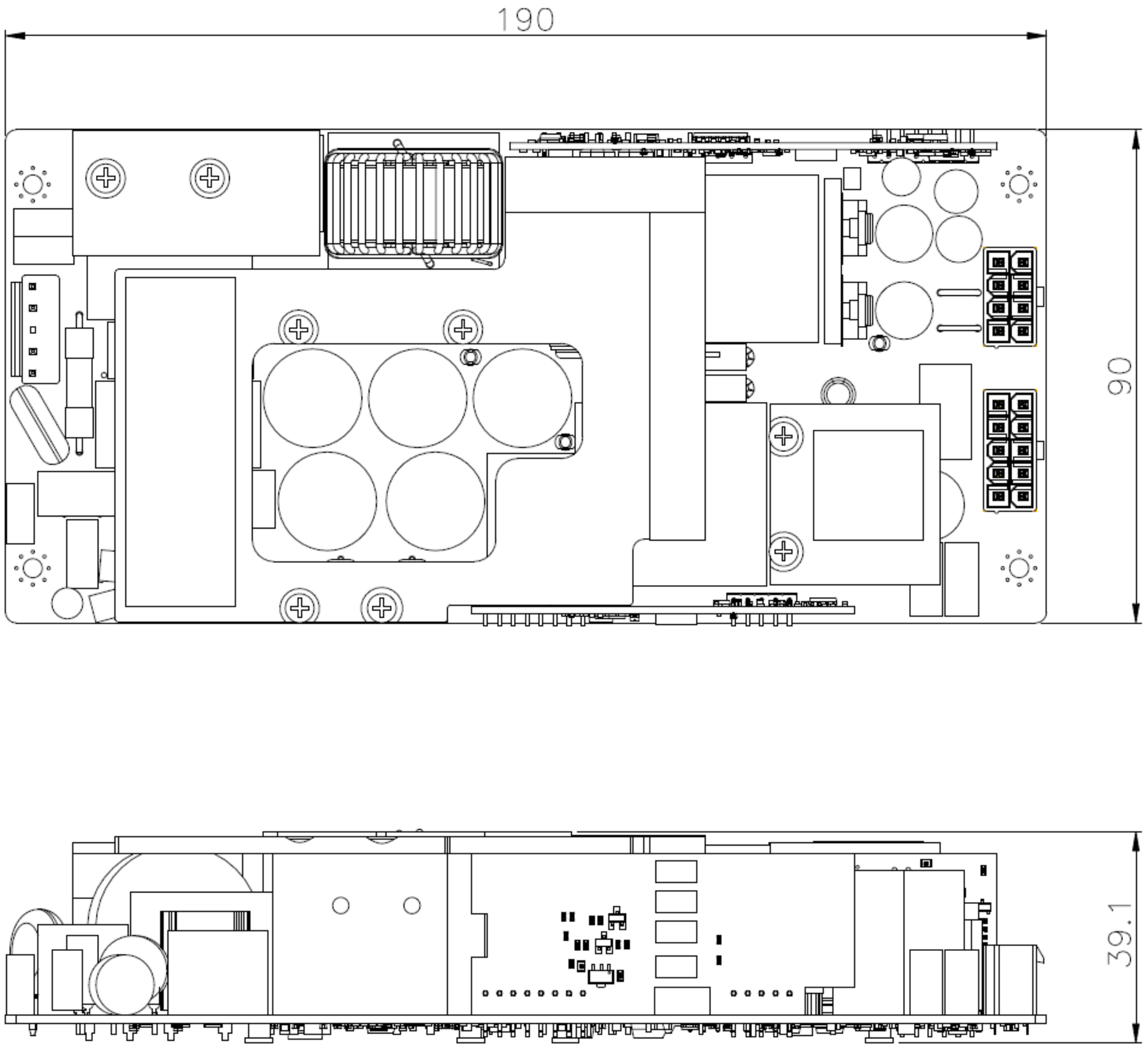
TECHNICAL DATA

Mechanical Outline Drawing



PHIHONG 50 YEARS OF HISTORY IN THE POWER SUPPLIES INDUSTRY

Since its founding in 1972, Phihong has emerged as a prominent power supply company, serving as a key supplier of solutions for consumer, mobile/portable, enterprise, telecom, datacom, and industrial applications.