CUI INC®

SERIES: ETSA 40W UD | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- 40 W power
- compact size
- universal input (90~264 Vac)
- single regulated output from 12~48 V
- over voltage and short circuit protection
- UL/cUL, GS safety approvals
- level V efficiency
- custom designs available

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
ETSA120330UD	12	3.3	40	240	V
ETSA190210UD	19	2.1	40	240	V
ETSA200200UD	20	2	40	240	V
ETSA240170UD	24	1.7	40	240	V
ETSA480085UD	48	0.85	40	240	V

Notes: 1. At full load, 100 ~ 240 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with 10 µF aluminum electrolytic and 0.1 µF ceramic capacitors.

PART NUMBER KEY

ETSA120330UD X - XX - SZ - CXX

- Base Number: example of 12 Vdc, 3.3 A
- AC Input Plug: D = IEC 320 C8 plug
- 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: see output plug options on page 7
- Factory Designation
- Reserved for Custom Configurations

INPUT

parameter	conditions/description	min	typ	max	units
voltage		85		264	Vac
frequency		47		63	Hz
current				1	RMS
leakage current	at 120 Vac			0.25	mA
no load power consumption				0.3	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±1		%
load regulation			±5		%

PROTECTION

parameter	conditions/description	min	typ	max	units
short circuit protection	output shut down and auto restart				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute			3,000 4,242	Vac Vac
isolation resistance	input to output at 500 Vdc	100			MΩ
safety approvals	UL 60950-1, EN 60950-1/IEC 60950-1, CSA C22.2 No. 60950-1				
EMI/EMC	FCC CFR 47 Part 15, EN 55022, EN 61000-3, EN 55024 (EN 61204-3), EN 61000-4, CE				
RoHS	2011/65/EU				

ENVIRONMENTAL

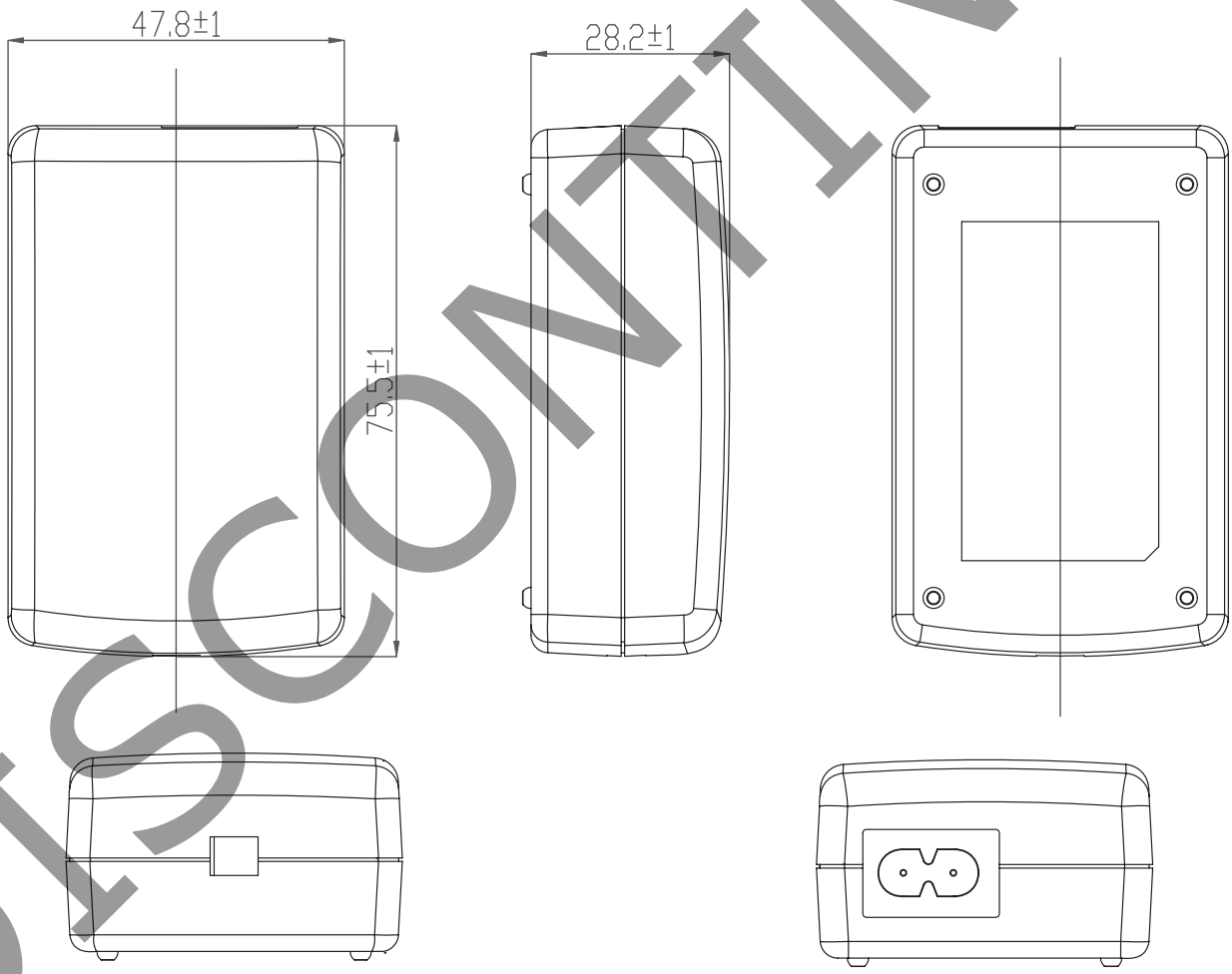
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-10		70	°C
operating humidity		20		80	%
storage humidity		10		90	%

MECHANICAL

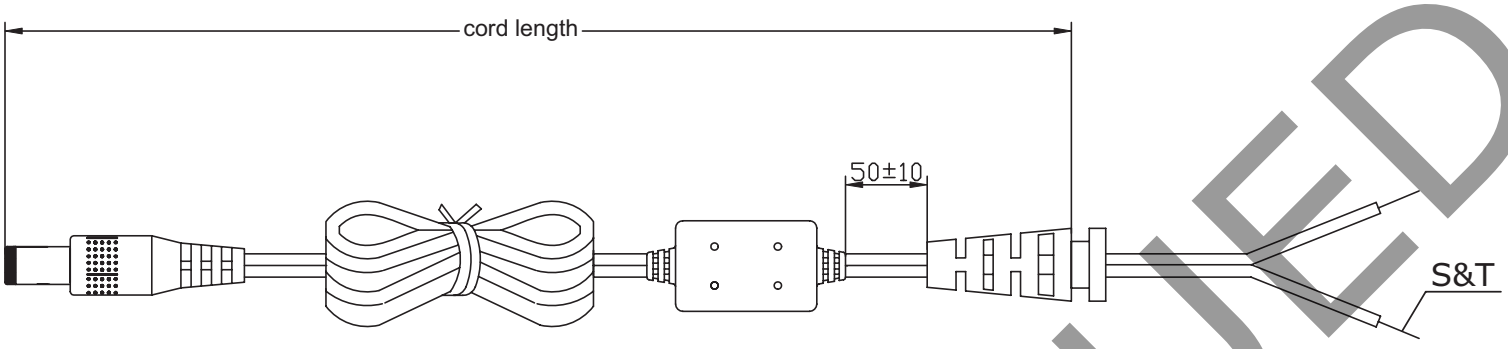
parameter	conditions/description	min	typ	max	units
dimensions	2.972 x 1.882 x 1.110 (75.5 x 47.8 x 28.2 mm)				inch
input plug	IEC320 / C8				

MECHANICAL DRAWING

units: mm
tolerance: ±1mm



DC CORD

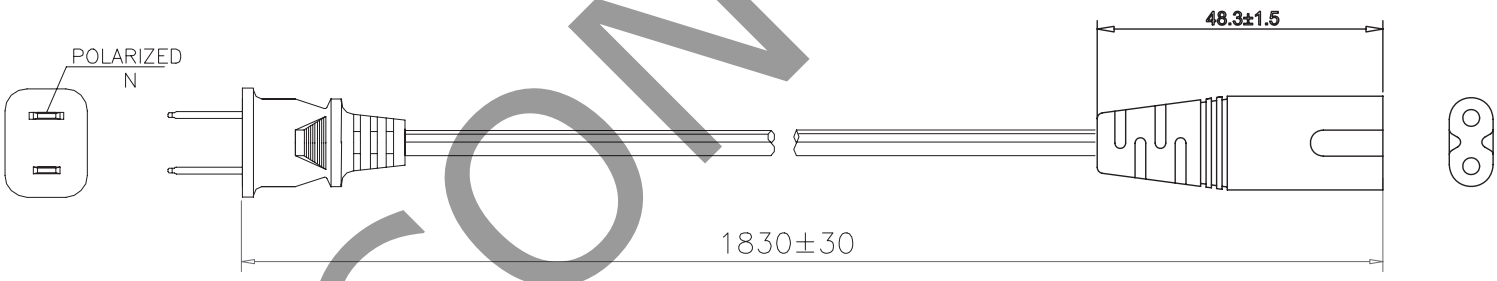


MODEL	CABLE GAUGE	CABLE LENGTH
ETSA120330UD	18 AWG	1,530 ±100
ETSA190210UD	20 AWG	1,830 +150/-0
ETSA200200UD	20 AWG	1,830 +150/-0
ETSA240170UD	20 AWG	1,830 +150/-0
ETSA480085UD	22 AWG	1,830 ±100

AC CORD

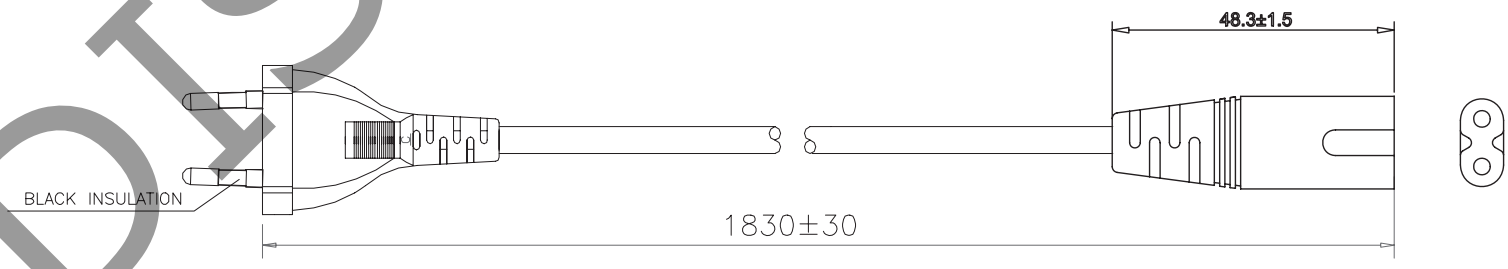
NORTH AMERICAN INPUT CABLE

units: mm



EUROPEAN INPUT CABLE

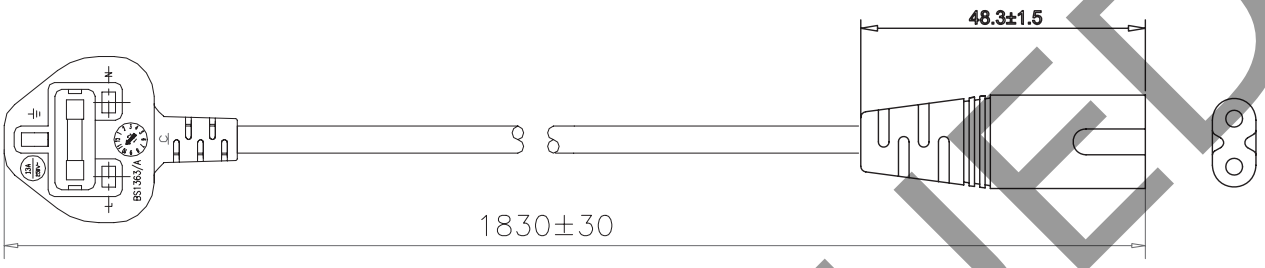
units: mm



AC CORD (CONTINUED)

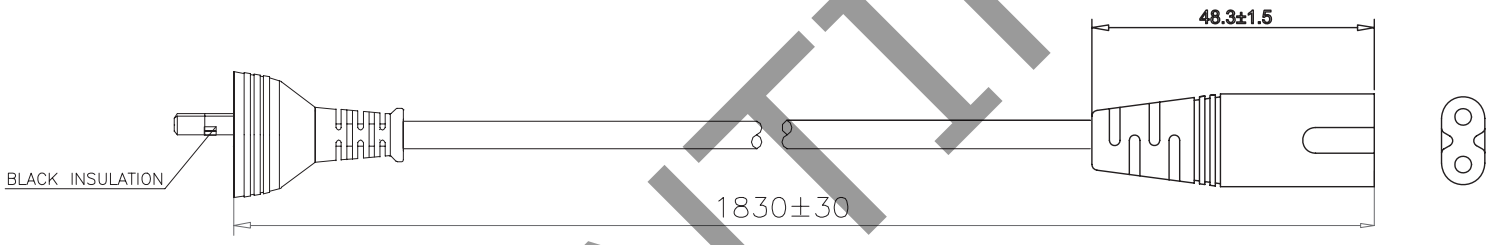
UNITED KINGDOM INPUT CABLE

units: mm



AUSTRALIAN INPUT CABLE

units: mm

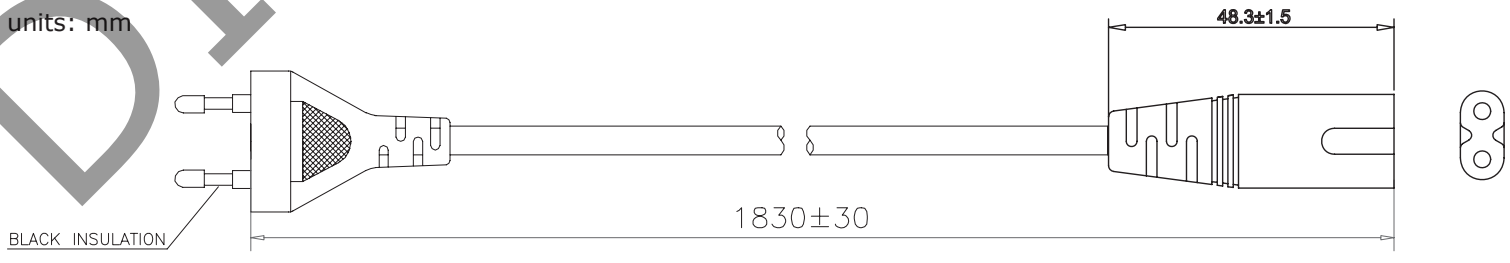


CHINA INPUT CABLE

units: mm

SOUTH KOREA INPUT CABLE

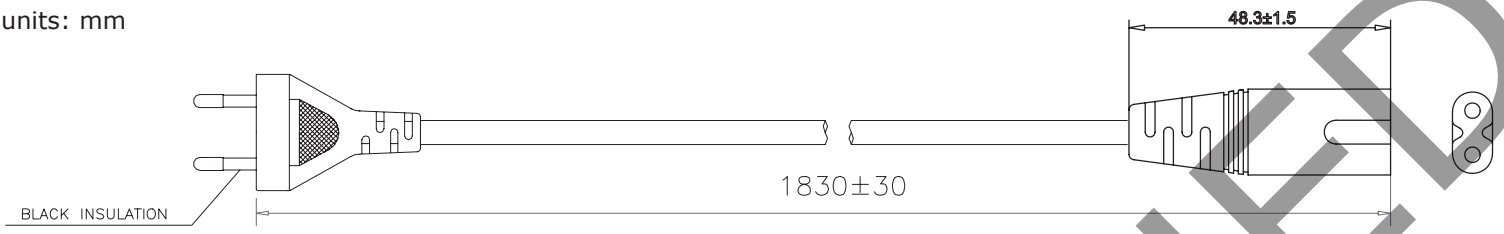
units: mm



AC CORD (CONTINUED)

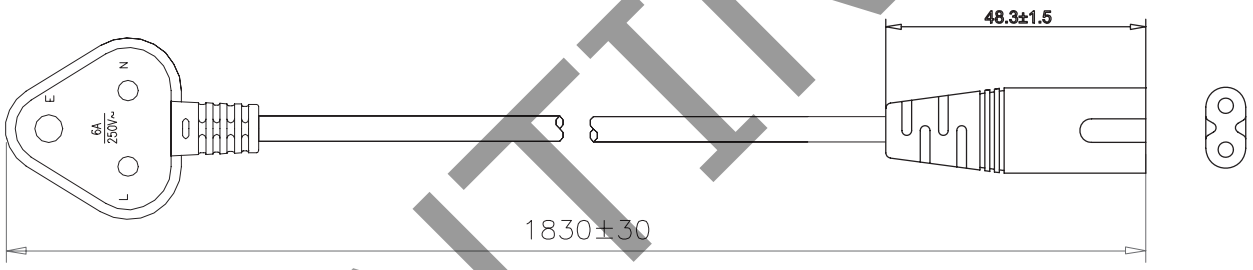
BRAZIL INPUT CABLE

units: mm



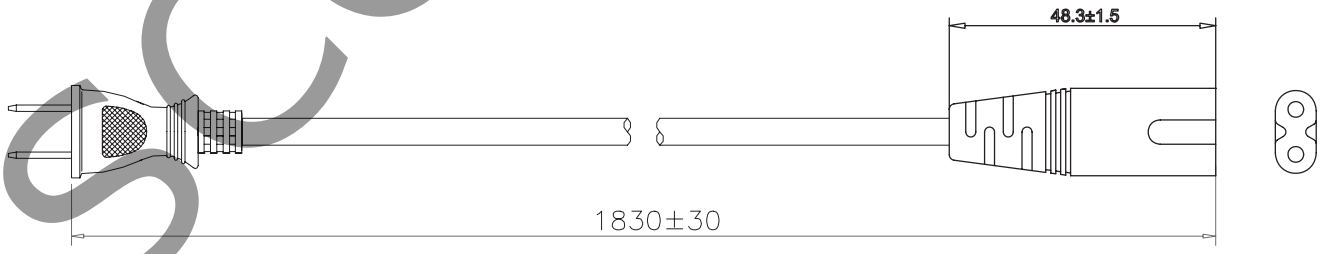
SOUTH AFRICA INPUT CABLE

units: mm



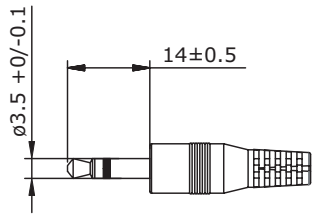
JAPAN INPUT CABLE

units: mm

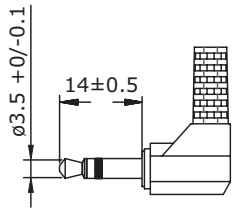


OUTPUT PLUG OPTIONS

3.5 mm Phono Plug



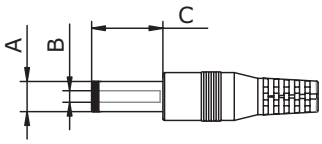
P1



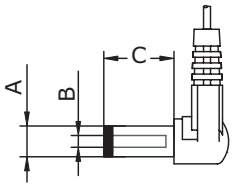
P1R

*Tip positive

Standard DC Plug



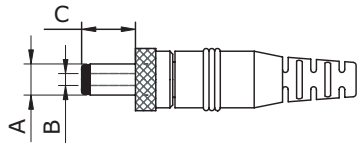
Standard PX



Right Angle PXR

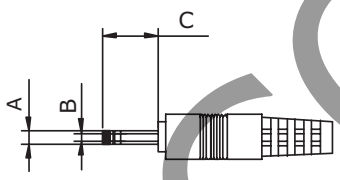
	A	B	C	Unit
P5/P5R	5.5	2.1	9.5	mm
P6/P6R	5.5	2.5	9.5	mm
P7/P7R	3.5	1.35	9.5	mm
P8/P8R	3.8	1.35	9.5	mm
P9/P9R	3.8	1.05	9.5	mm

Locking DC Plug

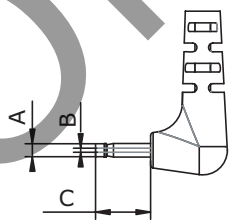


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

EIAJ Plugs

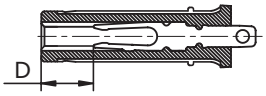


Standard PXX

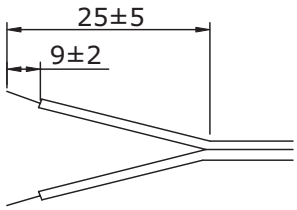


Right Angle PXXR

	EIAJ	A	B	C	D	Unit
P12/P12R	EIAJ-1	2.35	0.7	9.5	NA	mm
P13/P13R	EIAJ-2	4.0	1.7	9.5	5.0	mm
P14/P14R	EIAJ-3	4.75	1.7	9.5	5.0	mm



Stripped and Tinned



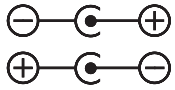
DC PLUG TYPE

PXX X X

Plug Type:
PXX = See above plug options
ST = Stripped and Tinned

Plug Angle:
"blank" = Straight
R = Right Angle

Plug Polarity:
P = Center Positive
N = Center Negative



*Contact CUI for additional plug options

REVISION HISTORY

rev.	description	date
1.0	initial release	05/18/2010
1.01	applied new spec template	08/02/2011
1.02	updated voltage	12/22/2011
1.03	updated P7/P7R B dimension	03/23/2012
1.04	updated safety and EMI/EMC data	05/15/2012
1.05	safety and EMI/EMC data updated, V-Infinity branding removed	08/15/2012
1.06	updated series/model numbers	11/20/2012
1.07	corrected dc cord lengths	01/16/2013
1.08	removed PSE	06/11/2013
1.09	added ac cord options	11/18/2014
1.10	updated datasheet	01/21/2015

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

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