

■ Features

- 3"×2" miniature size
- Universal AC input / Full range
- Class II (without FG) installations
- No load power consumption < 0.1W
- High efficiency up to 91%
- For 1U applications
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- -30~70°C wide range of operating temperature
- Operating altitude up to 5000 meters
- LED indicator for power on
- 3 years warranty

■ Applications

- Industrial electrical equipment
- Mechanical equipment
- Factory automation equipment
- Handheld electronic device

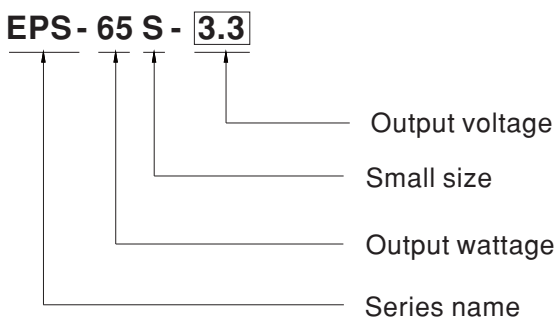
■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

■ Description

EPS-65S is a 65W highly reliable green PCB type industrial power supply with a high power density on the 3" by 2" footprint. It accepts 80~264VAC input and offers various output voltages between 3.3V and 48V. The working efficiency is up to 91% and the extremely low no load power consumption is down below 0.1W. EPS-65S is able to be used for Class II (no FG) system design.

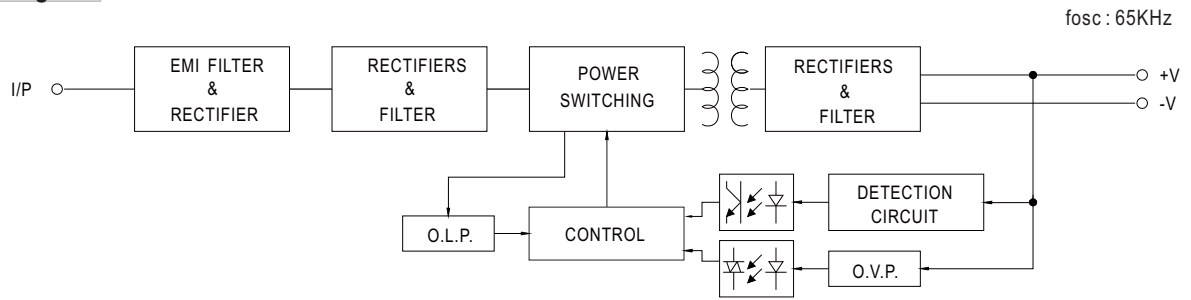
■ Model Encoding



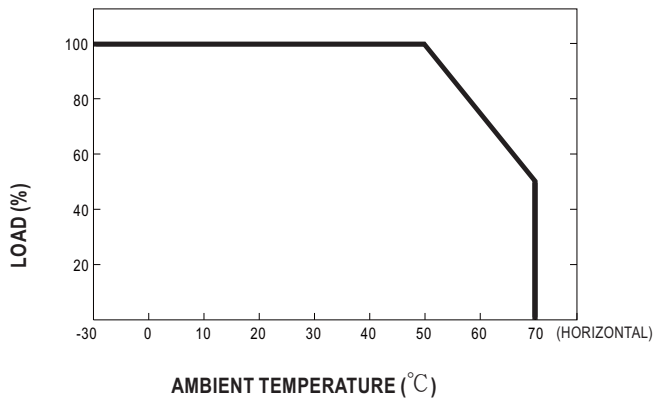
SPECIFICATION

| ORDER NO. | | EPS-65S-3.3 | EPS-65S-5 | EPS-65S-7.5 | EPS-65S-12 | EPS-65S-15 | EPS-65S-24 | EPS-65S-48 | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------|-------------|------------|--------------|------------|------------|--|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 7.5V | 12V | 15V | 24V | 48V | |
| | RATED CURRENT | 10A | 10A | 8A | 5.42A | 4.34A | 2.71A | 1.36A | |
| | CURRENT RANGE | 0 ~ 11A | 0 ~ 11A | 0 ~ 8.8A | 0 ~ 5.96A | 0 ~ 4.77A | 0 ~ 2.98A | 0 ~ 1.49A | |
| | RATED POWER | 33W | 50W | 60W | 65W | 65.1W | 65W | 65.3W | |
| | PEAK LOAD(10sec.) <small>Note.2</small> | 36.3W | 55W | 66W | 71.5W | 71.6W | 71.5W | 71.5W | |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 80mVp-p | 80mVp-p | 80mVp-p | 120mVp-p | 150mVp-p | 240mVp-p | 300mVp-p | |
| | VOLTAGE ADJ. RANGE | 2.9~3.6V | 4.7~5.5V | 7.12~8.3V | 11.4~13.2V | 13.5~16.5V | 22.8~27.6V | 45.6~52.8V | |
| | VOLTAGE TOLERANCE <small>Note.4</small> | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | LOAD REGULATION | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| | SETUP, RISE TIME | 500ms, 30ms / 230VAC 500ms, 30ms / 115VAC at full load | | | | | | | |
| HOLD UP TIME (Typ.) | 30ms / 230VAC 12ms / 115VAC at full load | | | | | | | | |
| INPUT | VOLTAGE RANGE <small>Note.5</small> | 80 ~ 264VAC | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | |
| | EFFICIENCY (Typ.) | 80% | 84% | 85% | 88% | 89% | 90% | 91% | |
| | AC CURRENT (Typ.) | 1.5A / 115VAC 1A / 230VAC | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD STAR 30A/115VAC 50A/230VAC | | | | | | | |
| | LEAKAGE CURRENT(max.) | 0.25mA/264VAC | | | | | | | |
| PROTECTION | OVERLOAD | 115 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | |
| | OVER VOLTAGE | 3.8~4.46V | 5.75~6.75V | 8.62~11.3V | 13.8~16.2V | 17.25~20.25V | 27.6~32.4V | 55.2~64.8V | |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +70°C (Refer to "Derating Curve") | | | | | | | |
| | WORKING HUMIDITY | 20% ~ 90% RH non-condensing | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C, 10 ~ 95% RH | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03% / °C (0 ~ 50°C) | | | | | | | |
| | OPERATING ALTITUDE <small>Note.6</small> | 5000 meters | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | |
| SAFETY & EMC (Note. 7) | SAFETY STANDARDS | UL62368-1, TUV BS EN/EN62368-1, BS EN/EN60335-1, EAC TP TC 004 approved | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P: 3KVAC | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | |
| | EMC EMISSION | Compliance to BS EN/EN55032(CISPR32) Class B, BS EN/EN61000-3-2,3, EAC TP TC 020 | | | | | | | |
| | EMC IMMUNITY | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, Heavy industry Level, EAC TP TC 020 | | | | | | | |
| OTHERS | MTBF | 3334.3K hrs min. Telcordia SR-332 (Bellcore) ; 706.6K hrs min. MIL-HDBK-217F (25°C) | | | | | | | |
| | DIMENSION | 76.2*50.8*24mm or 3" * 2" *0.945" inch (L*W*H) | | | | | | | |
| | PACKING | 0.11Kg; 120pcs/14.2Kg/0.94CUFT | | | | | | | |
| NOTE | <ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltages. Please check the derating curve for more details. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power. (as available on http://www.meanwell.com) <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | | | | | | | |

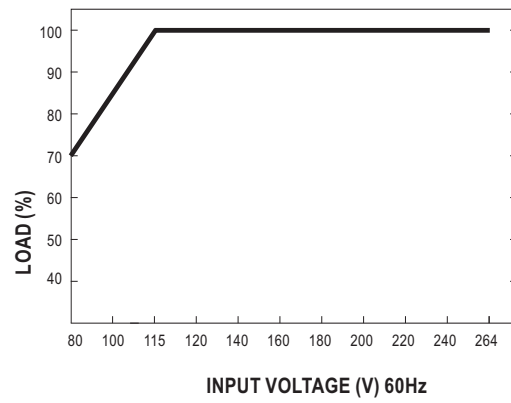
Block Diagram



Derating Curve

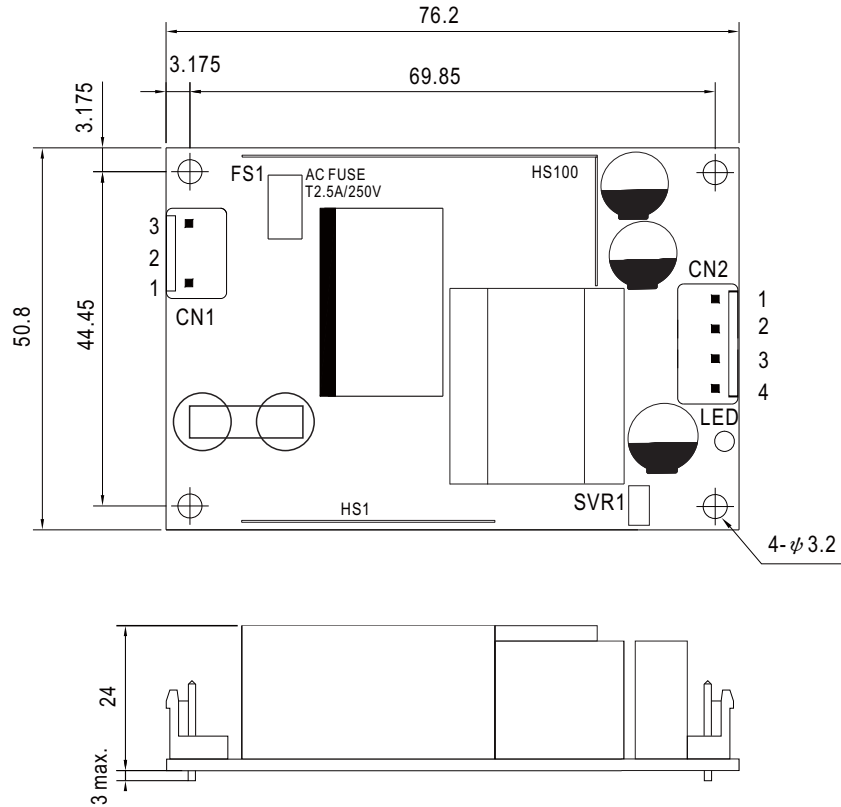


Static Characteristics



Mechanical Specification

Case No. Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | AC/N | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | AC/L | | |

DC Output Connector (CN2) : JST B4P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | +V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | +V | | |
| 3 | -V | | |
| 4 | -V | | |

Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>