

**SERIES:** ETSA 60W U | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

- 60 W power
- universal input (90~264 Vac)
- compact size
- single regulated output from 12~24 V
- over voltage and short circuit protections
- UL/cUL, Intertek and PSE safety approvals
- level V efficiency
- custom designs available



MODEL	output voltage	output current max	output power max	ripple and noise <sup>1</sup> max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
ETSA120500U	12	5	60	200	V
ETSA190342U	19	3.42	60	240	V
ETSA240270U	24	2.7	60	240	V

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

**PART NUMBER KEY**

**ETSA120500U X - XX - SZ - CXX**

Base Number  
example of 12 Vdc, 5 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:  
see output plug options  
on page 7

Factory  
Designation

Reserved for Custom  
Configurations

**INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
inrush current	12 V output			1.4	A
	all other outputs			1.5	A
leakage current	12 V output			0.35	mA
	all other outputs			0.25	mA
no load power consumption	12 V output			0.3	W
	all other outputs			0.5	W

**OUTPUT**

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

**PROTECTIONS**

parameter	conditions/description
over voltage protection	output voltage clamped by internal protection zener
short circuit protection	output shut down, auto restart

**SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute			1,500	Vac
insulation resistance	input to output at 500 Vdc	100			MΩ
safety approvals	UL/cUL (UL 60950-1), EN 60950-1/IEC 60950-1, PSE				
EMI/EMC	FCC part 15, subpart b, class B; CE; CISPR 22, class B; ICES-003; ANSI C63.4; EN 61204-3; EN 55022; EN 55024; EN 61000-(2, 3); IEC 61000-4-(2, 3, 4, 5, 6, 8, 11)				
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	%

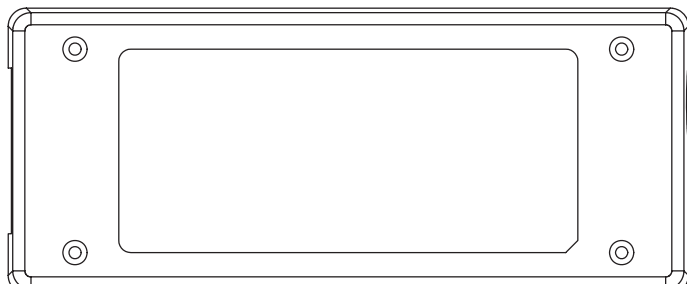
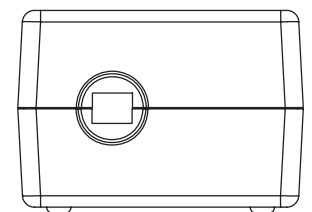
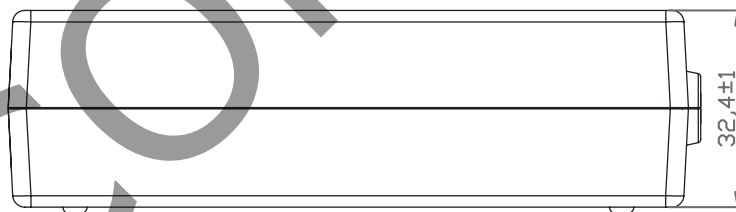
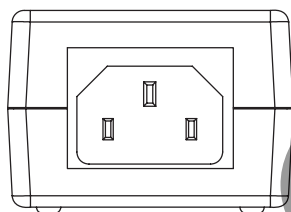
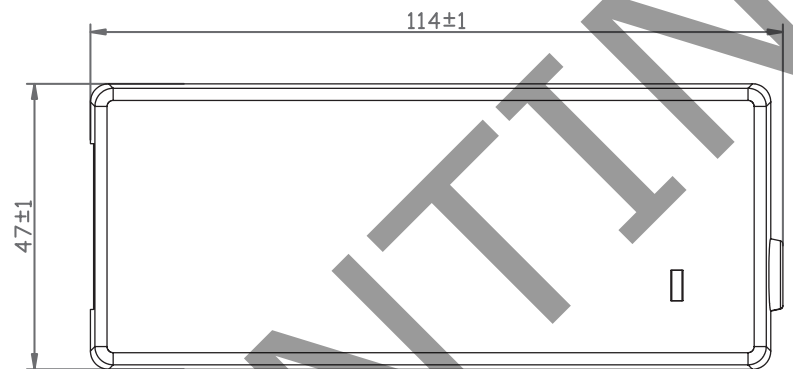
**MECHANICAL**

parameter	conditions/description	min	typ	max	units
dimensions	114 x 47 x 32.4 (4.488 x 1.850 x 1.276 inches)				mm
input plug	IEC320 / C14				
weight <sup>1</sup>			230		g

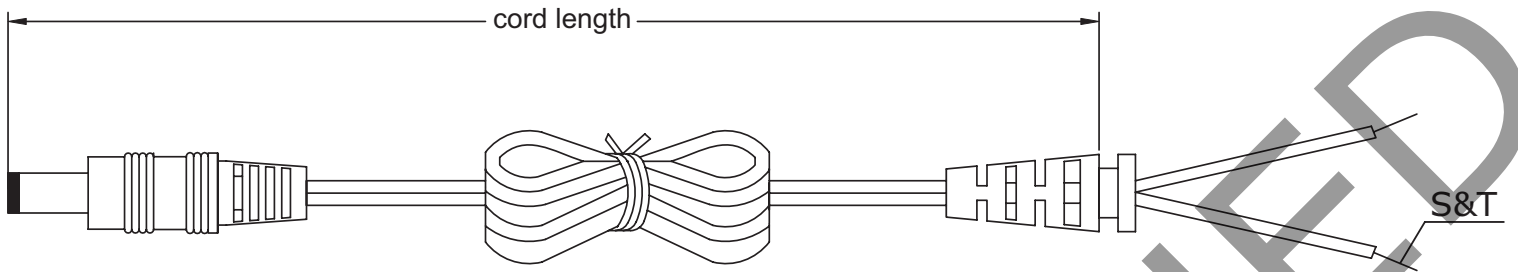
Notes: 1. weight does not include AC Cord

**MECHANICAL DRAWING**

units: mm

tolerance:  $\pm 1$ mm

## DC CORD

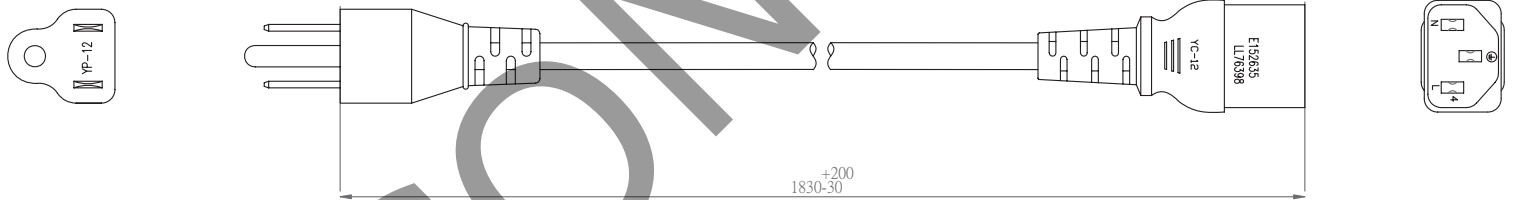


MODEL NO.	CABLE GAUGE	CORD LENGTH
ETSA120500U	16 AWG	1,000 mm ±100
ETSA190342U	18 AWG	1,530 mm ±100
ETSA240270U	18 AWG	1,530 mm ±100

## AC CORD

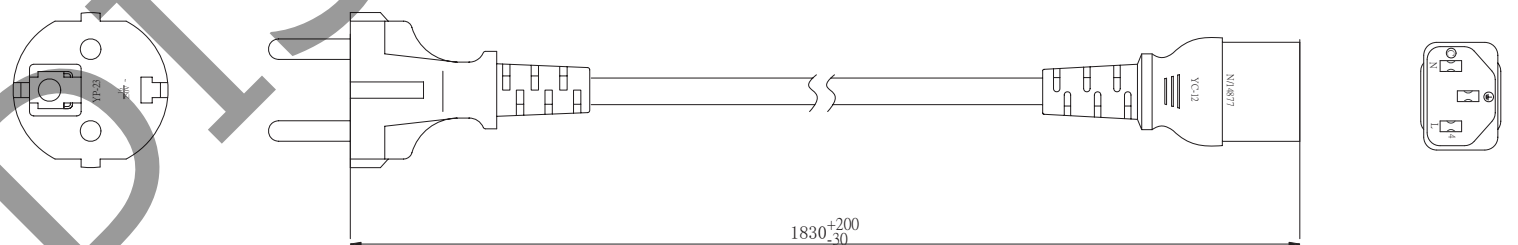
### NORTH AMERICAN INPUT CABLE

units: mm



### EUROPEAN INPUT CABLE

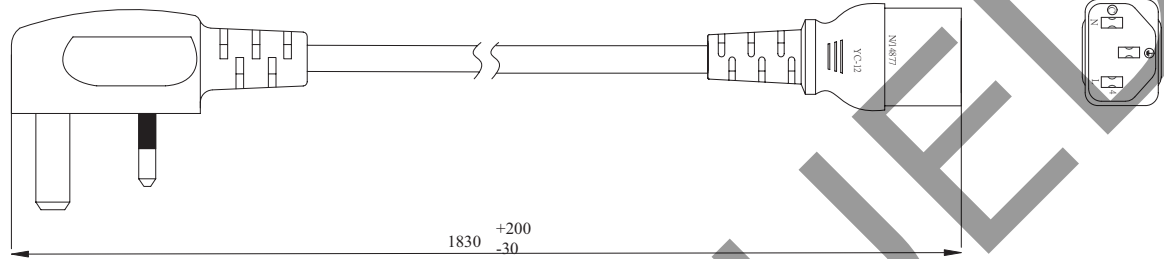
units: mm



## AC CORD (CONTINUED)

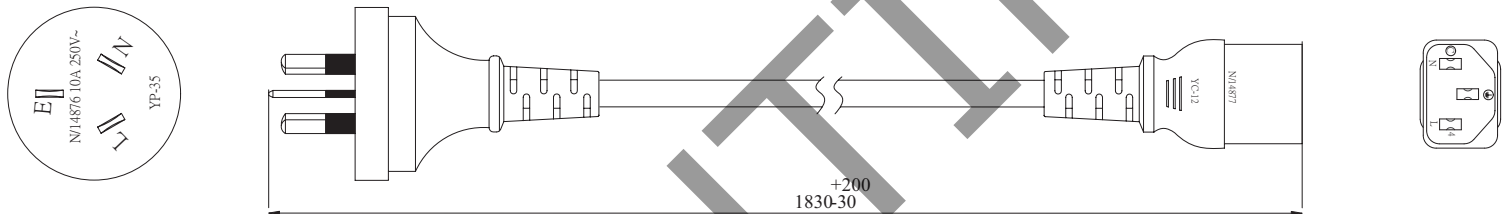
### UNITED KINGDOM INPUT CABLE

units: mm



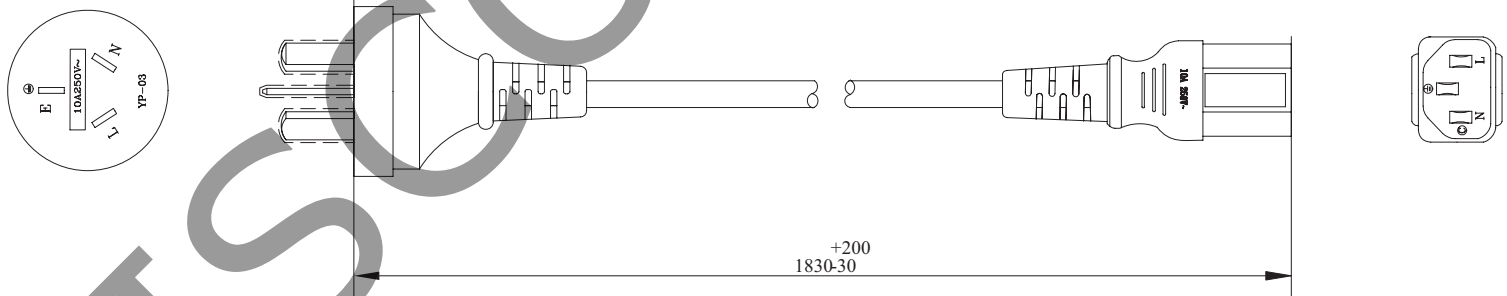
### AUSTRALIAN INPUT CABLE

units: mm



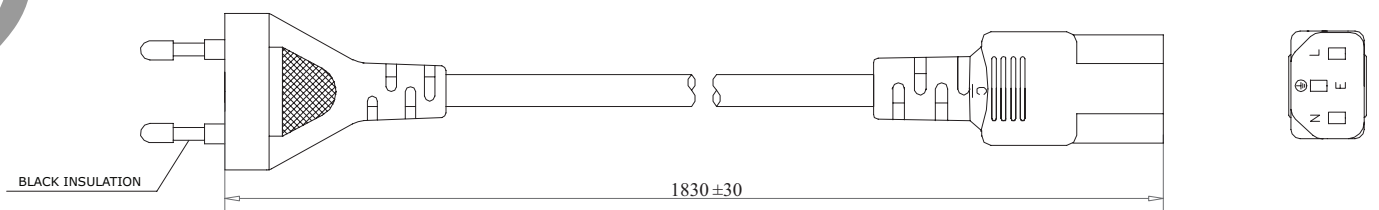
### CHINA INPUT CABLE

units: mm



### SOUTH KOREA INPUT CABLE

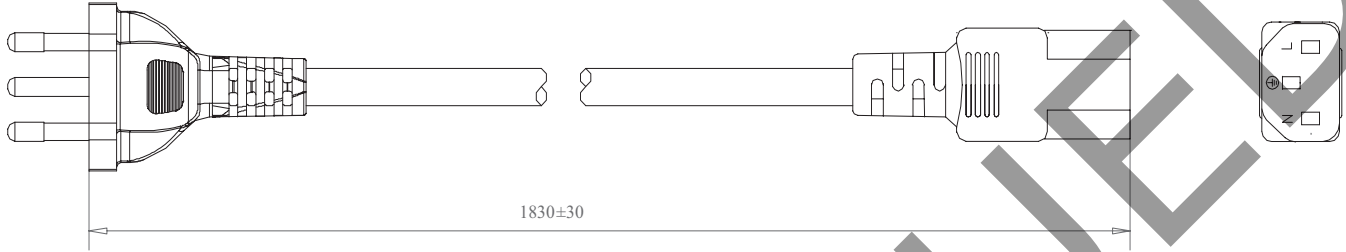
units: mm



## AC CORD (CONTINUED)

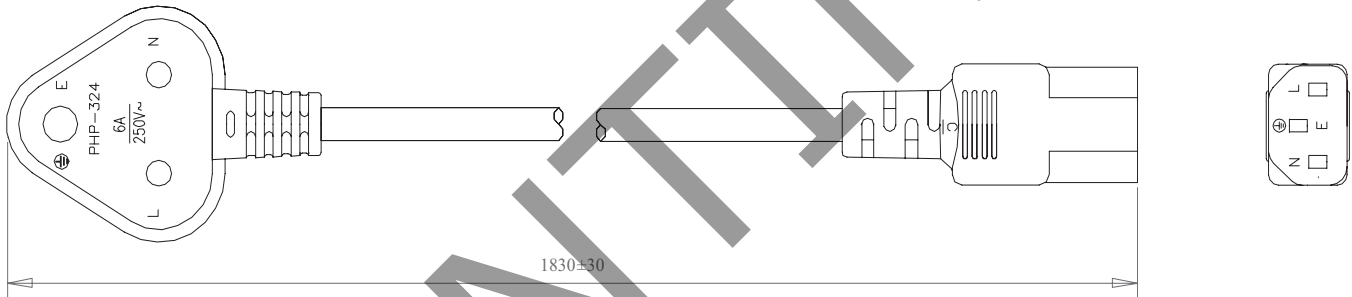
### BRAZIL INPUT CABLE

units: mm



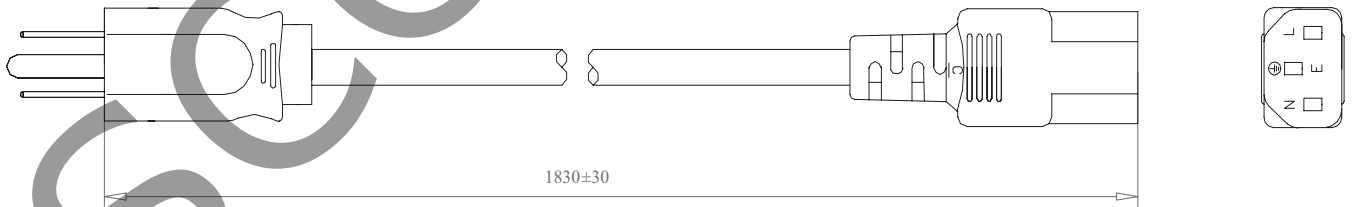
### SOUTH AFRICA INPUT CABLE

units: mm



### JAPAN INPUT CABLE

units: mm



## OUTPUT PLUG OPTIONS

### 3.5 mm Phono Plug



P1



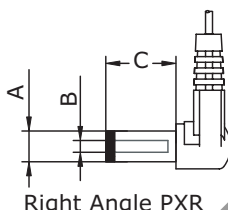
P1R

\*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

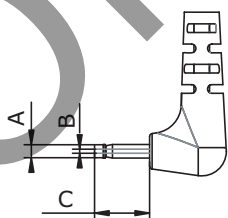


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

### 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 XX**

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	12/05/2011
1.01	updated P7/P7R B dimension, V-Infinity branding removed, safety and EMI/EMC data updated	08/15/2012
1.02	updated DC Cord information	11/14/2012
1.03	updated series number	11/20/2012
1.04	added ac cord options	11/20/2014

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



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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.