SERIES: EMSA 30W **DESCRIPTION: SWITCHING POWER SUPPLY**

FEATURES

- universal AC input
- regulated output voltage
- short circuit protection
- meets EISA / efficiency level V regulations
- custom designs available

RoHS

MODEL	output voltage	output current		output wattage	ripple*	efficiency level	cord length
	nominal (V dc)	min (A)	max (A)	max (W)	max. (mVp-p)		(mm)
EMSA120250	12	0	2.5	30	300	V	1530 ±100
EMSA200150	20	0	1.5	30	300	V	1530 ±100
EMSA240125	24	0	1.25	30	300	V	1530 ±100

*at full load, 100 ~ 240 V ac input, measured at 20MHz bandwidth with a 10 uF electrolytic cap and a 0.1 uF ceramic cap on the output

PART NUMBER KEY

EMSA120250 X - XX - SZ - CXX

Base Number
example of 12 V dc, 2.5 A

Blades:
"blank" = North American, European, United Kingdom, Australian, and China blades included
N = North American blade included
E = European blade included
B = United Kingdom blade included
A = Australian blade included
C = China blade included

DC Plug type:
see output plug options on page 4

Factory Designation

Reserved for custom configurations

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INPUT

parameter	conditions/description	min	nom	max	units
rated input voltage		100		240	V ac
input voltage range		90		264	V ac
rated frequency		50		60	Hz
frequency range		47		63	Hz
rated input current				1.0	A
no load power consumption				0.3	W

OUTPUT

parameter	conditions/description	min	nom	max	units
line regulation			±1		%
load regulation			±5		%
over voltage protection	output voltage clamped by internal protection zener				
short circuit protection	output shut down and auto-restart				

SAFETY & EMI

parameter	conditions/description	min	nom	max	units
HI-POT	input to output at 10 mA for 1 minute			3,000 4,242	V ac V dc
insulation resistance	input to output at 500 V dc	100			MΩ
safety approvals	UL/cUL, GS, BSMI, RCM, CCC				
EMI standard	FCC class B, CE, VCCI-II				
leakage current				0.25	mA
RoHS compliant	yes				

ENVIRONMENTAL

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

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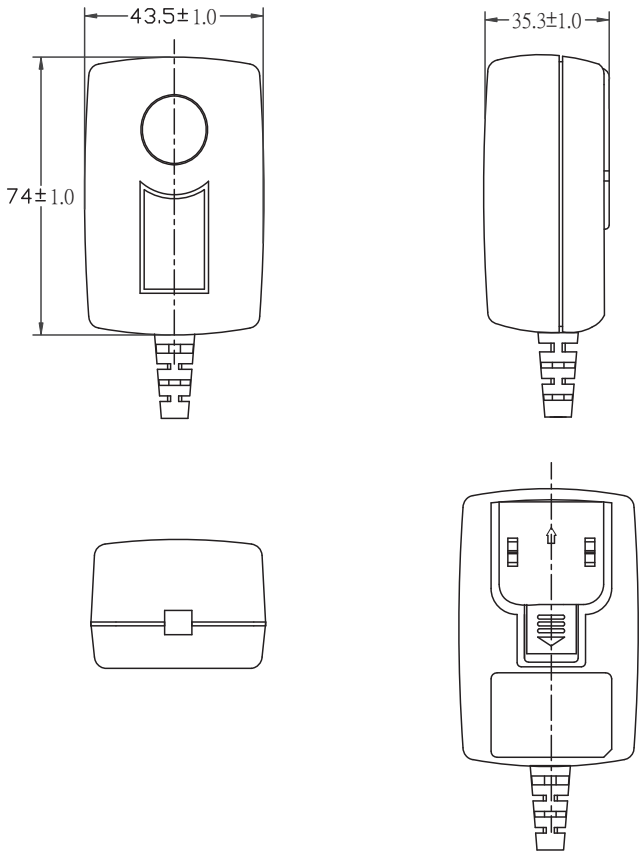
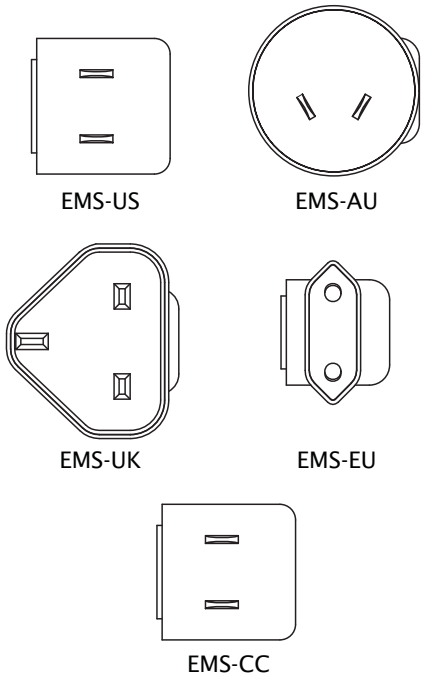
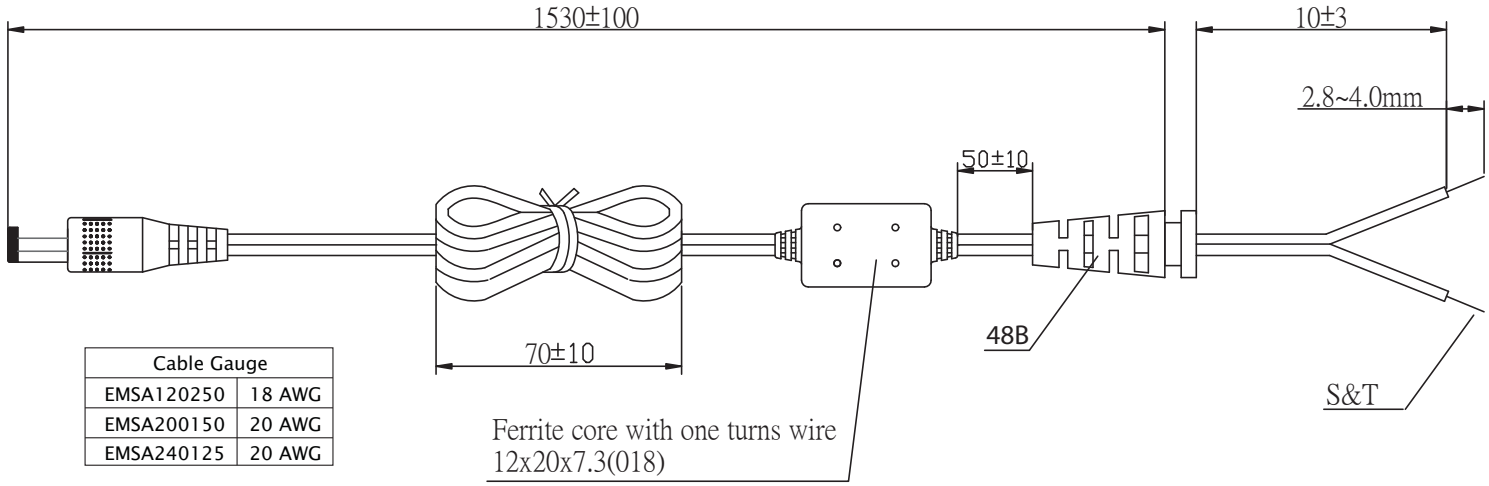
MECHANICAL DRAWING



input plug	multi-blade (UL, UK, VDE, SAA, CCC)
weight	230 g (12 V), 220 g (20/24 V)
case size	74 L x 43.5 W x 35.3 H mm tolerance: ±1 mm



DC CORD



Cable Gauge	
EMSA120250	18 AWG
EMSA200150	20 AWG
EMSA240125	20 AWG

Black wire, white stripe: Positive

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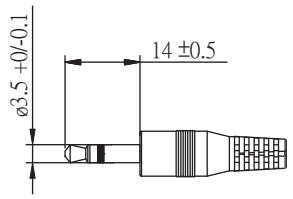
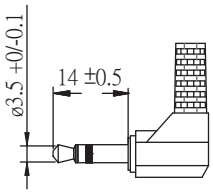
OUTPUT PLUG OPTIONS

3.5 mm Phono Plug



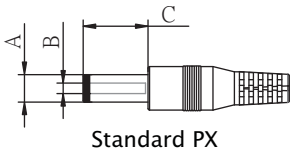
P1



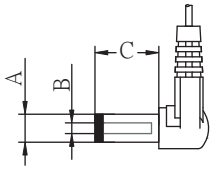
P1R

*Tip positive

Standard DC Plug



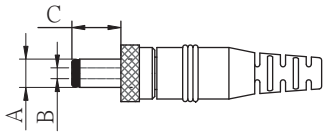
Standard PX



Right Angle PXR

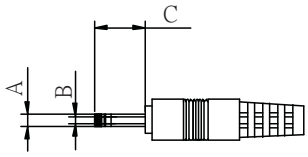
	A	B	C	Unit
P5/P5R	5.5	2.1	9.5	mm
P6/P6R	5.5	2.5	9.5	mm
P7/P7R	3.5	1.3	9.5	mm
P8/P8R	3.8	1.35	9.5	mm
P9/P9R	3.8	1.05	9.5	mm

Locking DC Plug

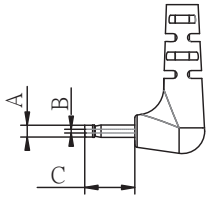


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

EIAJ Plugs

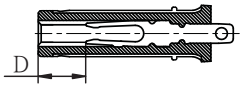


Standard PXX

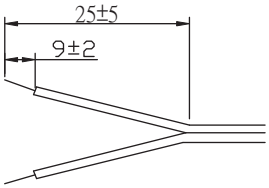


Right Angle PXXR

	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

ST

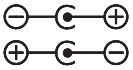
stripped and tinned

PXX X X

Plug type

Plug angle:
"blank" = standard
R = right angle

Plug polarity:
"blank" = N/A
P = center positive
N = center negative



***Contact CUI for additional output plug options.**

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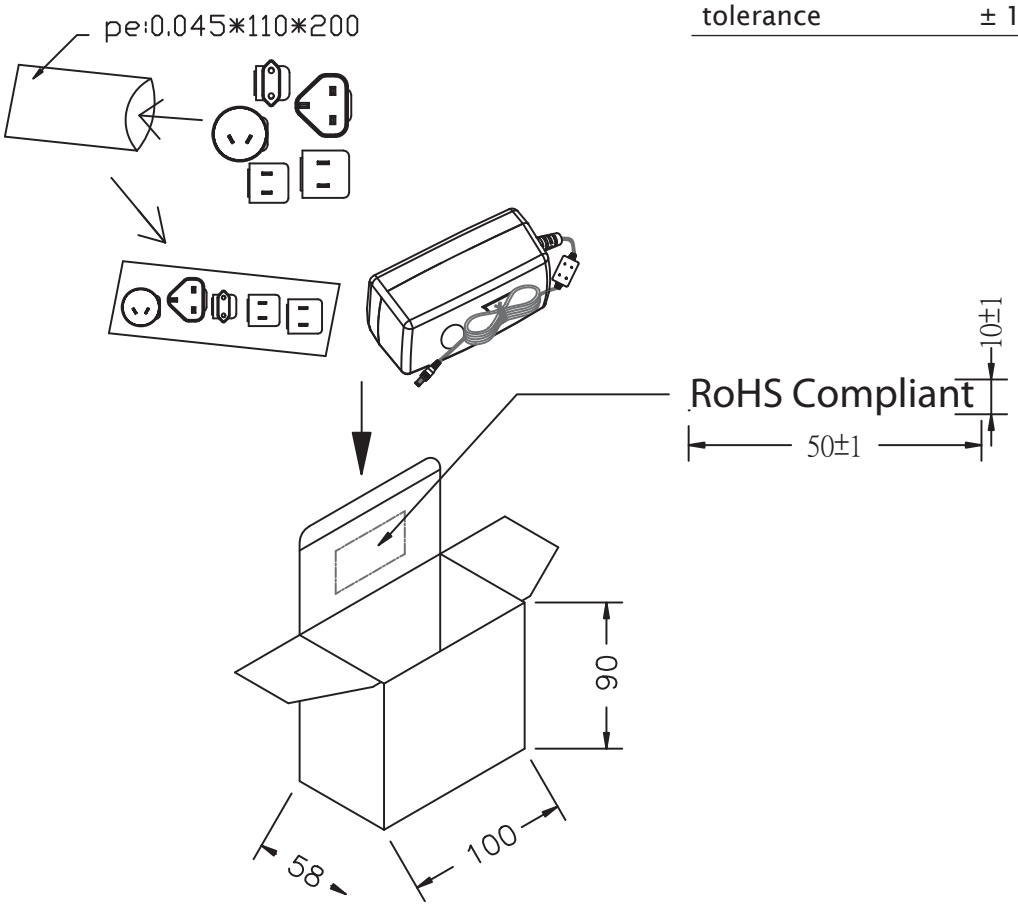
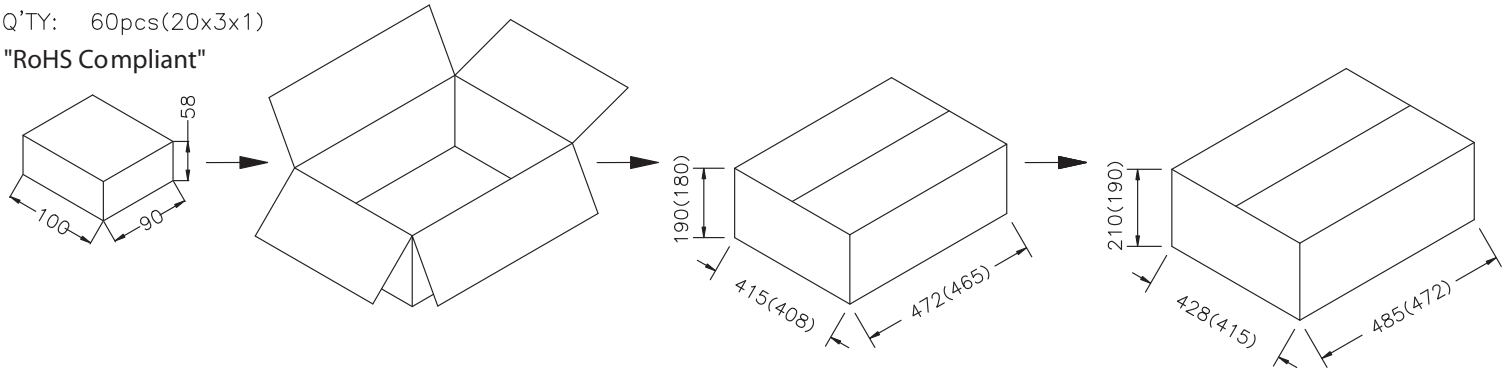
INDIVIDUAL PACKAGING

tolerance	± 1 mm



PACKAGING

tolerance	+7 / -0 mm

EXTERNAL CARTON MATERIAL:A=B(6mm)
INTERNAL CARTON MATERIAL:B3B(3mm)
CARTON SIZE: 485X428X210mm
Q'TY: 60pcs(20x3x1)
"RoHS Compliant"