CUI INC®

SERIES: ETSA 100W U | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- 100 W power
- universal input (90~264 Vac)
- single regulated outputs
- over voltage, over current, and short circuit protections
- UL/cUL safety approvals
- level V efficiency
- power factor correction
- custom designs available

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
ETSA120834U	12	8.34	100	240	V
ETSA160625U	16	6.25	100	320	V
ETSA190527U	19	5.27	100	380	V
ETSA240417U	24	4.17	100	480	V
ETSA360278U	36	2.78	100	480	V
ETSA480209U	48	2.09	100	480	V

Notes: 1. Ripple and noise measured with 20 MHz bandwidth oscilloscope, each output terminated with 10 µF/50 V electrolytic and 0.1 µF ceramic capacitors.

PART NUMBER KEY

ETSA120834U X - P51 - WP - CXX

- Base Number: example of 12 Vdc, 8.34 A
- Input Cable:
  - "Blank" = No Cable
  - C = North American input cable
  - 2 = European input cable
  - 3 = United Kingdom input cable
  - 4 = Australian input cable
  - 5 = China input cable
  - 6 = South Korea input cable
  - 7 = Brazil input cable
  - 8 = South Africa input cable
  - 9 = Japan input cable
- DC Plug Type
- Factory Designation
- Reserved for Custom Configurations

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at 90 Vac, 50 Hz			2.5	A
inrush current	at 230 Vac, cold start			150	A
power factor correction	at full load		0.9		
no load power consumption				0.5	W

OUTPUT

parameter	conditions/description	min	typ	max	units
total regulation		-2		+5	%
hold-up	at 115/230 Vac, 50/60 Hz, full load	16			ms
temperature coefficient				±0.05	%/°C

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	auto latch off	110		130	%
over current protection	auto restart when overload is removed	110		160	%
short circuit protection	auto shutdown, auto restart when short circuit removed				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output for 4 seconds input to ground for 4 seconds	4,242 2,121			Vdc Vdc
isolation resistance	input to output at 500 Vdc input to ground at 500 Vdc	20 20			MΩ MΩ
safety approvals	UL/cUL, GS				
EMI/EMC	FCC Part 15 Class B, EN55022/EN55024 Class B, CE				
MTBF	at full load, 25°C	140,000			hrs
RoHS	2011/65/EU				

ENVIRONMENTAL

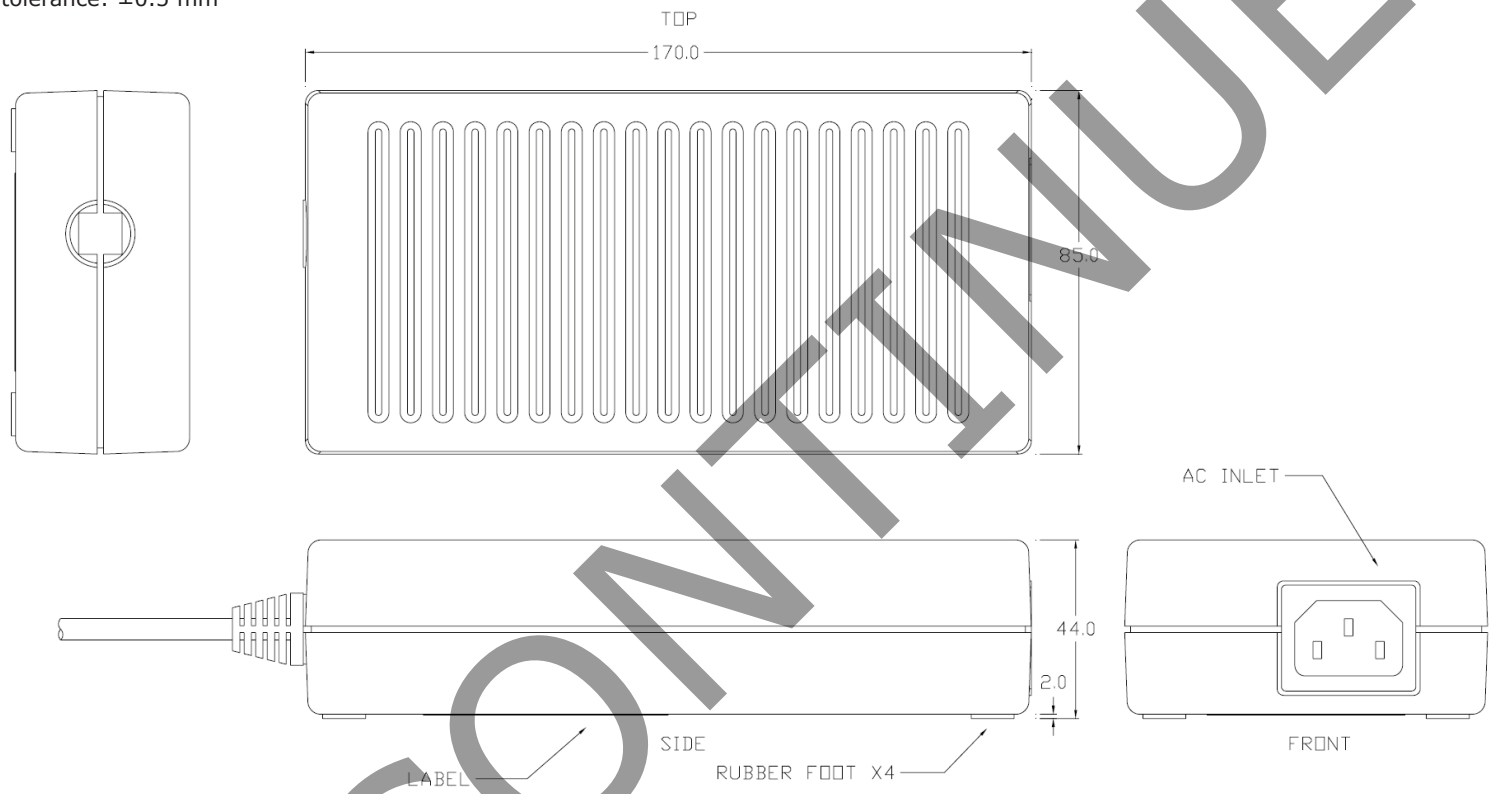
parameter	conditions/description	min	typ	max	units
operating temperature	derate linearly 2.5% per °C from 41~60°C	0		60	°C
storage temperature	12 Vdc & 16 Vdc output models all other models	-10 -10		85 70	°C °C
operating humidity	non-condensing	20		90	%
storage humidity	non-condensing	20		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	170 x 85 x 44				mm
input plug	IEC320 / C14				

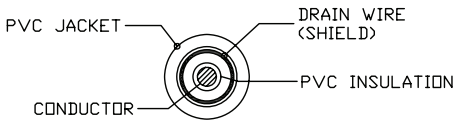
MECHANICAL DRAWING

units: mm
tolerance: ±0.5 mm

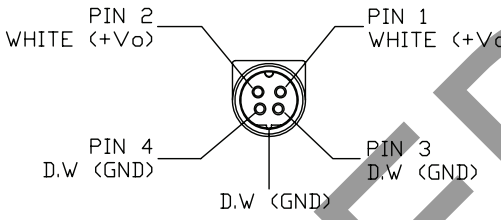


DC CORD

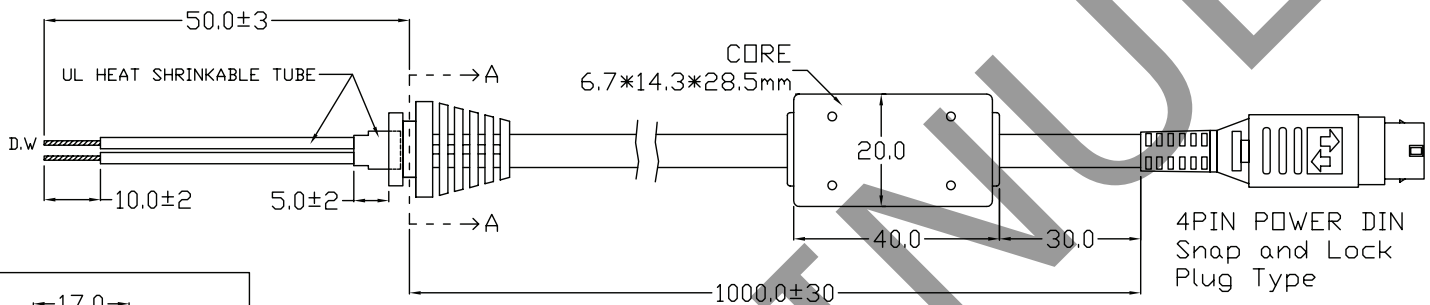
units: mm

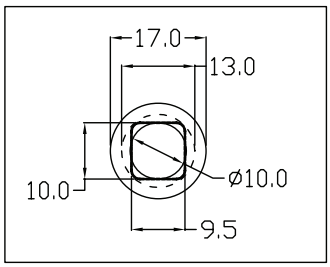


See Table 1
SECTIONAL DRAWING



4P POWER DIN
FRONT VIEW





SECTION A-A

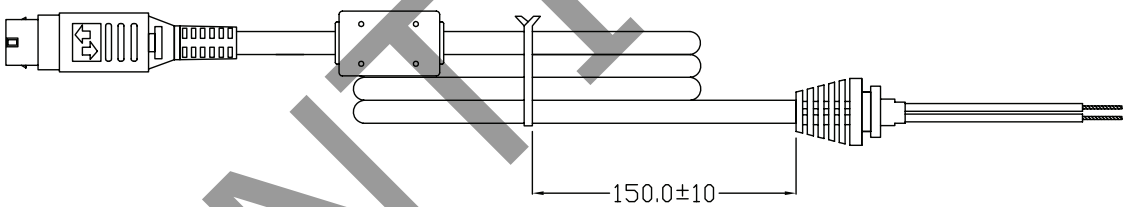


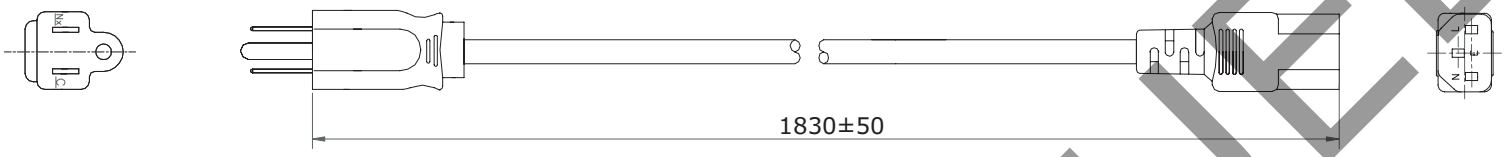
Table 1

MODEL NO.	CABLE
ETSA120834U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA160625U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA190527U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA240417U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA360278U	16 AWG, Black, UL1185 80/90°C, 300 V, 16 AWGX1C + aluminum shield (16 AWG)
ETSA480209U	16 AWG, Black, UL1185 80/90°C, 300 V, 16 AWGX1C + aluminum shield (16 AWG)

AC CORD

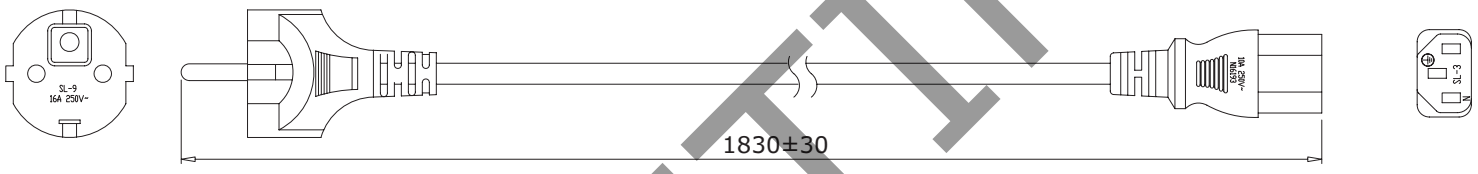
NORTH AMERICAN INPUT CABLE

units: mm



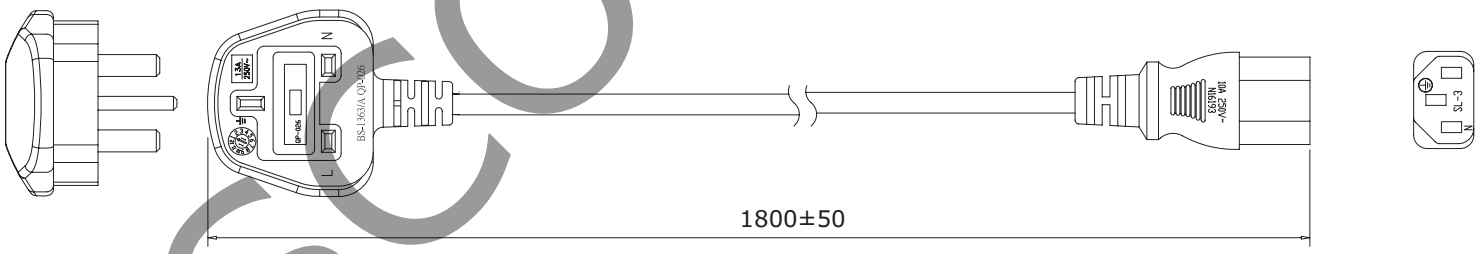
EUROPEAN INPUT CABLE

units: mm



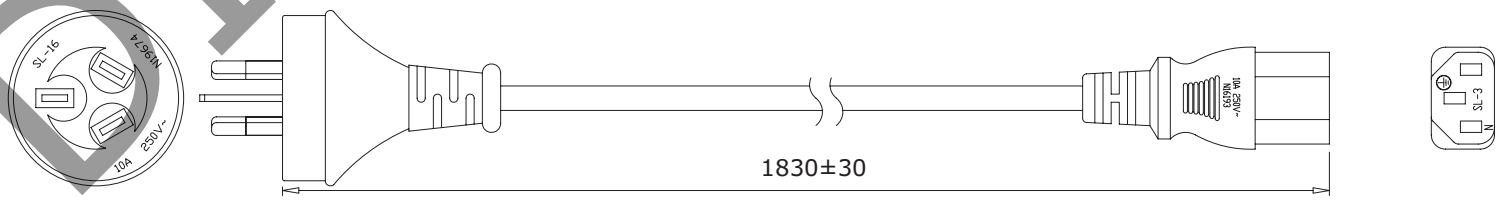
UNITED KINGDOM INPUT CABLE

units: mm



AUSTRALIAN INPUT CABLE

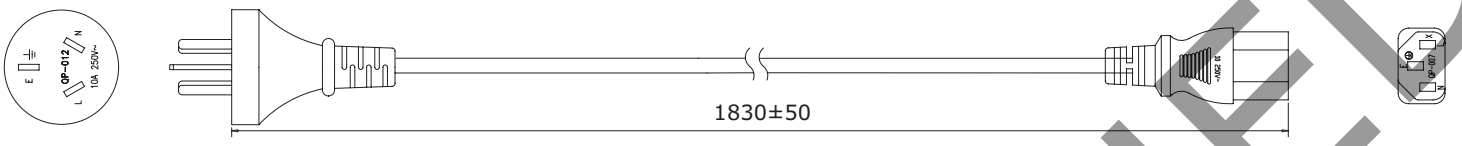
units: mm



AC CORD (CONTINUED)

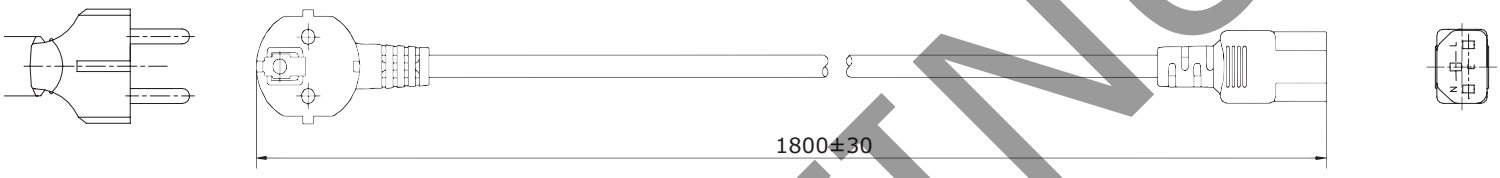
CHINA INPUT CABLE

units: mm



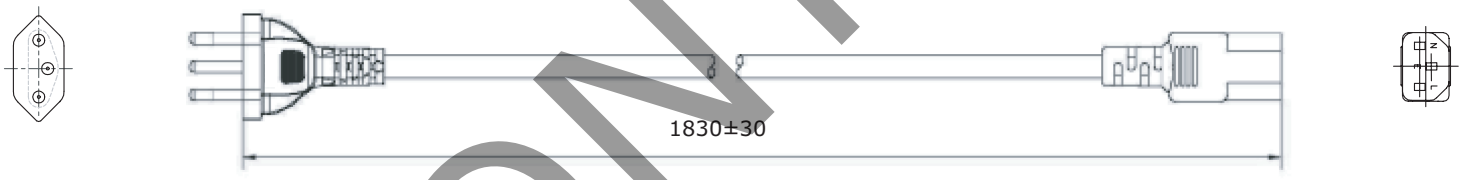
SOUTH KOREA INPUT CABLE

units: mm



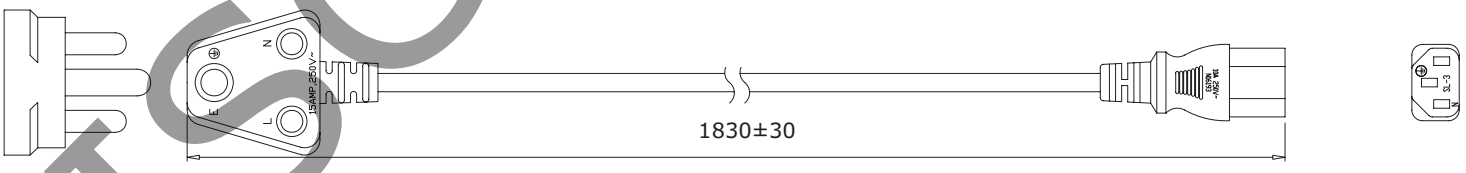
BRAZIL INPUT CABLE

units: mm



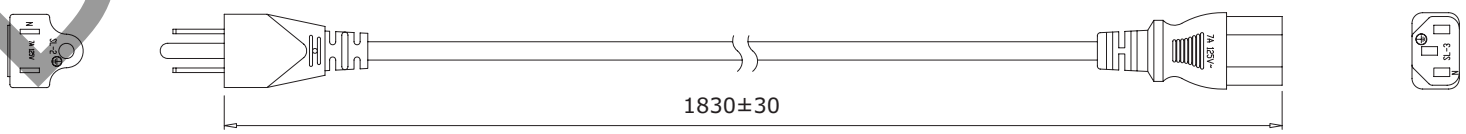
SOUTH AFRICA INPUT CABLE

units: mm



JAPAN INPUT CABLE

units: mm



REVISION HISTORY

rev.	description	date
1.0	initial release	11/22/2013
1.01	added ac cord options	10/09/2014

The revision history provided is for informational purposes only and is believed to be accurate.

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