ITDA180I SERIES

180W Desktop Power Supply for I.T. Equipment

- Wide Input Voltage 90 to 264VAC, 47 to 63Hz
- Constant Output Voltage Available From 12VDC To 48VDC
- Over Voltage, Over Current, Short Circuit, and Over Temperature Protection
- High Efficiency (over 90%), Active Power Factor Correction (PFC)
- Energy Star 2.0, CEC Level V, and RoHS Compliance
- UL/C-UL, TUV-GS, CE Certifications
- Output connector shield connects back to earth ground.
- EMC: FCC Part 15 Class B & EN55022 Class B

2 Year Warranty

Approvals:

Single Output

Part Number	Output Voltage	Max. Output Current	Efficiency (220VAC, Full Load)	Over Voltage Protection	Max. Output Power
ITDA180I-S120SI	12 VDC	14.16 A	91.5%	16V	170W
ITDA180I-S190SI	19 VDC	9.47 A	92.5%	26V	180W
ITDA180I-S240SI	24 VDC	7.50 A	93.5%	33V	180W
ITDA180I-S280SI	28 VDC	6.42 A	93.5%	39V	180W
ITDA180I-S360SI	36 VDC	5.00 A	93.5%	50V	180W
ITDA180I-S480SI	48 VDC	3.75 A	93.5%	60V	180W

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		180	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			2.3	A
Input Current (High Line)	Io=Full load, Vin=230VAC			0.9	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC			50	A
Power Factor Correction	Vin=110VAC		99		%
Efficiency	Io=Full Load, Vin=230VAC	91.5		93.5	%
No-Load Power Consumption	No Load, VIn=230VAC			0.5	W
Line Regulation	Io=Full Load			0.5	%
Load Regulation	Vin=230VAC			5	%
Over Voltage Protection	Latch mode. The power unit shall return to normal operation only after the power is turn-on again.				
Over Current Protection	Hiccup mode. Self-recovery when fault is removed.	120	140	170	% Io
Over Temperature Protection			125		°C
Short Circuit Protection	No damage shall occur when any output operating in a short circuit condition. The power supply shall be self-recovery when the fault condition is removed.				
Output Overshoot / Undershoot	When power on or off			10	%
Start Up Time	Io=Full Load, Vin=90VAC			2	S
Hold-Up Time	Full Load, Vin=90~264VAC	9			mS
Rise Time				25	mS
Fall Time	Full Load			30	mS
Ripple & Noise (Peak to Peak)	Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.			1.5	% Vo

Conditions

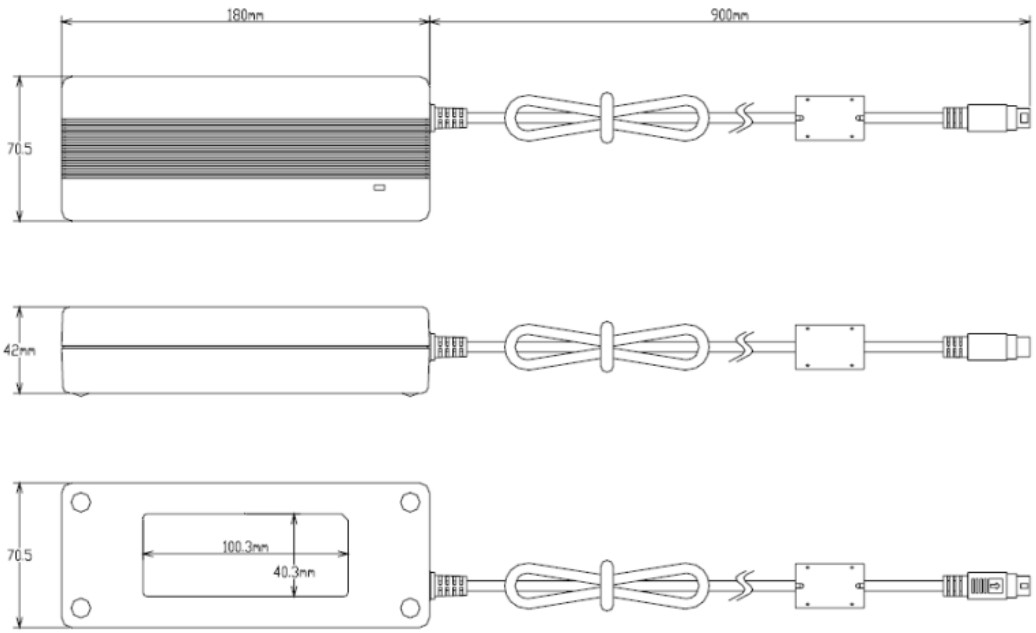
Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Humidity: 10% RH to 90% RH	0		+40	°C
Storage Temperature	Humidity: 5% RH to 95% RH	-20		80	°C
Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.45M			Hours

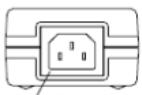
Approvals and Compliance

Parameter	Standards
EMI	EN 55022:1998, +A1:2000 +A2:2003, Class B, CISPR 22:2003, Class B, AS/NZS CISPR 22: 2004, Class B
EMS	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4.3, , EN61000-4-4, , EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-1-1
Safety UL/c-UL, T-mark, CE	UL/C-UL60950-1, EN60950-1
Environmental Compliance	RoHS

Mechanical

Parameter	Specification
Dimension, Net Weight	180x70.5x42mm (7.08x2.78x1.65 inches)
Weight	595g
The output connector shield/foil is connected back to earth ground, and isolated from both +output and output return.	





AC Input
IEC 320-C14 Inlet

4-PIN POWER DIN PLUG

PIN	FUNCTION
1	Output +
2	Output +
3	Return
4	Return

Chassis part to output connector:
Equivalent to CUI INC. PD-40 or PD-40S.