



SERIES: ETMA 250W U | DESCRIPTION: MEDICAL AC-DC POWER SUPPLY

FEATURES

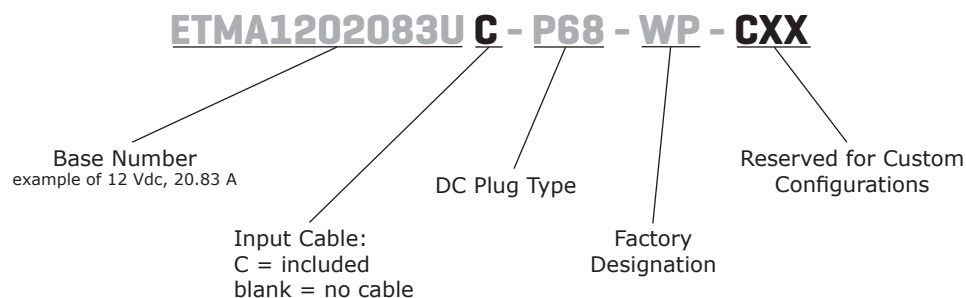
- up to 250 W power
- universal input (90~264 Vac)
- single regulated output from 12~48 V
- over voltage, overload and short circuit protections
- medical 60601-1 4th edition safety approvals
- designed for 2 x MOPP applications
- active PFC
- level V efficiency
- custom designs available



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency level
ETMA1202083U	12	20.83	250	240	V
ETMA1601563U	16	15.63	250	300	V
ETMA1901316U	19	13.16	250	300	V
ETMA2001250U	20	12.5	250	300	V
ETMA2401042U	24	10.42	250	300	V
ETMA360694U	36	6.94	250	300	V
ETMA480521U	48	5.21	250	300	V

Notes: 1. At full load, 100 ~ 240 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with 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
current	at 90 Vac, 60 Hz			3.5	A
inrush current	at 230 Vac, cold start			150	A
no load power consumption				0.5	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±1		%
load regulation			±5		%
hold-up time	at 115 Vac	16			ms
temperature coefficient			±0.05		%/°C

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	12 V output	110		133	%
	16 V output	110		130	%
	19 V output	111		137	%
	20 V output	118		130	%
	24, 36 V outputs	110		125	%
	48 V output	110		120	%
overload protection	shutdown and auto restart	110		160	%
short circuit protection	continuous, auto restart				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output for 2 seconds			4,242	Vdc
	input to frame ground for 2 seconds			2,121	Vdc
insulation resistance	input to output, at 500 Vdc	20			MΩ
	input to frame ground, at 500 Vdc	20			MΩ
safety approvals	medical UL/cUL UL 60601-1, TUV EN 60601-1, CB IEC 60601-1 4th edition				
EMI/EMC	FCC Part 18 Class B, EN 60601-1, EN 55011				
MTBF	at 25°C, max. load	140,000			hours
RoHS compliant	yes				

ENVIRONMENTAL

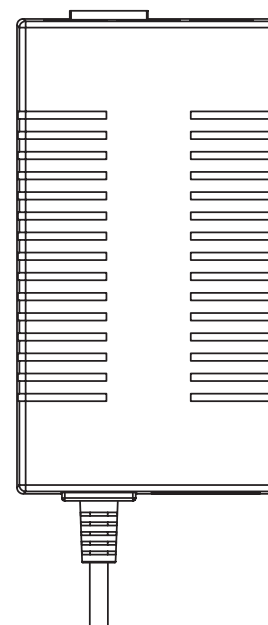
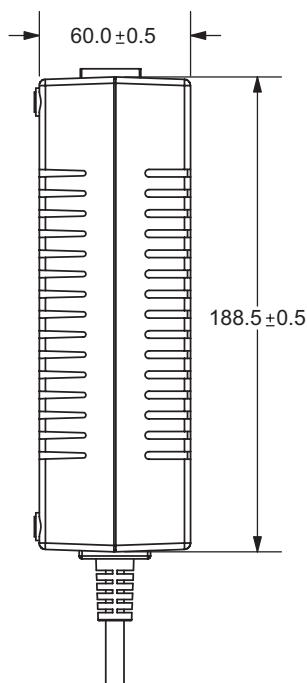
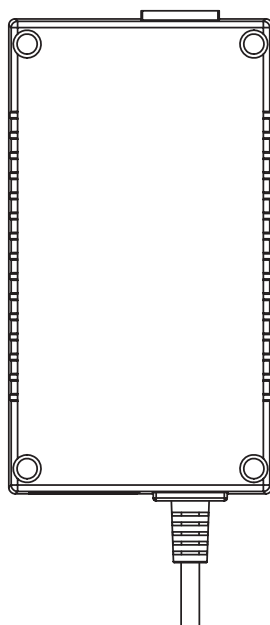
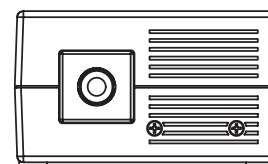
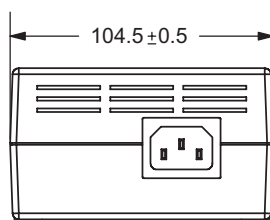
parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-10		70	°C
humidity	non-condensing	20		90	%

MECHANICAL

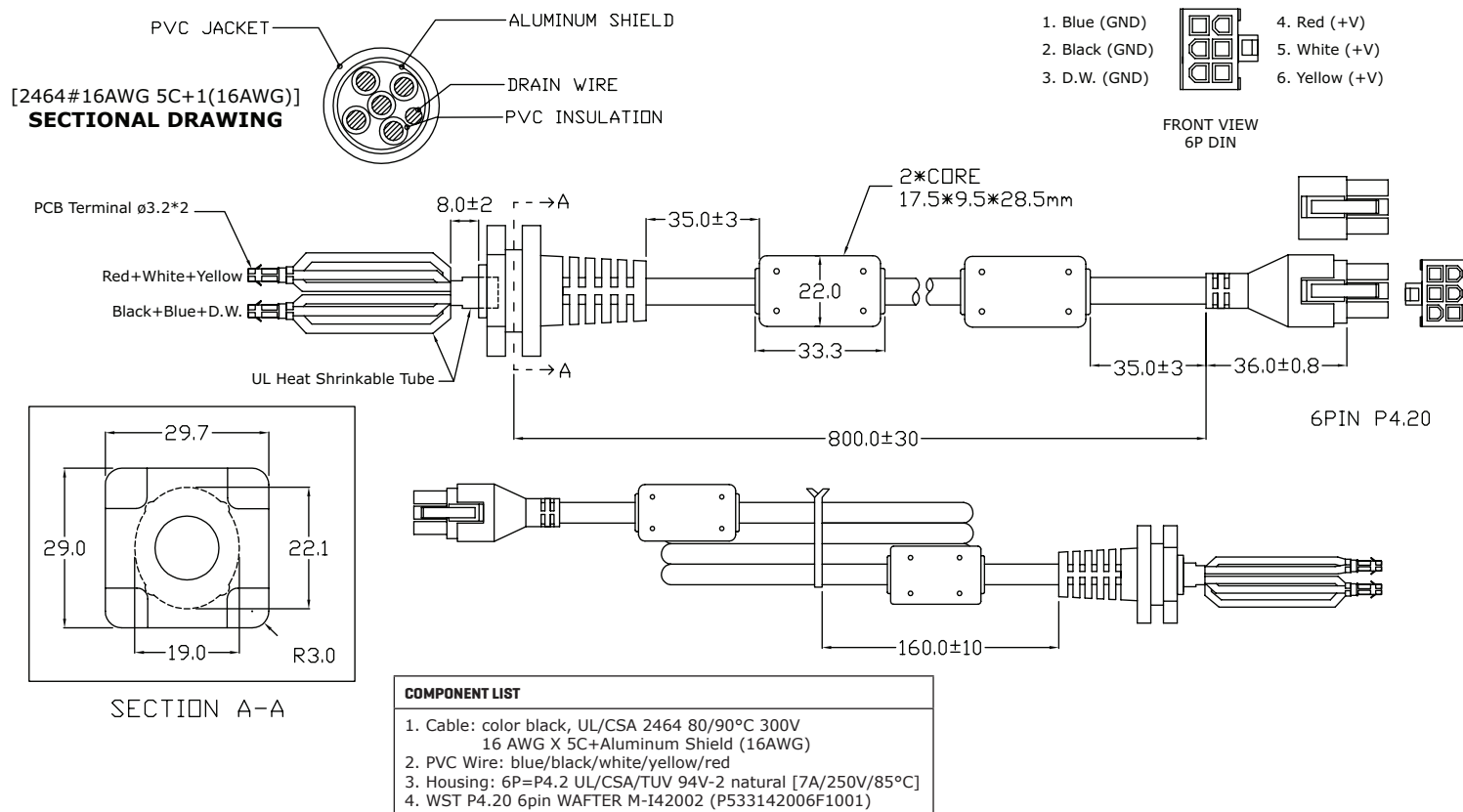
parameter	conditions/description	min	typ	max	units
dimensions	7.42 x 4.11 x 2.36 (188.5 x 104.5 x 60 mm)				inch
weight			1.06		kg
input plug	IEC320 / C14				

MECHANICAL DRAWING

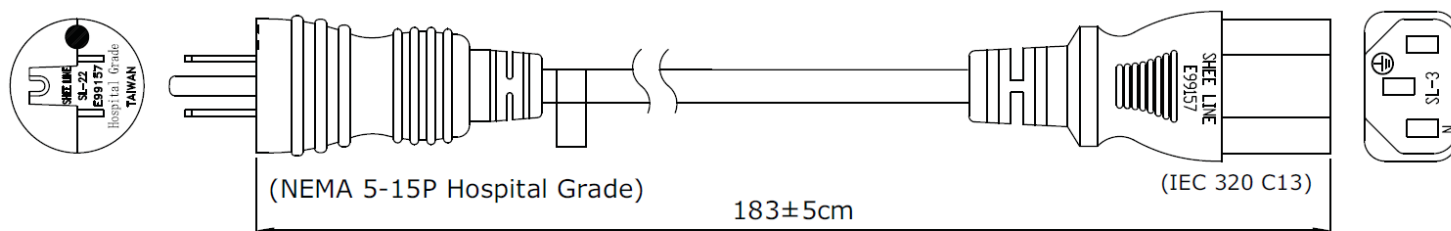
units: mm



DC CORD

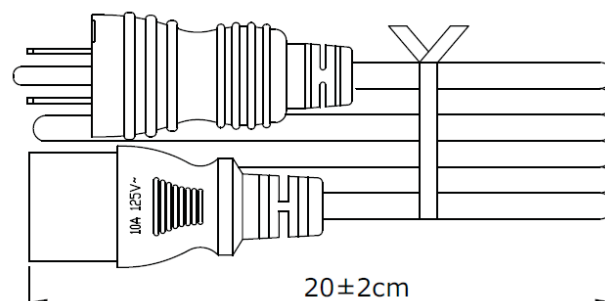


AC CORD



SPECIFICATION:

- 1) Length: 1.83m
- 2) Color: black
- 3) Plug: SL-22 (A)10 (V)125 Approval: UL/cUL
- 4) Connector: SL-3(A)10 (V)125 Approval: UL/cUL
- 5) Cable: SJT 18AWG/3C Approval: UL/CSA



REVISION HISTORY

rev.	description	date
1.0	initial release	03/05/2012
1.01	updated dc cord drawing	06/05/2012
1.02	description and warranty updated	08/21/2012
1.03	replaced TUV approval with Nemko	09/04/2013
1.04	updated to medical 60601-1 4th edition	06/20/2017

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 two (2) year limited warranty. Complete warranty information is listed on our website.

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<http://moschip.ru/get-element>

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