



Description: The MPU30 series of AC/DC switch mode power supplies provide 30 Watts of continuous output power. All supplies are UL94V-1 min. compliant and include IEC-320-C14 input for worldwide applications.

Electrical Characteristics:

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		264	VAC
Input Frequency		47		63	Hz
Output Power Range	Vin=90 to 264VAC	0		15	W
Output Voltage Range		See rating chart			V
Output Current Range		See rating chart			A
Input Current (Low Line)	Io=Full load, Vin=115VAC		0.25	0.35	A
Input Current (High Line)	Io=Full load, Vin=230VAC		0.17	0.22	A
Low Line Inrush Current	Io=Full load, 25 °C, Cool start, 115VAC		14	16	A
High Line Inrush Current	Io=Full load, 25 °C, Cool start, Vin=230VAC		28	30	A
Efficiency	Io=Full Load, Vin=230VAC	73		85	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC	1	3	5	%
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Hold-Up Time	Io=Full Load, Vin=110VAC	10	16		mS
Start Up Time	Io=Full Load, Vin=100VAC	0.5	1	2	S
Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Temperature Coefficient	All outputs	-0.04		0.04	%/ °C
Thermal Shutdown by Junction	Temperature Controller	-20		125	°C
Operating Temperature		0	50	70	C
Storage Temperature		-40		85	C
Relative Humidity	No-Condensing	5		95	%
Derate linearly from 100% load at 50 C to 50% load at 70 C					

Key Features

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Output Voltage Available From 3VDC Thru 40VDC
- Splash proof
- Over Current, Over Voltage and Over Load protection
- Class I Insulation
- Over temperature Detection
- Output Voltage Protection
- 3 Year Warranty

Safety Specifications

Vps	Dielectric Withstanding Voltage Primary to Secondary	Primary to secondary	5600	VDC
Vpg	Dielectric Withstanding Voltage Primary to Ground	Primary to ground	2800	VDC
Ri	Isolation Resistance	Test Voltage =2100VDC	50	M
CISPR	EMI requirements for CISPR-11	Vin=220VAC	B	CLASS
FCC	for FCC PART-18EMI requirements	Vin=110VAC	B	CLASS

Model Information – Single Outputs

Model Number	Output Voltage	Output Current	Total Regulation	Output Power Maximum
MSORS20-3S	3 ~ 5 VDC	6.66 ~ 4.00 A	5%	20W
MSORS25-5S	5 ~ 6 VDC	5.00 ~ 4.16 A	5%	25W
MSORS25-7S	6 ~ 8 VDC	4.16 ~ 3.12 A	5%	25W
MSORS30-9S	8 ~ 11 VDC	3.75 ~ 2.72 A	4%	30W
MSORS30-12S	11 ~ 13 VDC	2.72 ~ 2.30 A	3%	30W
MSORS30-15S	13 ~ 16 VDC	2.30 ~ 1.87 A	3%	30W
MSORS30-18S	16 ~ 21 VDC	1.87 ~ 1.42 A	3%	30W
MSORS30-24S	21 ~ 27 VDC	1.42 ~ 1.11 A	2%	30W
MSORS30-28S	27 ~ 33 VDC	1.11 ~ 0.91 A	2%	30W
MSORS30-36S	33 ~ 40 VDC	0.90 ~ 0.75 A	2%	30W

Model Information – Multiple Outputs

Model #	Output 1		Output 2		Output 3		Output Power
	Volts	Current	Volts	Current	Volts	Current	
MSORS25-3.3S12S	+3.3V	0.3 - 3A	+12V	0.13 - 1.3A			25W
MSORS30-5S12S	+5V	0.3 - 3A	+12V	0.13 - 1.3A			30W
MSORS30-5S15S	+5V	0.3 - 3A	+15V	0.1 - 1.0A			30W
MSORS30-5S24S	+5V	0.3 - 3A	+24V	0.07 - 0.7A			30W
MSORS26-3.3S5S	+3.3V	0.3 - 3A	+5V	0.16 - 1.6A			17.9W
MSORS30-12D	+12V	0.2 - 2A			-12V	0 - 0.5A	30W
MSORS30-15D	+15V	0.15 - 1.5A			-15V	0 - 0.5A	30W
MSORS30-5S24S	+5V	0.25 - 2.5A			-24V	0 - 1.0A	30W
MSORS30-5D12S	+5V	0.25 - 2.5A	+12V	0.13 - 1.3A	-5V	0 - 0.5A	25W
MSORS30-5D12S	+5V	0.25 - 2.5A	+12V	0.1 - 1.0A	-12V	0 - 0.5A	30W
MSORS30-5S15D	+5V	0.25 - 2.5A	+15V	0.1 - 1.0A	-15V	0 - 0.5A	30W
MSORS30-5S24D	+5V	0.3 - 3A	+24V	0.1 - 1.0A	-24V	0 - 0.5A	30W
MSORS30-5S24S12S	+5V	0.3 - 2.5A	+24V	0.1 - 1.0A	-12V	0 - 0.5A	30W
MSORS30-3.3S12S5S	+3.3V	0.25 - 2.5A	+12V	0.11 - 1.1A	-5V	0 - 0.5A	25W

Mechanical Specifications:

- Dimensions shown are in MM
- Optional Output Connector
- Weight is approximately 400 - 460 grams

