

**MTDA40A SERIES**

**40W/50W Desktop Power Supply for I.T. Equipment**



- Wide Operating Voltage 90 to 264 VAC, 47 to 63Hz
- IEC-320-C14 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- Class I system
- Energy Efficiency DoE VI, CoC v5(tier2)

**1 Year Warranty**

Approvals:

**Single Output**

Product Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
MTDA40A-S02	5 ~ 5.99 VDC	5.00 A	±5%	30W
MTDA40A-S03	6.5 ~ 8 VDC	4.61 ~ 3.75 A	±5%	30W
MTDA40A-S04	8 ~ 11 VDC	4.38 ~ 3.18 A	±5%	35W
MTDA40A-S05	11 ~ 13 VDC	3.64 ~ 3.07 A	±5%	40W
MTDA40A-S06	13 ~ 16 VDC	3.07 ~ 2.50 A	±5%	40W
MTDA40A-S07	16 ~ 21 VDC	2.81 ~ 2.14 A	±5%	45W
MTDA40A-S08	21 ~ 27 VDC	2.38 ~ 1.85 A	±3%	50W
MTDA40A-S09	27 ~ 33 VDC	1.85 ~ 1.51 A	±3%	50W
MTDA40A-S10	33 ~ 40 VDC	1.51 ~ 1.25 A	±2%	50W
MTDA40A-S11	40 ~ 48 VDC	1.25 ~ 1.04 A	±2%	50W

MTDA40A-S02~S04 are required to use AWG#14 / 4FT or AWG#16 / 2FT output cable.

MTDA40A-S05~S06 are required to use AWG#16/4FT output cable.

MTDA40A-S07~S11 are required to use AWG#18/6FT output cable.

The regulation and efficiency will be changed by modified output cable.

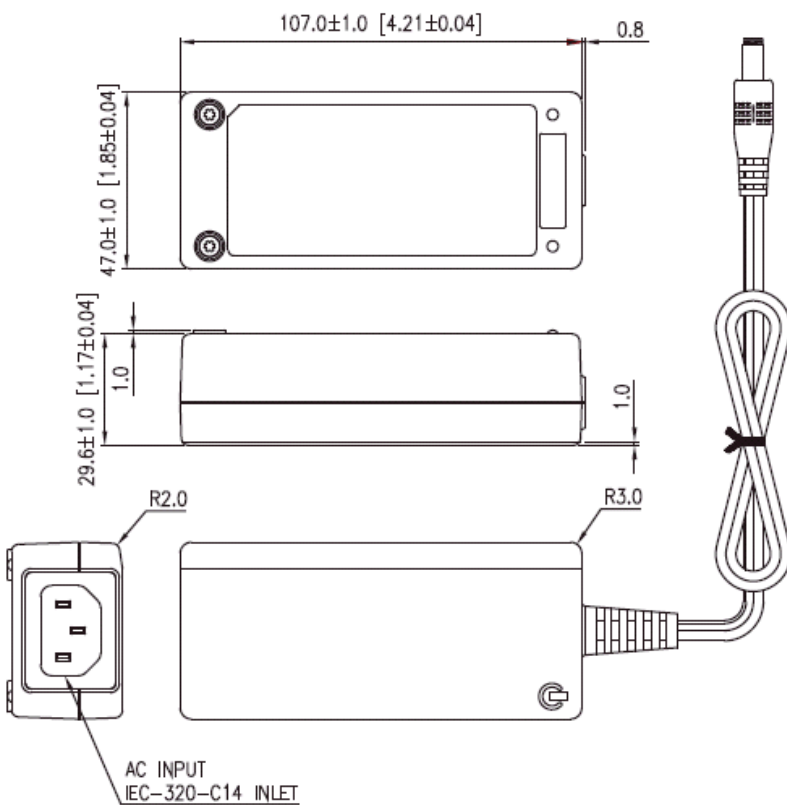
**Electrical Characteristics**

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Safety Approvals Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Operate Voltage Range		90		264	VAC
Input Frequency	Sine wave	47		63	Hz
Output Power Range	See Rating Chart			50	W
Low Line Input Current	Full load, Vin=100VAC		0.9		A
High Line Input Current	Full load, Vin=240VAC		0.52		A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC	40		50	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC	80		100	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
Efficiency	Full Load, Vin=230VAC	85		88.03	%
Line Regulation	Full Load, Vin=100~120VAC			1	%
Load Regulation	Vin=230VAC, 10~90% Load Change at Condition			5	%
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Time of Transient Response	Io=Full Load to Half Load, Vin=110VAC			4	ms
Hold-Up Time	Full Load, Vin=100VAC		12		ms
Start Up Time	Full Load, Vin=100~240VAC			3	s
Ripple & Noise (Peak to Peak)				2	%
Temperature Coefficient	Full Load, Vin=100~240VAC			±0.04	%/°C
Dielectric Withstanding Voltage(P-S)	Primary to Secondary			4242	VDC
Dielectric Withstanding Voltage(P-G)	Primary to PE			2550	VDC
EMC Emission	Compliance to EN55022(CISPR22)			B	Class

### Environmental

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Derate linearly from 100% load at 40 to 50% load at 70	0		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	non-condensing	0		95%	RH
Storage Humidity		0		95%	RH
Electro Static Discharge	Air Discharge, IEC61000-4-2			8	KV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			6	KV
Mean Time Between Failure	Operation Temperature at 25 , Calculated per MIL-HDBK-217F	100K			h
Operating Altitude (Elevation)	All Condition			5000	m
Vibration	10~500Hz,10min./1cycle, 60min.each along X, Y, Z axes			5	G
Surge Voltage	Line-Neutral			1	KV
Surge Voltage	Line-PE & Neutral-PE			2	KV

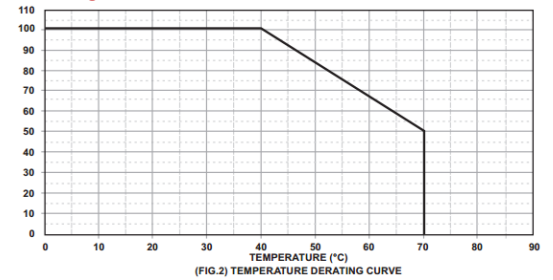
### Mechanical Diagram and Technical Chart



**Note:**

1. Dimensions are shown in mm & inch
2. Weight: approx. 265~280g (Exclude the input cord)
3. Optional output connector.

**Derating Chart**



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 40°C to 50% load at 70°C