



Reliable, High-Efficiency Power Solution  
Tailored for Industrial PoE Ethernet System

## Features

- Universal AC input/ Full range
- Protections: Short circuit/Overload /Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- BS EN/EN61000-6-2(BS EN/EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

## Applications

- Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

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## Description

The IES7211-P480-48V is a reliable and cost-effective 480W DIN rail power supply, designed for seamless installation on TS-35/7.5 or TS-35/15 mounting rails. Its slim 85.5mm width is optimized for space-saving installations within control cabinets, making it an excellent choice for environments with limited space. This power supply supports a wide AC input range from 90VAC to 264VAC and fully complies with BS EN/EN61000-3-2, the European Union's standard for harmonic current, ensuring compliance with international regulations.

Built with a durable metal housing, the IES7211-P480-48V offers enhanced heat dissipation, delivering consistent performance even in demanding conditions. With an impressive efficiency of up to 89%, it operates reliably in ambient temperatures from -20°C to 70°C, relying solely on natural air convection. Equipped with a constant current mode for overload protection, it is highly versatile, accommodating various inductive and capacitive applications, making it a dependable solution for industrial power systems.

<b>OUTPUT :</b>		<b>IES7211-P480-48V</b>
DC Voltage		48V
Rated Current		10A
Current Range		0 ~ 10A
Rated Power		480W
Ripple & Noise (max.) Note.2		150mVp-p
Voltage adj. Range		48 ~ 55V
Voltage Tolerance Note.3		± 1.0%
Line Regulation		± 0.5%
Load Regulation		± 1.0%
Setup, Rise Time	1500ms, 100ms/230VAC; 3000ms, 100ms/115VAC at full load	
Hold Uptime (Typ.)	60ms/230VAC; 16ms/115VAC at full load	
<b>INPUT</b>		
Voltage Range Note.4	90 ~ 264VAC; 127 ~ 370VDC	
Frequency range	47 ~ 63Hz	
Power Factor (Typ.)	PF>0.98/115VAC, PF>0.94/230VAC at full load	
Efficiency (Typ.)	92.5%	
AC Current (Typ.)	4.8A/115VAC; 2.4A/230VAC	
Inrush Current (Typ.)	20A/115VAC; 35A/230VAC	
Leakage Current	<2mA/ 240VAC	
<b>PROTECTION</b>		
Overload	105 ~ 130% rated output power [Protection type : Constant current limiting, recovers automatically after fault condition is removed]	
Over Voltage	56 ~ 65V [Protection type : Shut down o/p voltage, re-power on to recover]	
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down	
<b>ENVIRONMENT</b>		
Working Temp.	-20 ~ +70°C (Refer to "Derating Curve")	
Working Humidity	20 ~ 95% RH non-condensing	
Storage Temp., Humidity	-40 ~ +85°C , 10 ~ 95% RH	
Temp. Coefficient	± 0.03%/°C(0-50°C)	
Vibration	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6	

**SAFETY& EMC (Note 4)**

Safety standards	UL508, TUV BS EN/EN62368-1, EAC TP TC 004 BSMI CNS14336-1, IS13252(Part1)/EC60950-1(except for 48V) approved;(meet BS EN/EN60204-1)
Withstand Voltage	I/P-O/P:3KVAC; I/P-FG:2KVAC; O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH
EMC Emission	Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3,EAC TP TC 020,CNS13438 Class B
EMC Immunity	Compliance to BS EN/EN61000-4-2.3,4,5.6,8,11,BS EN/EN55035,BS EN/EN61000-6-2(BS EN/EN50082-2).BS EN/EN61204-3, heavy industry level, EAC TP TC 020

**OTHERS**

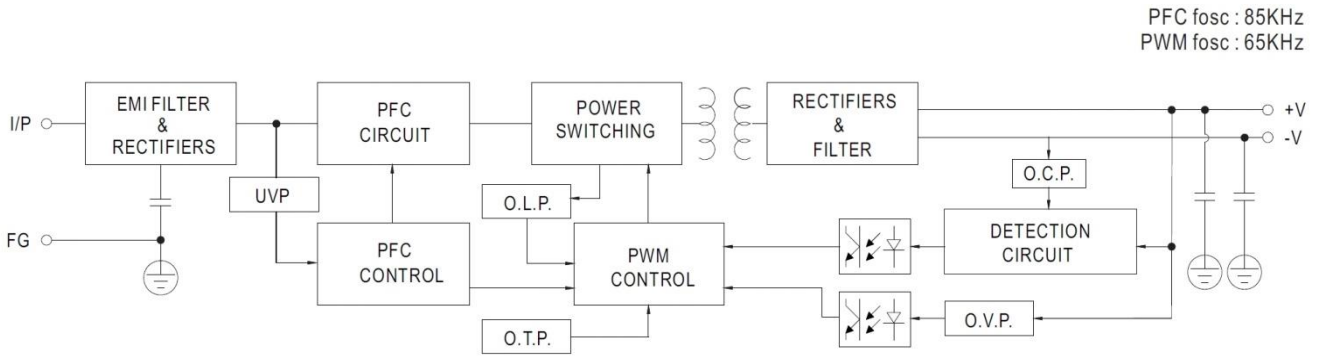
**IES7211-P480-48V**

MTBF	1041.6K hrs min. Telcordia SR-332 (Bellcore) ; 146.8K hrs min. MIL-HDBK-217F (25°C)
Dimension	85.5*125.2*128.5mm (W*H*D)

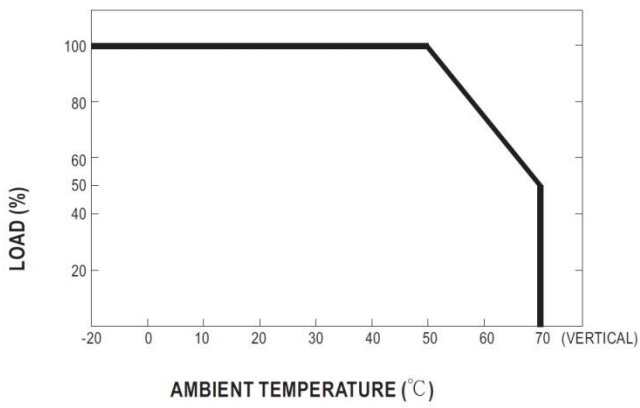
**NOTE**

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor.
- Tolerance : includes set up tolerance, line regulation and load regulation.
- Installation clearances : 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.
- Derating may be needed under low input voltage. Please check the derating curve for more details.
- The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.
- 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).

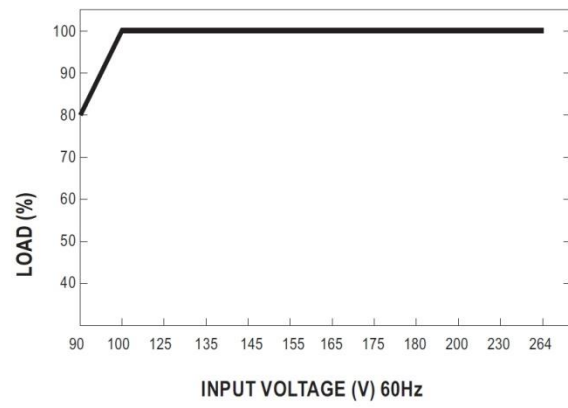
### Block Diagram



### Derating Curve



### Static Characteristics



Mechanical Specification

