

SERIES: YHY-DS60-CH | DESCRIPTION: AC-DC Battery Charger



FEATURES

- Universal AC input / Full range
- Constant current and voltage (CC-CV mode)
- Suitable for continue load
- For high surge current equipment
- Protections: Short circuit /Overload /Over voltage
- Changeable LED Indicator

APPLICATIONS

- Lead-acid Batteries
- Li-ion Batteries

Note: Modification for charger specification may be required for different battery specifications. Please contact battery vendor and YHYadapter for details.



Part #	Model #	Output Voltage (Vdc)	Output Current (Amp)	Output Power (Watt)	Charging Voltage Range(Vdc)	Recommended Battery Capacity (AH)	Ripple & Noise (mVp-p)
DSXXXXYYAA-CH-BB-NN (Notes As below)	YHY-08405000	8.4	5.00	42	6-8.4	30-90	100
	YHY-12604760	12.6	4.76	60	9-12.6	20-65	120
	YHY-14504130	14.5	4.14	60	12-14.5	20-65	150
	YHY-16803570	16.8	3.57	60	12-16.8	20-65	200
	YHY-21002860	21	2.86	60	15-21	10-35	200
	YHY-25202380	25.2	2.38	60	18-25.2	10-35	240
	YHY-29402040	29.4	2.04	60	21-29.4	10-35	300

YHY-33601790	33.6	1.79	60	24-33.6	5-20	300
YHY-36001670	36	1.67	60	25-36	5-20	300
YHY-42001430	42	1.43	60	30-42	5-20	300
YHY-50401190	50.4	1.19	60	36-50.4	5-20	300
YHY-54601100	54.6	1.10	60	39-54.6	5-20	300

Notes: 1. At full load, nominal input 100-240Vac, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 μ F multilayer ceramic and 10 μ F low ESR electrolytic capacitors.

PART NUMBER

DSXXXYYYAA-CH-BB-NN

XXX:	YYY:	AA:	BB:	NN:
Output Voltage	Power	IEC320-C8/C6/C14	DC Connector	A/E/H/S/D/XW...
12.6Vdc=126	60W=060		Barrel=N/A 4Pin=4P	

INPUT

Paramater	Description	Min.	Typ	Max.	Units
Input Voltage		90		264	Vac
Rated Voltage		100		240	Vac
Input Frequency		47		63	Hz
Rated Frequency		50		60	Hz
Current				1.5	A
Inrush Current	110Vac 60Hz, Full load, 25°C			40	A
	220Vac 50Hz, Full load, 25°C			80	A
Leakage Current	110Vac / 220Vac			0.05	mA
No Load Power Consumption	110Vac / 220Vac			0.21	W
Fuse		3.5			A

OUTPUT

Paramater	Description	Min.	Typ	Max.	Units
Regulation		±5			%

RECOMMENDED BATTERY

CAPACITY

LED Indicator	Green LED ON Current			150mA	
	Red LED ON Current	450mA			

PROTECTION

Paramater	Description	Min.	Typ	Max.	Units
Over Voltage Protection	Output Shut Down				%
Over Current Protection	Output Shut Down, Auto Recovery				%
Short Circuit Protection	Output Shut Down, Auto Recovery				%

SAFETY & COMPLIANCE

Paramater	Description	Min.	Typ	Max.	Units
Isolation Voltage	Power Supply of Class I, primary to secondary (AC input grounding connection with the DC output negative terminal) ,3s		1500		Vac
	Power Supply of Class II, primary to secondary, 3s		3000		Vac
Isolation Resistance	500Vdc between Primary Live, Primary Neutral and secondary.	10			MΩ
EMI/EMC	FCC Part 15B Class B, CE				
MTBF	25℃	50,000			Hrs
RoHs	YES				

ENVIRONMENT

Paramater	Description	Min.	Typ	Max.	Units
Operating temperature	Full load, Normal operation	0		40	℃
Storage temperature	With package	-40		85	℃
Operating humidity	Full load , Normal operating	5		95	%

Storage humidity	Non-condensing	10	90	%
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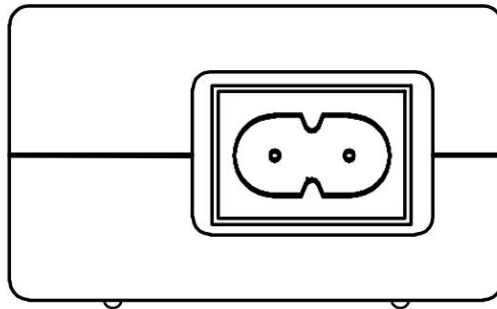
MECHANICAL

Parameter	Description	Min.	Typ	Max.	Units
Dimension	115 x 50 x 30				mm

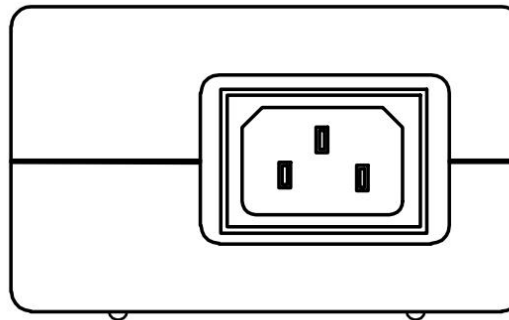
MECHANICAL DRAWING

Unit: mm
Tolerance: ± 0.2

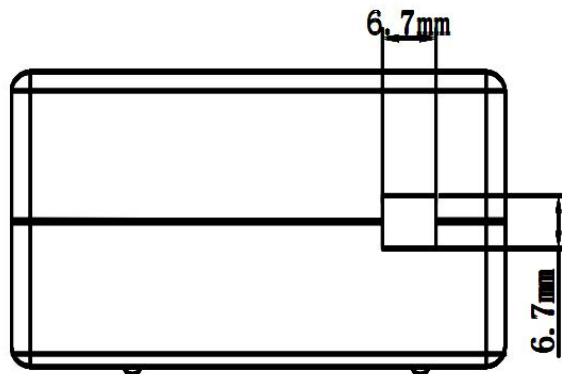
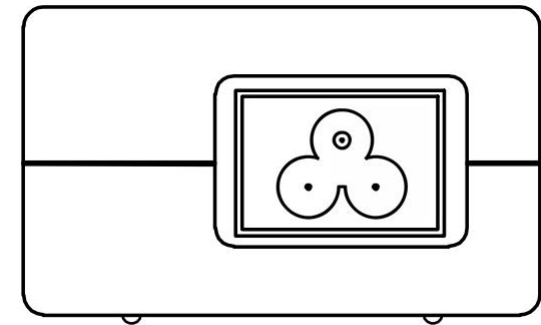
IEC320-C8

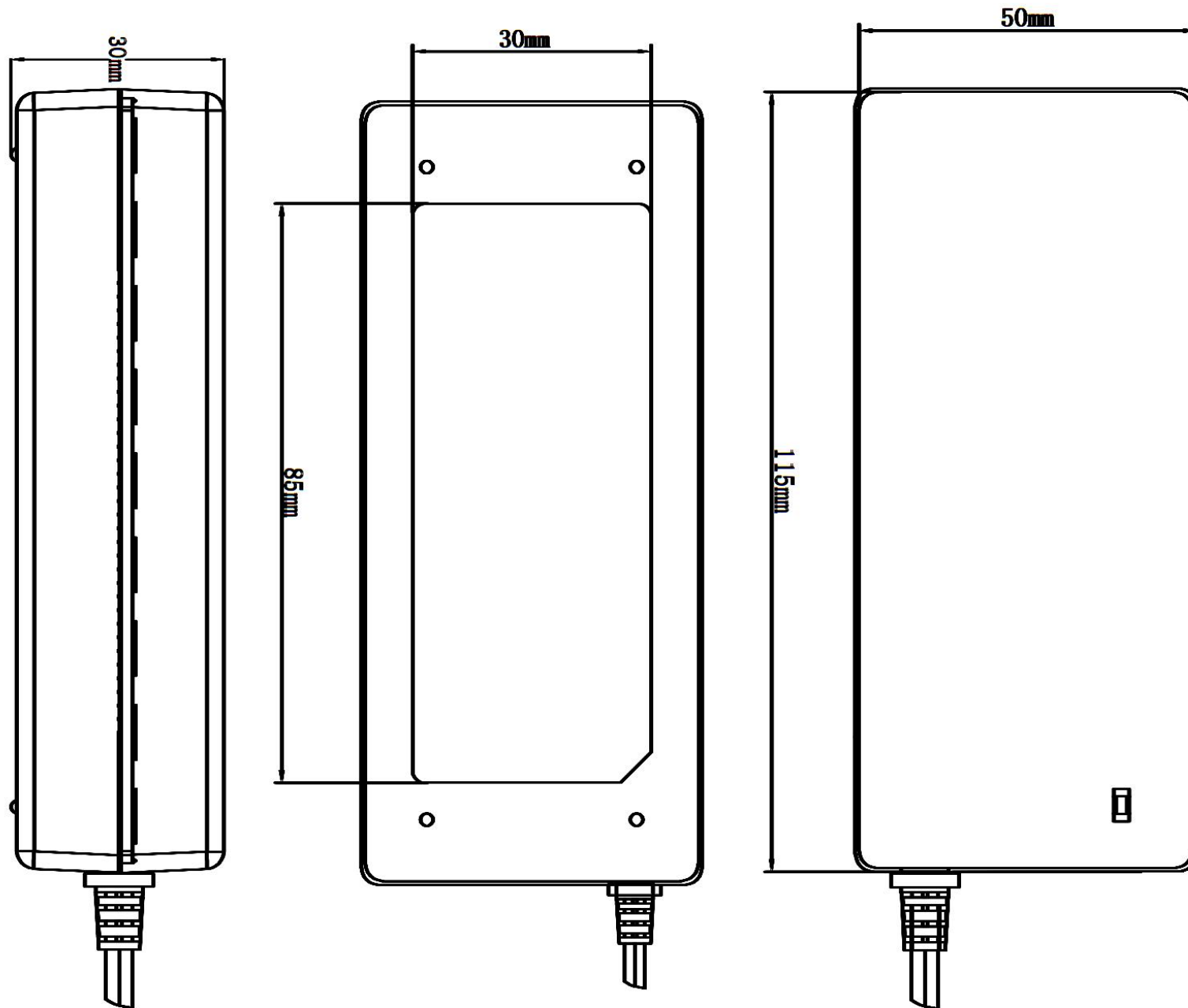


IEC320-C14



IEC320-C6





DC CABLE

Unit: mm

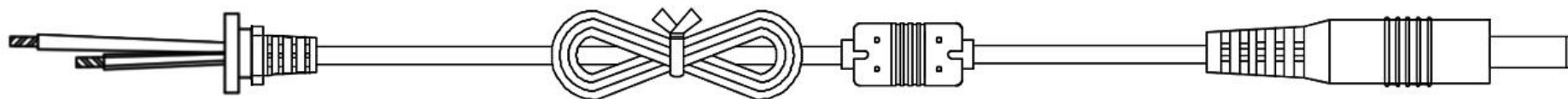


Table 1

Cable	Length
UL2464, 20AWG	1200mm±30
UL2468, 20AWG	1200mm±30
UL1185, 20AWG	1200mm±30

DC CONNECTOR

Plug Polarity

P= Center Positive

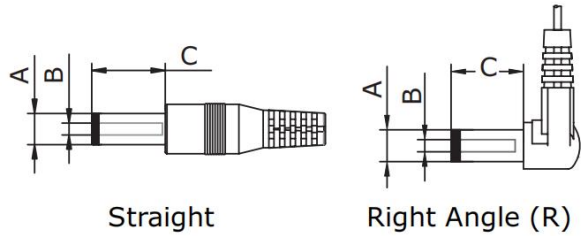


N= Center Negative

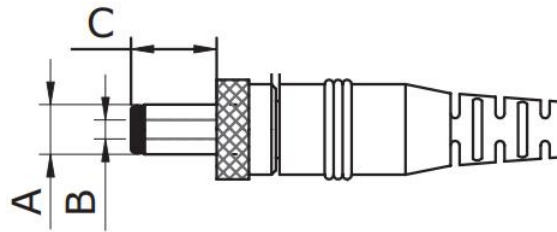


Plug Polarity		Type	Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.		A	B	C	Straight	Right
■	■	Barrel	5.5	2.1	10	■	■
■	■		5.5	2.5	10	■	■
■	■		6.5	3.0	10	■	N/A
■	■	Locking	5.5	2.1	9.5	■	N/A
■	■		5.5	2.5	9.5	■	N/A
N/A	N/A	Din		4Pin		■	N/A
N/A	N/A	Cigarette Lighter		Male		■	N/A
N/A	N/A			Female		■	N/A
N/A	N/A	Stipped & Tinned				N/A	N/A

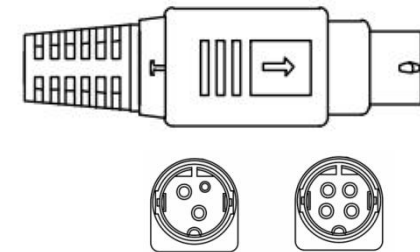
Barrel



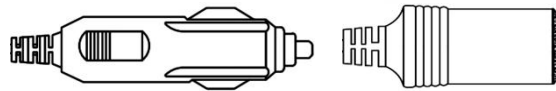
Locking



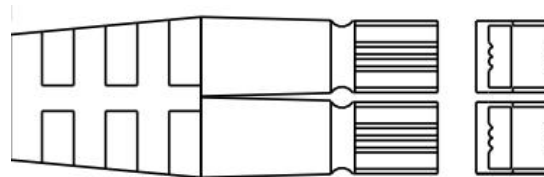
Din



Cigarette Lighter



Anderson Connector



Stripped & Tinned



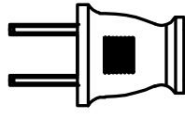
AC POWER CORD



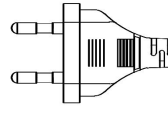
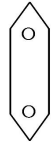
Table 2

AC Power Cord	North America	Europe	United Kingdom	Australia	South Korea	Japan	China	South Africa	Argentina
Length	1200mm ± 30								
Cable Type	2Cx18AWG								
Connector	IEC320-C7								

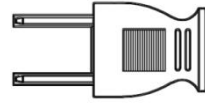
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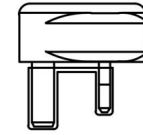
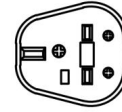
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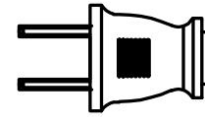
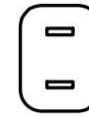
JAPAN



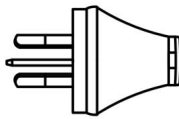
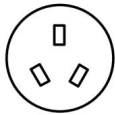
UNITED KINGDOM



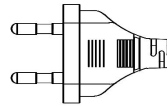
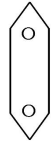
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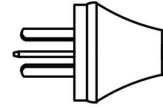
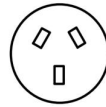
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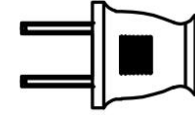
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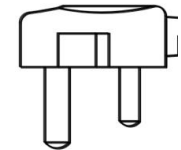
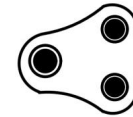
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CHINA



SOUTH AFRICA



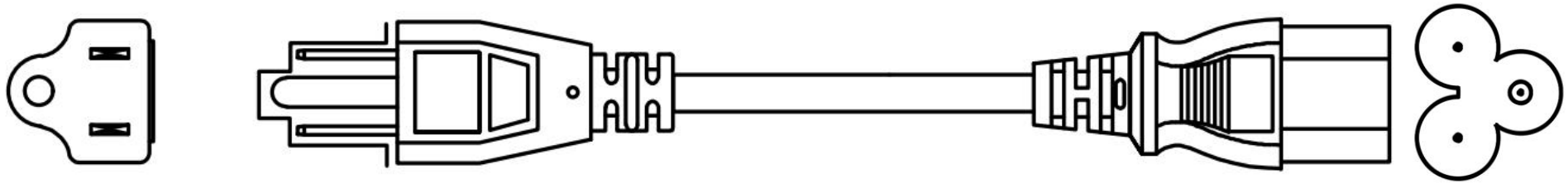


Table 3

AC Power Cord	North America	Europe	United Kingdom	Australia	South Korea	Japan	China	South Africa	Argentina	Italy	Switzerland	Brazil
Length	1200mm $\pm$ 30											
Cable Type	3Cx18AWG											
Connector	IEC320-C5											

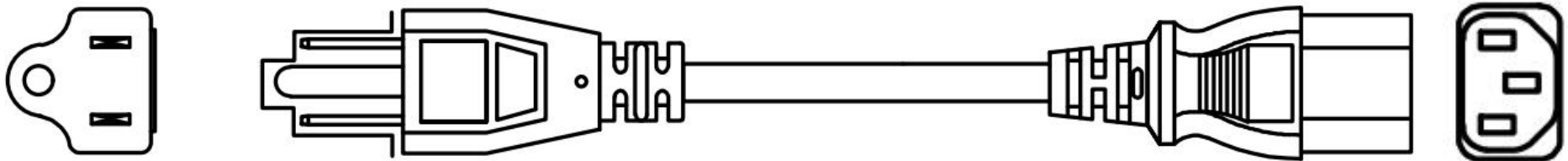
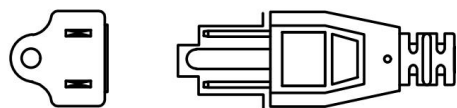


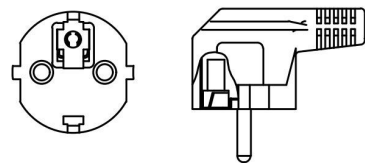
Table 4

AC Power Cord	North America	Europe	United Kingdom	Australia	South Korea	Japan	China	South Africa	Argentina	Italy	Switzerland	Brazil
Length	1200mm $\pm$ 30											
Cable Type	3Cx18AWG											
Connector	IEC320-C13											

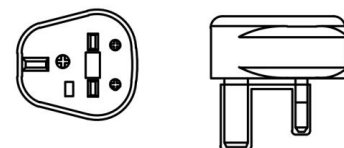
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EUROPE



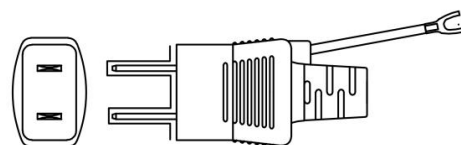
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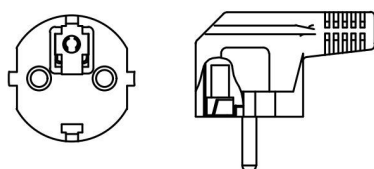
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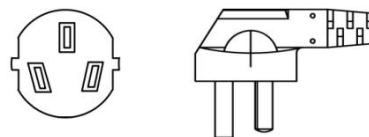
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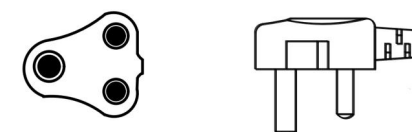
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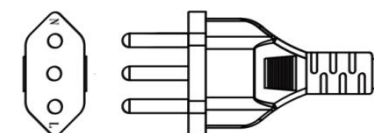
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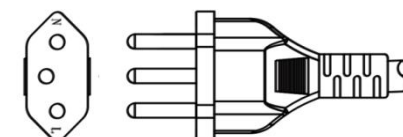
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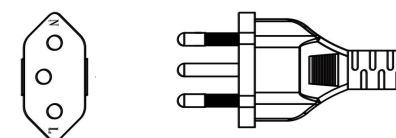
ITALY



SWITZERLAND



BRAZIL



ARGENTINA



REVISION HISTORY

REV.	Description	Date
1.0	Initial release	2025-7-4



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