

**date** 07/10/2015

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

#### **FEATURES**

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





MODEL	output voltage	output current	output power	ripple and noise¹	efficiency level
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	
ETMA050400UD	5	4	20	50	V
ETMA090300UD	9	3	27	90	V
ETMA120250UD	12	2.5	30	120	V
ETMA150200UD	15	2	30	150	V
ETMA180165UD	18	1.65	30	180	V
ETMA240125UD	24	1.25	30	240	V

<sup>1.</sup> at full load, 100  $\sim$  240 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with a 10  $\mu$ F aluminum electrolytic and 0.1  $\mu$ F ceramic capacitors.

# **PART NUMBER KEY**

Base Number Reserved for Custom example of 5 Vdc, 4 A Configurations DC Plug Type: Factory See output plug options Designation on page 3 for more details

#### **INPUT**

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

# **OUTPUT**

conditions/description	min	typ	max	units	
		±1		%	
5 Vdc output		±6		%	
9 Vdc output		±4		%	
12, 15 Vdc outputs		±3		%	
18, 24 Vdc outputs	±2			%	
		±2		%	
at 115 Vac		16		ms	
		70		kHz	
		±0.05		%/°C	
	5 Vdc output 9 Vdc output 12, 15 Vdc outputs 18, 24 Vdc outputs	5 Vdc output 9 Vdc output 12, 15 Vdc outputs 18, 24 Vdc outputs	#1  5 Vdc output  9 Vdc output  12, 15 Vdc outputs  18, 24 Vdc outputs  #2  at 115 Vac  16  70	#1  5 Vdc output  9 Vdc output  12, 15 Vdc outputs  18, 24 Vdc outputs  #2  at 115 Vac  16  70	

# **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	as per MIL-HDBK-217F, 115 Vac, 25 °C	300,000			hours
RoHS	2011/65/EU				

# **ENVIRONMENTAL**

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

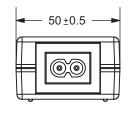
<sup>1.</sup> measured from 100  $\sim$  240 Vac, full load 2. measured from 60% to full load and from 60  $\sim$  20% load (60%  $\pm40\%$  load)

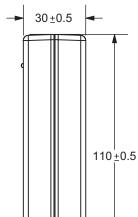
# **MECHANICAL**

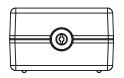
parameter	conditions/description	min	typ	max	units
dimensions	110 x 50 x 30 (4.331 x 1.969 x 1.181 inch)				mm
input plug	IEC320 / C8				
weight			220		g

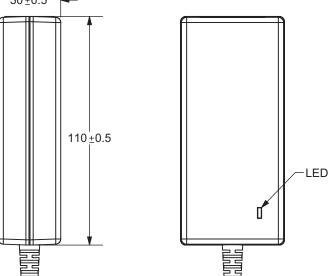
#### **MECHANICAL DRAWING**



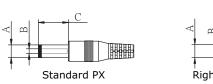




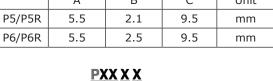


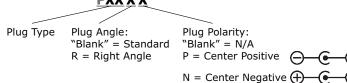


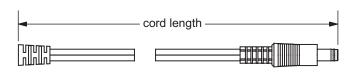
# DC OUTPUT PLUG OPTIONS / DC CORD



Standard PX			∮ ⊺ Right	Angle PXR
	А	В	С	Unit
P5/P5R	5.5	2.1	9.5	mm







MODEL NO.	CABLE GAUGE	CORD LENGTH
ETMA050400UD	18 AWG	720 mm ±50
ETMA090300UD	18 AWG	1,220 mm ±50
ETMA120250UD	18 AWG	1,800 mm ±50
ETMA150200UD	18 AWG	1,800 mm ±50
ETMA180165UD	18 AWG	1,800 mm ±50
ETMA240125UD	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
1.03	updated datasheet	07/10/2015

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.