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America

CERTIFICATE

No. B 12 09 57396 177

Holder of Certificate: **XP Power LLC.**

1241 East Dyer Road, Suite 150
Santa Ana CA 92705
USA

Production Facility(ies): 59319, 71712

Certification Mark:

Product: **Power supply (Power supply)**

Model(s): **XM4, XM5, XM7, XM9, XM10 Series (see attachment for model details)**

Parameters:

Rated Input Voltage:	100-240 V AC
Rated Input Frequency:	50/60 Hz
Rated Input Current:	XM4: 6.6 A; XM5: 7.0 A; XM7: 10.0 A; XM9: 12.7 A; XM10: 14.2 A
Rated Output Voltage:	See attachment
Protection Class:	Class I at end products
Temperature, Ambient:	Convection cooling: 50°C at full load, 70°C at half load.

See attachment for further information.

Tested according to: EN 60601-1:2006

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: 095-1200354-100

Date, 2012-09-24

491441

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UCB_F_12.02 2012-02

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ATTACHMENT TO CERTIFICATE NO. B 12 09 57396 177
FOR XP POWER LLC

POWER SUPPLY

The equipment is a modular AC to DC power supply intended to be used in Medical Electrical Equipment. Units are intended for building in Class I end-products. The power supply consisting of an input power platform and various plug-in Output Modules. Each plug-in Output Module is either 2, 3 or 4 slot width.

XM4 to XM10 module configuration:

CHASSIS					OUTPUT MODULES 1-5 (1-6: 900 W chassis/ 1-7: 1000 W chassis)										OPTIONS					
					MOD.1		MOD.2		MOD.3		MOD.4		MOD.5		MOD.6		MOD.7			
X	X	X	X	-															-	P	P	S	S	÷	÷

Where:

Chassis (input power platform):

Model	Max Input Current (A)	Max Output Power (W) (100-180V)	Max Output Power (W) (180-240V)	Output module No.
XM4 series	5.6	400	600	Up to 5
XM5 series	7.0	500	700	Up to 5
XM7 series	10.0	700	900	Up to 5
XM9 series	12.7	900	1100	Up to 6
XM10 series	14.2	1000	1200	Up to 7

Output modules:

Module codes	Slot wide	Output Voltage (V1)/Current(A1)	Output Voltage (V2)/ Current(A2)
1C	2	3.3V/20.0A	--
2C	2	3.3V/40.0A	--
3C	3	3.3V/60.0A	--
1D	2	5.0V/20.0A	--
2D	2	5.0V/40.0A	--
3D	3	5.0V/60.0A	--
1J	2	12.0V/8.5A	--
2J	2	12.0V/17.0A	--
3J	3	12.0V/25.0A	--
1L	2	15.0V/7.0A	--
2L	2	15.0V/14.0A	--
3L	3	15.0V/20.0A	--
1P	2	24.0V/5.0A	--
2P	2	24.0V/10.5A	--
3P	3	24.0V/17.0A	--
1R	2	24.0V/5.0A	--
2R	2	24.0V/10.5A	--
3R	3	24.0V/17.0A	--
1Q	2	28.0V/4.5A	--
2Q	2	28.0V/9.0A	--

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FOR XP POWER LLC

Module codes	Slot wide	Output Voltage (V1)/Current(A1)	Output Voltage (V2)/ Current(A2)
3Q	3	28.0V/14.0A	--
1U	2	36.0V/3.5A	--
2U	2	36.0V/7.0A	--
3U	3	36.0V/11.0A	--
1W	2	48.0V/2.5A	--
2W	2	48.0V/5.2A	--
3W	3	48.0V/8.5A	--
1Y	2	60.0V/2.0A	--
2Y	2	60.0V/4.2A	--
3Y	3	60.0V/7.0A	--
5A	2	5.0V/10.0A	5.0V/10.0A
5B	2	5.0V/10.0A	3.3V/10.0A
5D	2	12.0V/10.0A	12.0V/8.0A
5E	2	15.0V/8.0A	15.0V/6.0A
5F	2	15.0V/8.0A	12.0V/8.0A
5G	2	12.0V/10.0A	5.0V/10.0A
5H	2	12.0V/10.0A	3.3V/10.0A
5J	2	12.0V/10.0A	2.0V/10.0A
5K	2	15.0V/10.0A	5.0V/10.0A
5L	2	15.0V/10.0A	3.3V/10.0A
5M	2	15.0V/10.0A	2.0V/10.0A
5N	2	24.0V/6.0A	5.0V/10.0A
5P	2	24.0V/6.0A	3.3V/10.0A
5Q	2	24.0V/6.0A	2.0V/10.0A
4J	4	12.0V/62.5A	--
4L	4	15.0V/50.0A	--
4P	4	24.0V/31.5A	--
4U	4	36.0V/21.0A	--
4W	4	48.0V/15.7A	--
4Y	4	60.0V/12.5A	--

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ATTACHMENT TO CERTIFICATE NO. B 12 09 57396 177
FOR XP POWER LLC

Conditions of Acceptability:

When installing the equipment, all requirements of the standards and the manufacturer's specifications must be met.

The models require:

- Suitable Fire/Mechanical/Electrical enclosure shall be provided as part of the end product.
- When installed into end product, sufficient clearance and creepage distance shall be provided between power supply and accessible conductive parts.
- Temperature, Leakage Current, Protective Earthing, Dielectric Voltage Withstand, and Interruption of the Power Supply tests should be considered as part of the end product evaluation.
- The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
- The output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of the end use equipment. .
- Proper bonding to the end-product main protective earthing terminal is required when the power supply is installed in the end product.
- Suitably rated branch protection to be provided as part of the end-product.
- The product was not investigated to the following standards or clauses: Electromagnetic Compatibility (EN 60601-1-2) Clause 14, Programmable Electronic Systems, Biocompatibility (ISO 10993-1), additional evaluation shall be conducted at end use.
- Scope of Power Supply evaluation defers the following clauses to the be determined as part of the end product:
  Clause 7.5 (Safety Signs),
  Clause 7.9 (Accompanying Documents),
  Clause 9 (ME Hazard),
  Clause 10 (Radiation),
  Clause 14 (PEMS),
  Clause 16 (ME Systems)
- Scope of Power Supply evaluation excludes the following:
  Patient applied parts clauses: 4.6, 7.2.10, 8.3, 8.5.2, 8.5.5, 8.7.4.7-8.7.4.9, 8.9.1.15
  Battery related clauses: 7.3.3, 15.4.3
  Hand Control related clauses: 8.10.4
  Oxygen related clauses: 11.2.2
  Fluids related clauses: 11.6.2 – 11.6.4
  Sterilization clause: 11.6.7
  Biocompatibility Clause: 11.7 (ISO 10993)
  Motor related clauses: 13.2.13.3, 13.4
  Heating Elements related clause: 13.2
  Flammable Anesthetic Mixtures Protection: Annex G

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CERTIFICATE

No. B 12 01 57396 132

Holder of Certificate: **XP Power LLC.**
1241 East Dyer Road, Suite 150
Santa Ana CA 92705
USA

Production Facility(ies): 59319, 71712

Certification Mark:

Product: **Power supply (Power supply)**

Model(s): **XM15 Series (see attachment for model details)**

Parameters:

Rated Input Voltage:	100-240 V AC
Rated Input Frequency:	50/60 Hz
Rated Input Current:	20 A
Rated Output Voltage:	See attachment
Protection Class:	Class I at end products
Temperature, Ambient:	Convection cooling: 50°C at full load, 70°C at half load.

See attachment for further information.

Tested according to: EN 60601-1:2006

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: 095-1200067-000

477970

Date, 2012-01-19

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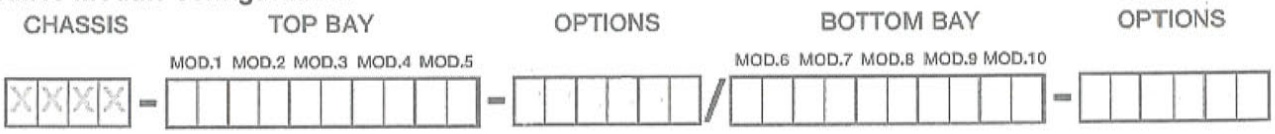
ATTACHMENT TO CERTIFICATE NO. B 12 01 57396 132
FOR XP POWER LLC

POWER SUPPLY

The equipment is a modular AC to DC power supply intended to be used in Medical Electrical Equipments. Units are intended for building in Class I end-products. The power supply consists of an input power platform and various plug-in Output Modules. Each plug-in Output Module is either 2 or 3 slot width. Each power platform supports 10-20 slots per platform, in any combination of 2 or 3 slot plug-in modules.

XM15 module configuration:



Where:
Chassis: XM15;
Top/Bottom Bay module: Up to 5 output DC modules XY, X can be 1, 2, 3, or 5, Y can be A to Z;
Options: 6 numbers for vertical parallel option codes.

Output DC module XY:

Modules 1A-1Z: 2 Slot Module, each 3.3 to 60 Vdc, 20 A max, 126 W max.

Modules 2A-2Z: 2 Slot Module, each 3.3 to 60 Vdc, 40 A max, 252 W max.

Modules 3A-3Z: 3 Slot Module, each 3.3 to 60 Vdc, 60 A max, 420 W max.

Modules 5A-5Z: 2 Slot Module, each Dual output: V1=3.3 to 24 Vdc, 10 A max, 150 W max; V2=2.0 to 24 Vdc, 10 A max, 150 W max.

Conditions of Acceptability:

When installing the equipment, all requirements of the standards and the manufacturer's specifications must be met.

The models require:

- Suitable Fire/Mechanical/Electrical enclosure shall be provided as part of the end product.
- When installed into end product, sufficient clearance and creepage distance shall be provided between power supply and accessible conductive parts.
- Temperature, Leakage Current, Protective Earthing, Dielectric Voltage Withstand, and Interruption of the Power Supply tests should be considered as part of the end product evaluation.
- The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
- The output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of the end use equipment. .

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ATTACHMENT TO CERTIFICATE NO. B 12 01 57396 132
FOR XP POWER LLC

- Proper bonding to the end-product main protective earthing terminal is required when the power supply is installed in the end product.
- The maximum continuous output power shall not exceed 1500W for input voltages 100-180 VAC or 2500W when the supply voltage is 180-240VAC, when used with any combination of output modules.
- Suitably rated branch protection to be provided as part of the end-product.
- The product was not investigated to the following standards or clauses: Electromagnetic Compatibility (EN 60601-1-2) Clause 14, Programmable Electronic Systems, Biocompatibility (ISO 10993-1), additional evaluation shall be conducted at end use.
- Scope of Power Supply evaluation defers the following clauses to the be determined as part of the end product:
  Clause 7.5 (Safety Signs),
  Clause 7.9 (Accompanying Documents),
  Clause 9 (ME Hazard),
  Clause 10 (Radiation),
  Clause 14 (PEMS),
  Clause 16 (ME Systems)
- Scope of Power Supply evaluation excludes the following:
  Patient applied parts clauses: 4.6, 7.2.10, 8.3, 8.5.2, 8.5.5, 8.7.4.7-8.7.4.9, 8.9.1.15
  Battery related clauses: 7.3.3, 15.4.3
  Hand Control related clauses: 8.10.4
  Oxygen related clauses: 11.2.2
  Fluids related clauses: 11.6.2 – 11.6.4
  Sterilization clause: 11.6.7
  Biocompatibility Clause: 11.7 (ISO 10993)
  Motor related clauses: 13.2.13.3, 13.4
  Heating Elements related clause: 13.2
  Flammable Anaesthetic Mixtures Protection: Annex G

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America

CERTIFICATE

No. B 12 07 57396 158

Holder of Certificate: **XP Power LLC.**

1241 East Dyer Road, Suite 150
Santa Ana CA 92705
USA

Production Facility(ies): 59319, 52681, 71712

Certification Mark:

Product: **Power supply (Power Supply)**

Model(s): **X4, X5, X7, X9, X10, X15 Series**
X7-3D3J3J-230003-XD0142A
(See the attachment for the model number details)

Parameters:

Rated Input Voltage:	100-240 VAC
Rated Input Frequency:	X15 Series: 50/60 Hz, all others: 50/60/440 Hz
Rated Input Current:	X4 Series: 5.6 A, X5 Series: 7 A, X7 Series: 10 A, X9 Series: 12.7 A X10 Series: 14.2 A X15 Series: 20 A X7-3D3J3J-230003-XD0142A: 12 A
Protection Class:	I
Rated Output (DC):	380 V (Buss Voltage) 12 V (Isolated SELV)
Temperature, Ambient:	50°C at full load, 70°C at 50% of maximum load

See Attachment for Additional Information.

Tested according to: EN 60950-1/A12:2011

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: SI1207320-000

Date, 2012-07-12

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ATTACHMENT TO CERTIFICATE NO. B 12 07 57396 158
FOR XP POWER LLC

Model number configuration:
X4, X5, X7 series can be followed by up to 5 output module XY; X9 series can be followed by up to 6 output models XY, X10 series can be followed by up to 7 output models XY, X15 series is a two output module bay. X15 series can be followed by up to 10 output models XY. Where XY indicating the power module specific codes, where X can be 2, 3 or 5 and Y can be A to Z.

Each model consisting of:
PART A: AC/DC Power Platform, Input rated 100-240 Vac, 50/60/440 Hz (X15 without 440 Hz), as follows:

Model	Max Input Current (A)	Max Output Power (W) (100-180V)	Max Output Power (W) (180-240V)
X4 series	5.6	400	600
X5 series	7	500	700
X7 series	10	700	900
X7-3D3J3J-230003-XD0142A	12.0	772	772
X9 series	12.7	900	1100
X10 series	14.2	1000	1200
X15 series	20	1500	2500

PART B: DC/DC Power output modules, rated as follows:

Modules 1A-1Z: 2 Slot Module, 3.3 to 60 Vdc, 20 A max, 126 W max.

Modules 2A-2Z: 2 Slot Module, 3.3 to 60 Vdc, 40 A max, 252 W max.

Modules 3A-3Z: 3 Slot Module, 3.3 to 60 Vdc, 60 A max, 420 W max.

Modules 4A-4Z: 4 Slot Module, 12 to 60 Vdc, 62.5 A max, 756 W max.

Modules 5A-5Z: 2 Slot Module, Dual output: V1=3.3 to 24 Vdc, 10 A max, 150 W max; V2=2.0 to 24 Vdc, 10 A max, 150 W max.

Conditions of Acceptability:

1. The secondary outputs of power supply modules are SELV. The energy of the output at each voltage remains to be evaluated in the end equipment. Additional compliance shall be considered for output with hazardous energy level.
2. Power supply is provided with one fuse on each input line, suitable caution marking is to be provided in end system.
3. Power supply relies on the bonding of the chassis to the earthed chassis of the end product.