



SERIES: EMSA 40W

DESCRIPTION: SWITCHING POWER SUPPLY

FEATURES

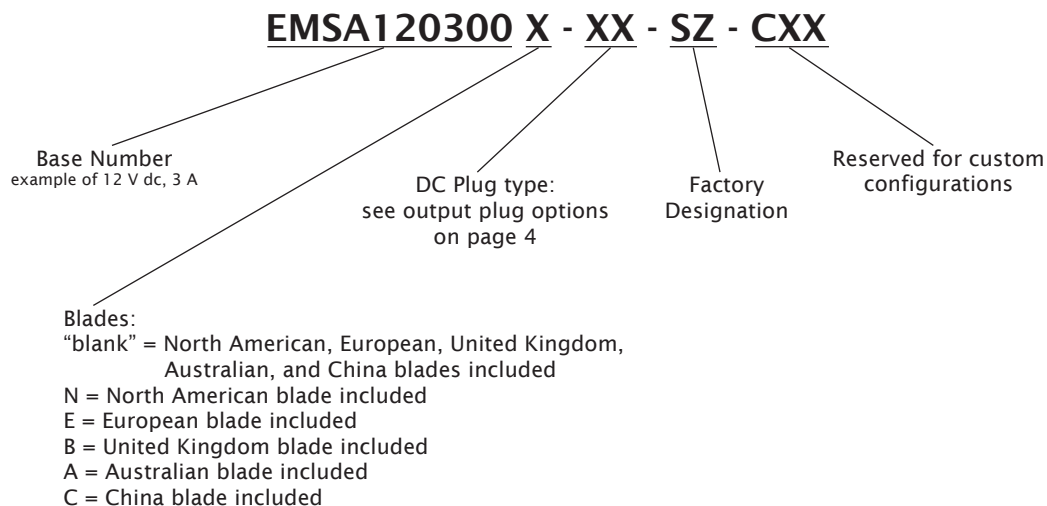
- universal AC input
- regulated output voltage
- short circuit protection
- meets EISA / efficiency level V regulations
- custom designs available



| MODEL | output voltage | | output current | | output wattage | ripple* | efficiency level | cord length (mm) |
|------------|-------------------|--|----------------|------------|----------------|-----------------|------------------|---------------------|
| | nominal (V dc) | | min (A) | max (A) | max (W) | max. (mVp-p) | | |
| EMSA120300 | 12 | | 0 | 3.0 | 36 | 300 | V | 1530 ±100 |
| EMSA200200 | 20 | | 0 | 2.0 | 40 | 300 | V | 1530 ±100 |
| EMSA240167 | 24 | | 0 | 1.67 | 40 | 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





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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

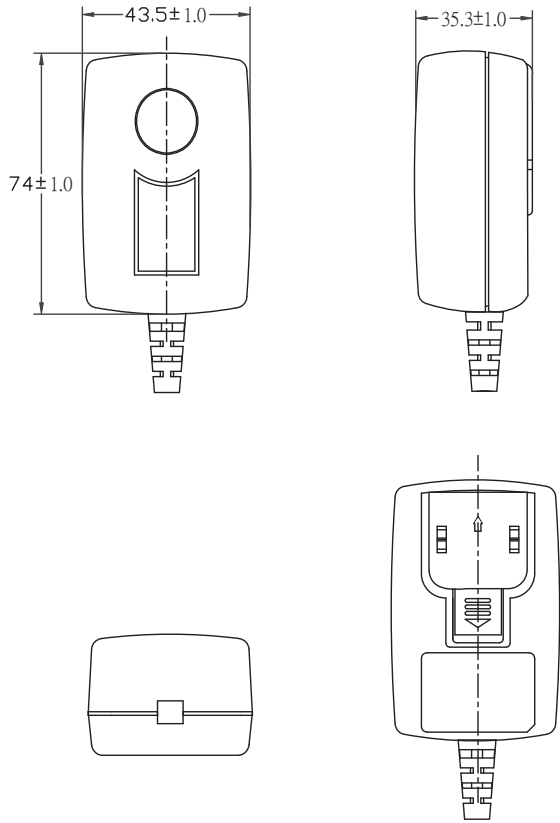
| parameter | conditions/description | min | nom | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| operating humidity | | 20 | | 80 | % |
| storage temperature | | -10 | | 70 | °C |
| storage humidity | | 10 | |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



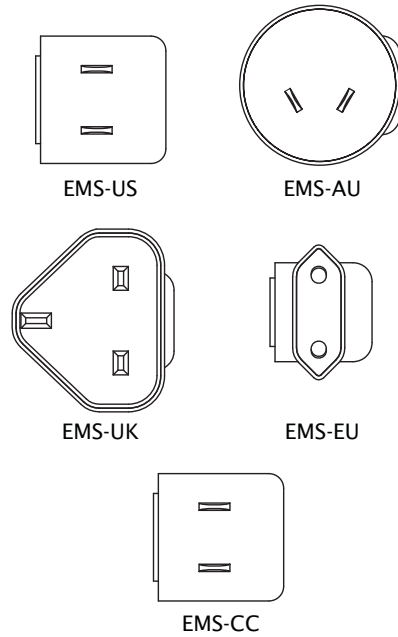
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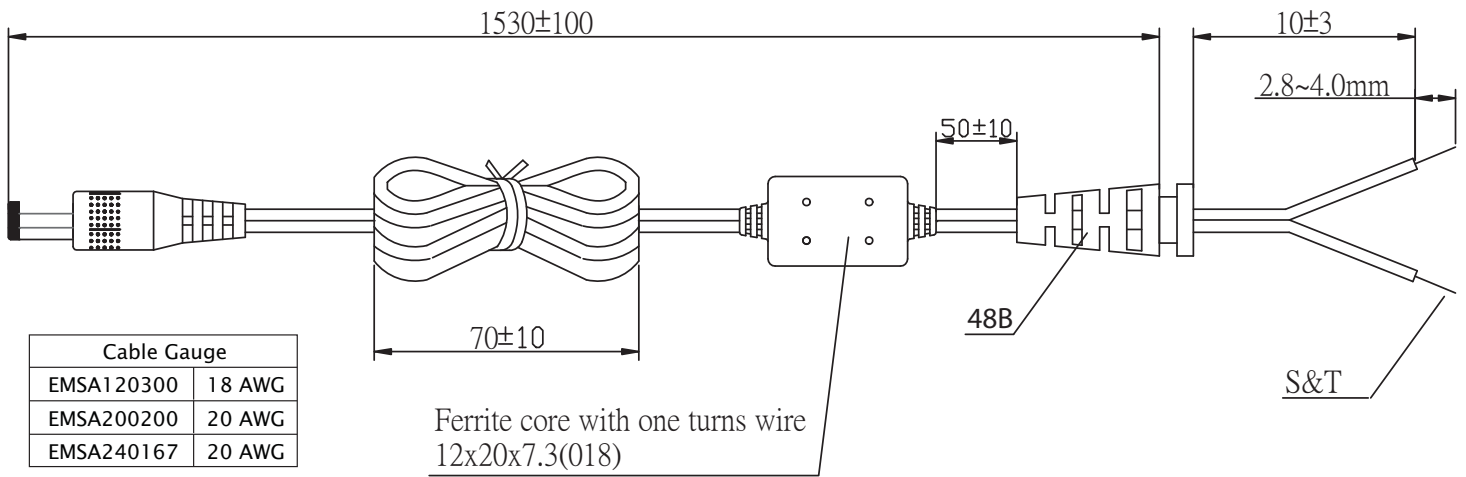
MECHANICAL DRAWING



| | |
|------------|---|
| input plug | multi-blade (UL, UK, SAA, VDE, CCC) |
| case size | 74 L x 43.5 W x 35.3 H mm tolerance: ±1 mm |



DC CORD



| Cable Gauge | |
|-------------|--------|
| EMSA120300 | 18 AWG |
| EMSA200200 | 20 AWG |
| EMSA240167 | 20 AWG |

Ferrite core with one turns wire
12x20x7.3(018)

Black wire, white stripe: Positive

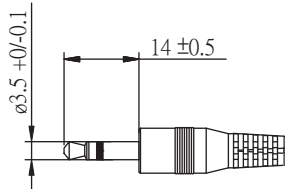


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OUTPUT PLUG OPTIONS

3.5 mm Phono Plug



P1



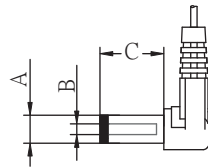
P1R

*Tip positive

Standard DC Plug



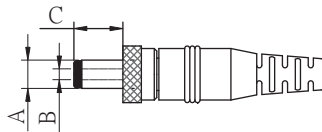
Standard PX



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

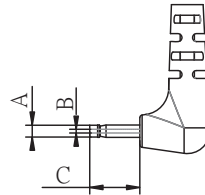


| | A | B | C | Unit |
|-----|-----|-----|-----|------|
| P10 | 5.5 | 2.1 | 9.5 | mm |
| P11 | 5.5 | 2.5 | 9.5 | mm |

EIAJ Plugs



Standard PXX

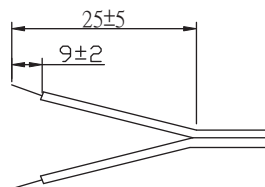


Right Angle PXXR

| | 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

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*Contact CUI for additional output plug options.



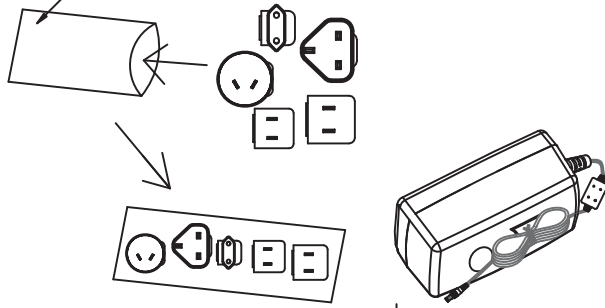
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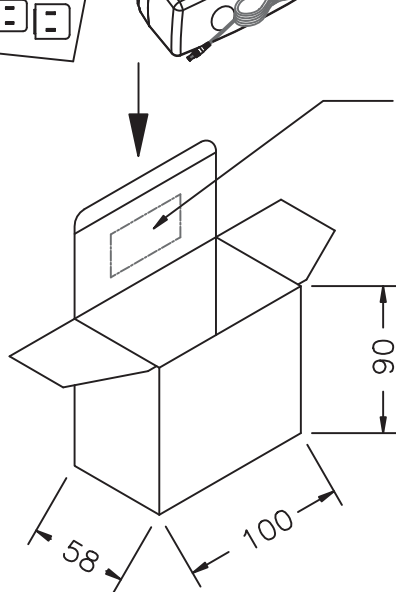
INDIVIDUAL PACKAGING

pe:0.045*110*200

tolerance ± 1 mm



RoHS Compliant
 50 ± 1
 10 ± 1



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"

