


Key Features:

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single to Triple Output
- Output Voltage Available From 2VDC - 50VDC
- Optional Output Connector
- Input, Over Voltage And Over Load protection
- Output Voltage Protection (Crowbar Design)
- Splash proof
- Class I Insulation
- 3 year warranty

Description: The MPU50 series of AC/DC switch mode power supplies provide 50 Watts of continuous output power. All supplies include IEC-320-C14 input for worldwide applications.

Electrical Specification:

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		50	W
Output Voltage Range		See rating chart			V
Output Current Range		See rating chart			A
Input Current (Low Line)	Io=Full load, Vin=115 VAC			1.35	A
Input Current(High Line)	Io=Full load, Vin=230 VAC			0.7	A
Low Line Inrush Current	load, 25 C , Cool start, Vin=115VAC Io=Full		12	15	A
High Line Inrush Current	Vin=230VAC load, 25 C , Cool start, Io=Full		26	30	A
Efficiency	Io=Full Load, Vin=230VAC	75	83	88	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC		3	7	%
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
Transient Response	Io=Full Load to Half Load, in=100VAC			4	mS
Hold-Up Time	Io=Full Vin=110VAC Load,	16			mS
Start Up Time	Load, Vin=100VAC Io=Full	0.3	1.5	2	S
Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%

Environmental Specifications:

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		0		70	C
Storage Temperature		-40		85	C
Relative Humidity		5		95	%

Safety Specifications:

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	5600			VDC
Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2800			VDC
Isolation Resistance	Test Voltage =2100VDC	50			M
EMI requirements for CISPR-11	Vin=220VAC	B			CLASS
for FCC PART-18EMI requirements	Vin=110VAC	B			CLASS

Single Output Models:

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
MSORS30-2S	2 ~ 3 VDC	12.0 ~ 10.0 A	7%	30W
MSORS40-3S	3 ~ 5 VDC	10.0 ~ 8.00 A	5%	40W
MSORS40-5S	5 ~ 6 VDC	8.00 ~ 6.66 A	5%	40W
MSORS42-7S	6 ~ 8 VDC	7.00 ~ 5.25 A	5%	42W
MSORS30-9S	8 ~ 11 VDC	5.63 ~ 4.00 A	4%	45W
MSORS45-12S	11 ~ 13 VDC	4.00 ~ 3.46 A	3%	45W
MSORS45-15S	13 ~ 16 VDC	3.46 ~ 2.81 A	3%	45W
MSORS50-18S	16 ~ 21 VDC	3.12 ~ 2.38 A	3%	50W
MSORS50-24S	21 ~ 27 VDC	2.30 ~ 1.85 A	2%	50W
MSORS50-28S	27 ~ 33 VDC	1.85 ~ 1.51 A	2%	50W
MSORS50-36S	33 ~ 40 VDC	1.51 ~ 1.25 A	2%	50W
MSORS50-48S	40 ~ 50 VDC	1.25 ~ 1.00 A	2%	50W

Multiple Output Models:

Model Number	Output #1		Output #2		Output #3		Output Power
MSORS40-3.3S12S	+3.3V	0.5 - 5A	+12V	0.2 - 2A			40W
MSORS42-5S12S	+5V	0.5 - 5A	+12V	0.2 - 2A			42W
MSORS42-5S15S	+5V	0.5 - 5A	+15V	0.15 - 1.5A			42W
MSORS42-5S24S	+5V	0.5 - 5A	+24V	0.1 - 1A			42W
MSORS26-3.3S5S	+3.3V	0.5 - 5A	+5V	0.2 - 2A			26.5W
MSORS42-12D	+12V	0.3 - 3A			-12V	0 - 1A	42W
MSORS42-15D	+15V	0.2 - 2A			-15V	0.1 - 1A	42W
MSORS42-5S24SX1	+5V	0.5 - 5A			-24V	0.1 - 1A	42W
MSORS42-5S7S	+5.1V	0.5 - 5A	+7.2V	0.3 - 2.6A			42W
MSORS42-10D	+10.5V	0.2 - 2A			-10.5V	0 - 2A	42W
MSORS35-5D	+5V	0.5 - 5A			-5V	0 - 2A	35W
MSORS42-3.3S12D	+3.3V	0.5 - 5A	+12V	0.4 - 2A	-12V	0.1 - 0.8A	42W
MSORS42-5D12S	+5V	0.5 - 5A	+12V	0.2 - 2A	-5V	0 - 0.8A	42W
MSORS42-5S12D	+5V	0.5 - 5A	+12V	0.2 - 2A	-12V	0.1 - 0.8A	42W

MSORS42-5S15D	+5V	0.5 - 5A	+15V	0.4 – 2A	-15V	0.1 – 0.8A	42W
MSORS42-5S24D	+5V	0.5 - 5A	+24V	0.2 – 1A	-24V	0 – 0.5A	42W
MSORS42-5S24S12S	+5V	0.5 - 5A	+24V	0.1 – 1A	-12V	0 – 0.8A	42W
MSORS42-3.3S12S5S	+3.3V	0.5 - 5A	+12V	0.4 – 2A	-5V	0.1 – 0.8A	42W

Mechanical Specifications:

Notes:

- 1) Dimensions are shown in inches and mm.
- 2) Weight is approximately 510 – 560 grams.
- 3) Optional Output Connector

