

SERIES: ETMA 30W | DESCRIPTION: MEDICAL AC-DC POWER SUPPLY

FEATURES

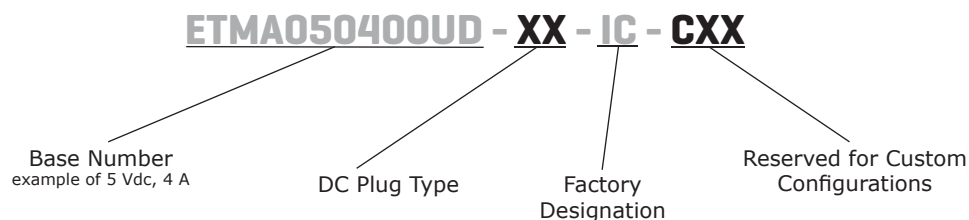
- up to 30 W power
- universal input (90~264 Vac)
- single regulated output from 5~24V
- over voltage and short circuit protections
- full medical safety approvals
- level V efficiency
- custom designs available



| MODEL | output voltage (Vdc) | output current max (A) | output power max (W) | ripple and noise ¹ max (mVp-p) | efficiency level |
|------------|-------------------------|---------------------------|-------------------------|--|------------------|
| ETMA050400 | 5 | 4 | 20 | 50 | V |
| ETMA090300 | 9 | 3 | 27 | 90 | V |
| ETMA120250 | 12 | 2.5 | 30 | 120 | V |
| ETMA150200 | 15 | 2 | 30 | 150 | V |
| ETMA180165 | 18 | 1.65 | 30 | 180 | V |
| ETMA240125 | 24 | 1.25 | 30 | 240 | V |

1. at full load, 100 ~ 240 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with a 10 μ F aluminum electrolytic and 0.1 μ F ceramic capacitors.

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|------------------------|-----|-----|-----|-------|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| input current | | | | 0.6 | A |
| inrush current | at 240 Vac | | | 50 | A |
| no load power consumption | | | | 0.3 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|------------------------------|------------------------|-----|-------|-----|-------|
| line regulation ¹ | | | ±1 | | % |
| load regulation ² | 5 V output | | ±6 | | % |
| | 9 V output | | ±4 | | % |
| | 12, 15 V outputs | | ±3 | | % |
| | 18, 24 V outputs | | ±2 | | % |
| voltage accuracy | | | ±2 | | % |
| hold-up time | at 115 Vac | | 16 | | ms |
| switching frequency | | | 70 | | kHz |
| temperature coefficient | | | ±0.05 | | %/°C |

Note: 1. measured from 100 ~ 240 Vac, full load
2. measured from 60% to full load and from 60 ~ 20% load (60% ±40% load)

PROTECTIONS

| parameter | conditions/description |
|--------------------------|--------------------------|
| over voltage protection | TVS component to clamp |
| short circuit protection | continuous, auto restart |

SAFETY & COMPLIANCE

| parameter | conditions/description | min | typ | max | units |
|-------------------|--|---------|-----|-------|-------|
| isolation voltage | input to output | | | 5,656 | Vdc |
| safety approvals | IEC 60601-1, EN 60601-1, UL 60601-1 | | | | |
| EMI/EMC | EN 55011, EN 60601-1-2, EN 61000-3-(2,3) | | | | |
| MTBF | at 25°C, 115 Vac, per MIL-HDBK-217F | 300,000 | | | hours |
| RoHS compliant | yes | | | | |

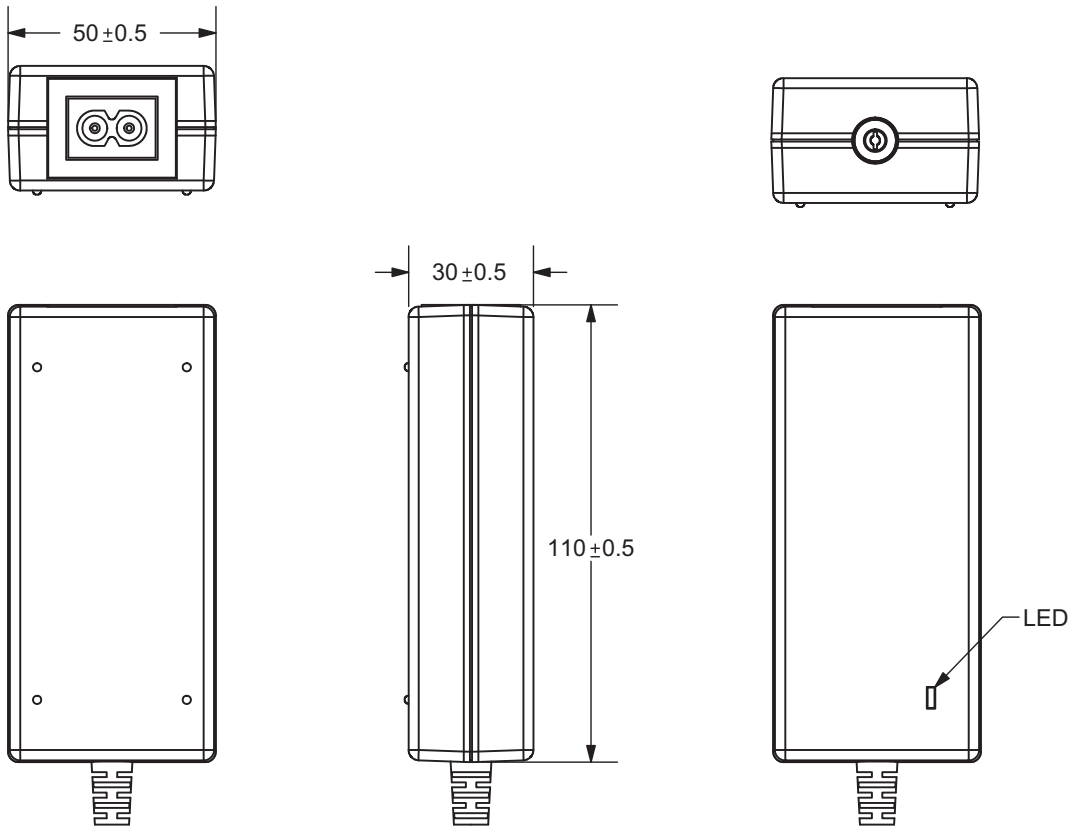
ENVIRONMENTAL

| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -20 | | 85 | °C |
| humidity | non-condensing | | | 93 | % |

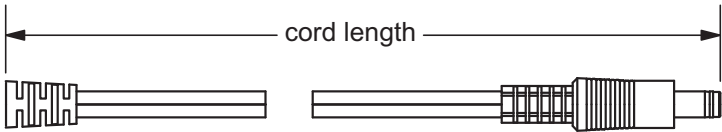
MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|------------|--|-----|-----|-----|-------|
| dimensions | 4.331 x 1.969 x 1.181 (110 x 50 x 30 mm) | | | | inch |
| input plug | IEC320 / C8 | | | | |
| weight | | | 220 | | g |

MECHANICAL DRAWING



DC CORD



| | A | B | C | Unit |
|--------|-----|-----|-----|------|
| P5/P5R | 5.5 | 2.1 | 9.5 | mm |
| P6/P6R | 5.5 | 2.5 | 9.5 | mm |

| MODEL NO. | CABLE GAUGE | CORD LENGTH |
|------------|-------------|--------------|
| ETMA050400 | 18 AWG | 720 mm ±50 |
| ETMA090300 | 18 AWG | 1,220 mm ±50 |
| ETMA120250 | 18 AWG | 1,800 mm ±50 |
| ETMA150200 | 18 AWG | 1,800 mm ±50 |
| ETMA180165 | 18 AWG | 1,800 mm ±50 |
| ETMA240125 | 18 AWG | 1,800 mm ±50 |

REVISION HISTORY

| rev. | description | date |
|------|-----------------------------|------------|
| 1.0 | initial release | 12/02/2011 |
| 1.01 | updated P7/P7R B dimension | 03/23/2012 |
| 1.02 | V-Infinity branding removed | 08/21/2012 |

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.

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