



the standard in safety

Underwriters
Laboratories

MS. L. HUANG
ADVANTECH CO LTD
1 ALLEY 20, LANE 26 RUEIGUANG RD
NEIHU DISTRICT
TAIPEI
114 TAIWAN

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Subject: UL Certification Documents For Applicant

The following material resulting from the investigation under the above numbers is enclosed.

<u>Document</u>	<u>Volume</u>	<u>Report Reference</u>	<u>Status</u>	<u>Date</u>
UL Test Report	XI	E214164-A1-UL-2	Re-issued	03/27/08

Please file revised Authorizations, Indices, and General Inspection Instructions in place of material of like identity. New Test Reports should be filed immediately following the last Test Report. Amendments or Corrections should be filed immediately before the Test Report to which they relate. Re-issued Test Reports should be filed immediately before all material related to the Test Report that it replaces.

NOTE: Manufacturers receive only the following sub-sections of the Applicant's complete Test Report, where applicable: Cover Page, Specific Inspection Criteria (BA through BE), Specific Technical Criteria (through section CF), Critical Components table, and Enclosures containing image supplements. Manufacturers do not receive Test Report information related to standard clause compliance or testing results.

NOTE: Manufacturers that require an Initial Product Inspection (IPI) have received their copy of the Follow-Up Service Procedure, but are instructed they are not allowed to ship products bearing the UL Mark until their UL Representative has successfully conducted the Initial Production Inspection.

Please review this material and report any inaccuracies to , referring to the above Project and/or PD Numbers.

This material is provided on behalf of Underwriters Laboratories Inc.(UL) or any authorized licensee of UL.

c: TAI File

191986001
24403

ADVANTECH CO LTD
1 ALLEY 20 LANE 26
RUEIGUANG RD
NEIHU DISTRICT
TAIPEI

優力國際安全認證有限公司
台北市 112 北投區大業路 260 號 1 樓
電話: 886.2.2896.7790 / 傳真: 886.2.2891.7644 / 網址: ul.com.tw

COVER PAGE FOR TEST REPORT

Product Category:	Medical Electrical Equipment
Product Category CCN:	PIDF, PIDF7
Test Procedure:	Classification
Product:	Panel PC
Model/Type Reference:	POC-123xxxxxxx and POC-125xxxxxxx, where x may be any alphanumeric character or blank.
Rating(s):	Model POC-123xxxxxxx: Power adapter (Hitron Electronics Corp, Model HES49-24021) input: 100-240Vac, 50/60 Hz, 1.0A Panel PC input: 18-25Vdc, 3.5A Model POC-125xxxxxxx: Power adapter (XPIQ Inc., Model PSM80PS24) input: 100-240 Vac, 47-63 Hz, 1.1-0.45A Power adapter (Sinpro, Model MPU50-108) input: 100-240 Vac, 47-63 Hz, 1.35-0.8A Panel PC input: 24Vdc, 2A max. (without battery pack) and 24Vdc 2.7A max. (with battery pack)
Standards:	UL 60601-1, 1st Edition, 2006-04-26 (Medical Electrical Equipment, Part 1: General Requirements for Safety) CAN/CSA-C22.2 No. 601.1-M90, 2005 (Medical Electrical Equipment - Part 1: General Requirements for Safety)
Applicant Name and Address:	ADVANTECH CO LTD 1 ALLEY 20 LANE 26 RUEIGUANG RD NEIHU DISTRICT TAIPEI 114 TAIWAN
This Report includes the following parts, in addition to this cover page:	
<ol style="list-style-type: none">1. Specific Inspection Criteria2. Specific Technical Criteria3. Clause Verdicts4. Critical Components5. Test Results6. National Differences7. Enclosures	

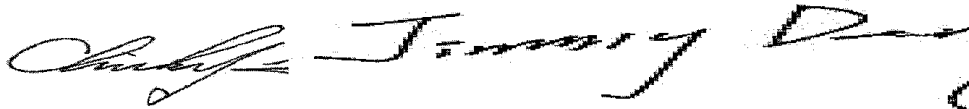
This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of Underwriters Laboratories Inc. ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

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Test Report By:

Reviewed By:




Chirky Lin/ Sharon Hsu
Engineer
Underwriters Laboratories
Taiwan Co., Ltd.

Jimmy Deng
Associate Project Engineer
Underwriters Laboratories Taiwan Co., Ltd.

SPECIFIC INSPECTION CRITERIA

BA1.0	Special Instructions to UL Representative
BA1.1	N/A

BB1.0	Supporting Documentation
BB1.1	<p>The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:</p> <p>A. Authorization - The Authorization page may include additional Factory Identification Code markings.</p> <p>B. Generic Inspection Instructions -</p> <ul style="list-style-type: none">i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

BC1.0	Markings and instructions	
BC1.1	The following markings and instructions are provided as indicated.	
BC1.2	All clause references are from UL 60601-1, 1st Edition, 2006-04-26 (Medical Electrical Equipment, Part 1: General Requirements for Safety).	
Standard Clause	Clause Title	Marking or Instruction Details
6.1e	Company identification	Classified or Recognized company's name, Trade name, Trademark or File
6.1f	Model	Model number
6.1g	Supply Connection	Voltage range, ac/dc, phases if more than single phase
6.1j	Power Input	Amps, VA, or Watts
6.1l	IP Rating	IPX0
6.1m	Mode of Operation	Continuous
6.1q	Attention, consult accompanying documents	
	US Hospital Grade Marking	"Grounding Reliability Can Only Be Achieved When The Equipment Is Connected To An Equivalent Receptacle Marked 'Hospital Only' Or 'Hospital Grade'." (located on product or power supply cord)

BD1.0	Production-Line Testing Requirements			
BD1.1	Test Exemptions - The following models are exempt from the indicated test			
	Model	Grounding Continuity	Dielectric Voltage Withstand	Patient Circuit Dielectric Voltage Withstand
	POC123, POC125	Exempt	Exempt	Exempt
BD1.2	Solid-State Component Test Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during either Dielectric Voltage Withstand Test:			
	N/A			

BE1.0	Sample and Test Specifics for Follow-Up Tests at UL			
BE1.1	The following tests shall be conducted in accordance with the Generic Inspection Instructions			
	Model	Samples	Test	Test Details
	N/A	N/A	N/A	N/A

SPECIFIC TECHNICAL CRITERIA

TEST REPORT UL 60601-1 Medical Electrical Equipment Part 1: General requirements for safety	
Report Reference No.....	E214164-A1-UL-2
Compiled by	Chirky Lin/ Sharon Hsu
Reviewed by	Jimmy Deng
Date of issue	2008-03-28
Standards	UL 60601-1, 1st Edition, 2006-04-26 (Medical Electrical Equipment, Part 1: General Requirements for Safety) CAN/CSA-C22.2 No. 601.1-M90, 2005 (Medical Electrical Equipment - Part 1: General Requirements for Safety)
Test procedure	Classification
Non-standard test method	N/A
Test item description	Panel PC
Trademark	None
Model and/or type reference	POC-123xxxxxxx and POC-125xxxxxxx, where x may be any alphanumeric character or blank.
Rating(s)	Model POC-123xxxxxxx: Power adapter (Hitron Electronics Corp, Model HES49-24021) input: 100-240Vac, 50/60 Hz, 1.0A Panel PC input: 18-25Vdc, 3.5A Model POC-125xxxxxxx: Power adapter (XPIQ Inc., Model PSM80PS24) input: 100-240 Vac, 47-63 Hz, 1.1-0.45A Power adapter (Sinpro, Model MPU50-108) input: 100-240 Vac, 47-63 Hz, 1.35-0.8A Panel PC input: 24Vdc, 2A max. (without battery pack) and 24Vdc 2.7A max. (with battery pack)

GENERAL INFORMATION	
Test item particulars (see also clause 5):	
Classification of installation and use	Portable
Supply connection	Appliance coupler
Accessories and detachable parts included in the evaluation	None
Options included	None
Possible test case verdicts:	
- test case does not apply to the test object	N / A
- test object does meet the requirement	P(Pass)
- test object does not meet the requirement	F(Fail) (acceptable only if a corresponding, less stringent national requirement is "Pass")
Abbreviations used in the report:	
- normal condition	N.C. - single fault condition
- operational insulation	OP - basic insulation
- basic insulation between parts of opposite polarity: BOP	- supplementary insulation
- double insulation	DI - reinforced insulation
General remarks:	
- "(see Enclosure #)" refers to additional information appended to the Test Report	
- "(see appended table)" refers to a table appended to the Test Report	
- Throughout the Test Report a point is used as the decimal separator	

General Product Information:	
CA1.0	Report Summary
CA1.1	N/A
CB1.0	Product Description
CB1.1	Consists of a LCD Module, DVD drive, HDD, Floppy Drive, CPU, Battery pack. Base and electronic component mounted on PWB and enclosed in plastic enclosure, supplied by external Listed adapter.
CC1.0	Model Differences
CC1.1	Model POC-123xxxxxxx is the basic model. Model POC-125-xxxxxxx is the same as POC-123-xxxxxxx except for the external power supplies that can be used and the battery pack.

CD1.0	Additional Information	
CD1.1	<p>This report was modified with Amendment 1 to include an alternate Panel and Inverter Board. Additional Leakage current tests, including separation by protective impedance (17g.5), were conducted to verify components. Corresponding Table 19 was amended to include the supporting data as well as the critical components table. Some minor corrections were also made to the Critical Components table.</p> <p>This report was modified with Amendment 2 to include new Model POC-125-xxxxxxx, with alternate power supplies and battery pack. Also revised the original Model Number to POC-123xxxxxxx.</p> <p>Amendment 3 - Correct plastic enclosure material description from Chi Mei Corporation, PA-765A to GE Plastics Global Products for Worldwide Procurement, C2800, and add Enclosure Metalized Coating, Basictak Co., Ltd., model 599-B3730 and 599-B4540.</p> <p>E214164-A1-UL-2 Reissue 1- Change Battery pack for Models: POC-123xxxxxxx and POC-125xxxxxxx to optional. Change the input rating of Panel PC: 18-25Vdc, 3.5A for Model POC-123xxxxxxx 24Vdc, 2A max. (without battery pack) and 24Vdc, 2.7A max. (with battery pack) for Model POC-125xxxxxxx Add manufacturer and model name of label material in critical component table and revise label's information.</p>	
CE1.0	Technical Considerations	
CE1.1	The product was investigated to the following additional standards:	UL 60601-1, 1st Edition, 2006-04-26 (includes National Differences for USA), CAN/CSA-C22.2 No. 601.1-M90 (R2005) (includes National Differences for Canada)
CE1.2	The product was not investigated to the following standards or clauses:	Clause 52.1, Programmable Electronic Systems (IEC 601-1-4), Clause 48, Biocompatibility (ISO 10993-1), Clause 36, Electromagnetic Compatibility (IEC 601-1-2)
CE1.3	The product is Classified only to the following hazards:	Casualty, Shock, Fire
CE1.4	The degree of protection against harmful ingress of water is:	Ordinary
CE1.6	The mode of operation is:	Continuous
CE1.7	Software is relied upon for meeting safety requirements related to mechanical, fire and shock:	No
CE1.8	The product is suitable for use in the presence of a flammable anesthetics mixture with air or oxygen or with nitrous oxide:	No

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

3	GENERAL REQUIREMENTS		Pass
3.1	Equipment when transported, stored, installed, operated in normal use and maintained according to the instructions of the manufacturer, causes no safety hazard which could reasonably be foreseen and which is not connected with its intended application in normal condition (N.C.) and in single fault condition (S.F.C.)	The equipment causes no hazards when used according the manufacturers instructions.	Pass
3.4	An alternative means of construction is used to that detailed in this standard and it can be demonstrated that an equivalent degree of safety is obtained	No alternative construction.	N/A

5	CLASSIFICATION		Pass
5.1	Type of protection against electric shock		Pass
	Class I equipment		Pass
	Class II equipment		N/A
	Internally powered equipment		N/A
5.2	Degree of protection against electric shock		Pass
	Type B applied part		N/A
	Type BF applied part		N/A
	Type CF applied part		N/A
	Not classified - no applied parts		Pass
5.3	Classification according to the degree of protection against ingress of water as detailed in the current edition of IEC 529 (see 6.1.1)	Ordinary equipment.	Pass
5.4	Methods of sterilization or disinfection		N/A
5.5	Equipment not suitable for use in the presence of flammable mixtures	The equipment is not an AP or APG category equipment.	Pass
	Category AP equipment		N/A
	Category APG equipment		N/A
5.6	Mode of operation:		Pass
	-continuous operation		Pass
	-short-time operation, specified operation; period ..		
	-intermittent operation, specified operation; rest		

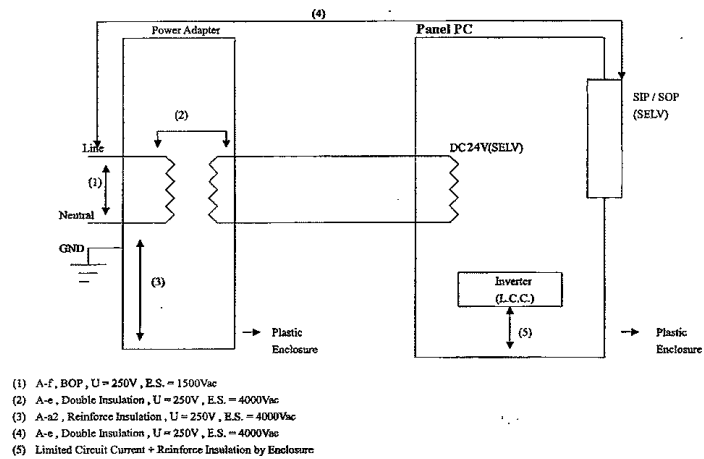
IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

	period		
	-continuous operation with short-time, stated permissible loading time		
	-continuous operation with intermittent, stated permissible loading/rest time		

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

INSULATION DIAGRAM

Panel PC, Model POC-123



IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

TABLE: to insulation diagram							
Area	Insulation type: operational / basic / supplementary / double / reinforced	Reference voltage (V)	Required creepage (mm)	Required clearance (mm)	Measured creepage (mm)	Measured clearance (mm)	Remarks
A-f	BOP	250 V	3.0	1.6	>3.0	>1.6	(1), evaluated in separated certification.
A-e	DI/RI	250 V	8.0	5.0	>8.0	>5.0	(2), evaluated in separated certification.
A-a2	DI/RI	250 V	8.0	5.0	>8.0	>5.0	(3), evaluated in separated certification.
A-e	DI/RI	250 V	8.0	5.0	>8.0	>5.0	(4), Dielectric Voltage = 4000 Vac
--	LCC + RI	--	--	--	--	--	(5) RI provided by plastic enclosure.

INSULATION DIAGRAM CONVENTIONS

Insulation diagram is a graphical representation of equipment insulation barriers, protective impedance and protective earthing. If feasible, use the following conventions to generate the diagram:

1. All isolation barriers are identified by letters between separate parts of diagram, for example separate transformer windings, optocouplers, wire insulation, creepage and clearance distances.
2. Parts connected to earth with large dots are protectively earthed. Other connections to earth are functional.
3. Applied parts are extended beyond the equipment enclosure and terminated with an arrow.
4. Parts accessible to the operator only are extended outside of the enclosure, but are not terminated with an arrow.
5. Blocks containing the letter "Z" indicate protective impedance.
6. Operational Insulation (OP) - indicates insulation that may be required for function of the equipment, but is not required or relied on for compliance with the requirements of clauses 17, 20 and 57.

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

6	IDENTIFICATION, MARKING AND DOCUMENTS		Pass
6.1	Marking on the outside of equipment or equipment parts		Pass
6.1c	Markings of the specific power supply affixed	POC-123: Hitron Electronics Corp. Model HES49-24021 only. POC-125: XPIQ Inc Model PCM80PS24 or Sinpro Model MPU50-108	Pass
6.1d	If marking is not practicable due to size or nature of enclosure, information is included in accompanying documents		Pass
6.1e	Name and/or trademark of the manufacturer or supplier.....:	Advantech	Pass
6.1f	Model or type reference	POC-123xxxxxxx and POC-125xxxxxxx	Pass
6.1g	Rated supply voltages or voltage range(s)	100-240 Vac	Pass
	Number of phases	Single	Pass
	Type of current	AC	Pass
6.1h	Rated frequency or rated frequency range(s) (Hz) :	Model POC-123xxxxxxx: Power adapter (Hitron Electronics Corp, Model HES49-24021): 50/60 Hz Model POC-125xxxxxxx: Power adapter (XPIQ Inc., Model PSM80PS24) : 47-63 Hz Power adapter (Sinpro, Model MPU50-108): 47-63 Hz	Pass
6.1j	Rated power input (VA, W or A).....:	Model POC-123xxxxxxx: Power adapter (Hitron Electronics Corp, Model HES49-24021): 1.0A Model POC-125xxxxxxx: Power adapter (XPIQ Inc., Model PSM80PS24): 1.1-0.45A Power adapter (Sinpro, Model MPU50-108): 1.35-0.8A	Pass
6.1k	Power output of auxiliary mains socket - outlets	No power output socket provided.	N/A
6.1l	Class II symbol	Class I Product	N/A

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
	Symbol for degree of protection against ingress of water provided.....:	Optional, IP20 or ordinary equipment.	Pass
	Symbol for protection against electric shock.....:	No applied part.	N/A
	If equipment has more than one applied part with different degrees of protection, the relevant symbols are clearly marked on such applied parts, or on or near relevant outlets		N/A
	Symbol for protection of defibrillation-proof applied parts	No applied parts.	N/A
	Symbol 14 from Table DI for defibrillation-proof with protection partly in patient cable	No patient cable.	N/A
6.1m	Mode of operation (if no marking, suitable for continuous operation)	Optional, continuous operation.	Pass
6.1n	Types and rating of external accessible fuses.....:	No external accessible fuses.	N/A
6.1p	Ratings of external output:	No external output.	N/A
6.1q	Symbol for physiological effect(s):		Pass
	- attention, consult accompanying documents		Pass
	- non-ionizing radiation, or symbols as adopted by ISO or IEC 417		N/A
6.1r	Anaesthetic-proof symbol: AP or APG.....:		N/A
6.1s	Dangerous voltage symbol	No dangerous voltage	N/A
6.1t	Special cooling requirements	No special cooling requirements	N/A
6.1u	Limited mechanical stability	Equipment not overbalance during normal use when tilted through an angle of 10 degree, no limited mechanism required.	N/A
6.1v	Protective packing requirement(s)	No special measures have to be taken during transport or storage.	N/A
	- Marking(s) for unpacking safety hazard(s)		N/A
	- Equipment or accessories supplied sterile, marked as sterile		N/A
6.1y	Potential equalization terminal	No such terminal provided.	N/A
	- Functional earth terminal	No such terminal provided.	N/A
6.1z	Removable protective means	No such means.	N/A
	Durability of marking test		Pass

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
6.2	Marking on the inside of equipment or equipment parts		N/A
6.2a	Nominal voltage of permanently installed equipment	Not permanently installed equipment.	N/A
6.2b	Maximum power loading for heating elements or holders for heating lamps	No heating elements and lamps.	N/A
6.2c	Dangerous voltage symbol	No dangerous voltage presents.	N/A
6.2d	Type of battery and mode of insertion	Type and mode of insertion provided in Manuel.	Pass
	- Marking referring to accompanying documents used for battery not intended to be changed by the operator	Battery Pack not changeable.	Pass
6.2e	Fuses accessible with a tool identified either by type and rating or by a reference to diagram	Fuse marking is evaluated as part of the power supply.	N/A
6.2f	Protective earth terminal		N/A
6.2g	Functional earth terminal		N/A
6.2h	Supply neutral conductor in permanently installed equipment (N)		N/A
6.2j	Markings required in 6.2 f), h), k), and l) remain visible after connection and are not affixed to parts which have to be removed		N/A
	- Markings comply with IEC 445		N/A
6.2k	For permanently connected devices the supply connections are clearly marked adjacent to the terminals (or in accompanying documents for small equipment)		N/A
6.2l	Statement for suitable wiring materials at temperatures over 75°C		N/A
6.2n	Capacitors and/or circuit parts marked as required in Sub-clause 15c		N/A
6.3	Marking of controls and instruments		Pass
6.3a	Mains switch clearly identified	No mains switch provided.	N/A
	- ON and OFF positions marked according to Symbols 15 and 16 of table D1 or indicated by an adjacent indicator light		N/A
6.3b	Indication of different positions of control devices and switches	On Screen Device (OSD) control employed.	Pass
6.3c	Indication of the direction in which the magnitude of the function changes, or an indicating device	No Safety Hazard caused during function changeing.	Pass

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
6.3f	The functions of operator controls and indicators are identified	OSD control employed.	Pass
6.3g	Numeric indications of parameters are in SI units except for units listed in Am. 2	No numeric indication used for control.	N/A
6.4	Symbols		Pass
	Used symbols comply with Appendix D or IEC 417 and/or IEC 878 or ISO publications (if applicable)		Pass
6.5	Colors of the insulation of conductors		Pass
6.5a	Protective earth conductor has green/yellow insulation	Protective earth conductor was evaluated as part of the power supply.	Pass
6.5b	All insulations of internal protective earth conductors are green/yellow at least at their terminations		N/A
6.5c	Only protective or functional earthing, or potential equalization conductors are green/yellow	Evaluated as part of the power supply.	Pass
6.5d	Color of neutral conductor	Appliance inlet provided on Power Supply	N/A
6.5e	Colors of phase conductor(s)	Appliance inlet provided on Power Supply	N/A
	- Compliance with IEC 227 and IEC 245	Evaluated as part of the power supply.	Pass
6.5f	Additional protective earthing in multi-conductor, cords are marked green/yellow at the ends of the additional conductors		N/A
6.6	Medical gas cylinders and connections		N/A
6.6a	In accordance with ISO ISO/R 32	No gas cylinders or connections	N/A
6.6b	Identification of connection point		N/A
6.7	Indicator lights and push-buttons		Pass
6.7a	Red indicator lights used exclusively to indicate a warning of danger and/or a need for urgent action		N/A
	- Yellow used to indicate caution or attention required	No yellow indicator lights.	N/A
	- Green used to indicate ready for action		Pass
6.7b	Color red used only for push-buttons by which a function is interrupted in case of emergency	No color red used for push-buttons.	N/A
6.8	ACCOMPANYING DOCUMENTS		Pass
6.8.1	Equipment accompanied by documents containing	See Enclosure 6-01 for details.	Pass

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
	at least instructions for use, a technical description and an address to which the user can refer		
	Classifications specified in Clause 5 included in both the instructions for use and the technical description	See Enclosure 6-01 for details.	Pass
	Markings specified in Sub-clause 6.1 included in the accompanying documents if they have not been permanently affixed to equipment		Pass
	Warning statements and the explanation of warning symbols provided in the accompanying documents	See Enclosure 6-01 for details.	Pass
6.8.2	Instructions for use		Pass
6.8.2a	General information provided in instructions for use	See Enclosure 6-01 for details.	Pass
	- state the function and intended application of the equipment	See Enclosure 6-01 for details.	Pass
	- include an explanation of: the function of controls, displays and signals	See Enclosure 6-01 for details.	Pass
	- the sequence of operation	See Enclosure 6-01 for details.	Pass
	- the connection and disconnection of detachable parts and accessories	See Enclosure 6-01 for details.	Pass
	- the replacement of material which is consumed during operation		N/A
	- information regarding potential electromagnetic or other interference and advice regarding avoidance		Pass
	- include: indications of recognized accessories, detachable parts and materials, if the use of other parts or materials can degrade minimum safety		N/A
	- instructions concerning cleaning, preventive inspection and maintenance to be performed including the frequency of such maintenance		N/A
	General information provided in instructions:		Pass
	- information for the safe performance of routine maintenance	See Enclosure 6-01 for details.	Pass
	- parts on which preventive inspection and maintenance shall be performed by other persons including the periods to be applied	See Enclosure 6-01 for details.	Pass
	- explanation of figures, symbols, warning statements and abbreviations on the equipment	See Enclosure 6-01 for details.	Pass
6.8.2c	Signal output or signal input parts intended only for connection to specified equipment described	See Enclosure 6-01 for details.	Pass

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
6.8.2d	Details about acceptable cleaning, disinfection or sterilization methods included		Pass
6.8.2e	Warning statement for mains operated equipment with additional power source	Supplied by R/C DC adapter.	N/A
6.8.2f	A warning to remove primary batteries if equipment is not likely to be used for some time	No primary batteries provided.	N/A
6.8.2g	Instructions to ensure safe use and adequate maintenance of rechargeable batteries		Pass
6.8.2h	Identification of specified external power supplies or battery chargers necessary to ensure compliance with the requirements of IEC 601-1	POC-123: Hitron Electronics Corp. Model HES49-24021 only. POC-125: XPIQ Inc Model PCM80PS24 or Sinpro Model MPU50-108.	Pass
6.8.2j	Identification of any risks associated with the disposal of waste products, residues, etc.	See "Safety Instructions" in Enclosure 6-01 for details.	Pass
	- Advice in minimizing these risks	See "Safety Instructions" in Enclosure 6-01 for details.	Pass
6.8.3	Technical description		Pass
6.8.3a	All characteristics essential for safe operation provided		Pass
6.8.3b	Required type and rating of fuses utilized in the mains supply circuit external to permanently installed equipment		N/A
	- Instructions for replacement of interchangeable and/or detachable parts which are subject to deterioration during normal use		N/A
6.8.3c	Instructions or reference information for repair of equipment parts designated by the manufacturer as repairable provided	See Enclosure 6-01 for details.	Pass
6.8.3d	Environmental conditions for transport and storage specified in accompanying documents and marked on packaging	Storage and transportation: Temperature: -20 ~ 60 degree C (-4 ~ 140 degree F).	Pass
7	POWER INPUT		Pass
	Power Input Measurements	(see appended table 7)	Pass

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

10	ENVIRONMENTAL CONDITIONS		Pass
10.1	Equipment is capable while packed for transport or storage of being exposed to the conditions stated by the manufacturer	Storage and transportation: Temperature: -20 ~ 60 degree C (-4 ~ 140 degree F), Humidity: 10% ~ 90%	Pass
10.2.2a	Rated voltage not exceeding 250 V for hand-held equipment	Not hand-held equipment.	N/A
	Rated voltage not exceeding 250 V d.c. or single-phase a.c. or 500 V polyphase a.c. for equipment up to 4kVA	100-240 Vac, single-phase	Pass
	Rated voltage not exceeding 500 V for all other equipment		N/A
	Rated input frequency not more than 1kHz		Pass
10.2.2b	Internal replaceable electrical power source specified	The battery pack information is included in the User Manual also states that the battery pack is not user replaceable.	Pass

14	REQUIREMENTS RELATED TO CLASSIFICATION		Pass
14.4a	Class I and Class II equipment in addition to basic insulation provided with an additional protection		Pass
14.4b	Equipment supplied from external dc source of reverse polarity results in no safety hazard	Power supplies are UL R/C to UL 60601-1	Pass
14.5a	Dual classification for internally powered equipment with a means of connection to supply mains	Power Supplies are Class I. LCD can additionally run off of the battery pack alone.	Pass
14.5b	Internally powered equipment complies with requirements for Class I or Class II equipment while connected to supply mains, and with requirements for internally powered equipment when not connected	Class I only.	Pass
14.6c	Applied parts intended for direct cardiac application are of type CF	No applied parts.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

15	LIMITATION OF VOLTAGE AND/OR ENERGY		Pass
15b	Voltage measured one sec after disconnection of the mains plug does not exceed 60V	Evaluated as part of the power supply.	Pass
15c	For live parts accessible after equipment has been de-energized the residual voltage does not exceed 60 V nor residual energy exceed 2 mJ	No such parts.	N/A
	Marking provided for manual discharging	No components provided for manual discharging.	N/A

16	ENCLOSURES AND PROTECTIVE COVERS		Pass
16a	Equipment enclosed to protect against contact with live parts, and with parts which can become live (finger, pin, hook test)		Pass
	Insertion or removal of lamps - protection against contact with live parts provided	No lamps	N/A
16b	Opening in a top cover positioned that accessibility of live parts by a test rod is prevented		N/A
16c	Conductive parts accessible after the removal of handles, knobs, levers		N/A
	- have a resistance of not more than 0.2 Ohm	No such parts	N/A
	- separated from live parts by one of the means described in Sub-clause 17g		N/A
16d	Parts with voltage exceeding 25V a.c. or 60V d.c. which cannot be disconnected by external mains switch or plug protected against contact		N/A
16e	Removable enclosures protecting against contact with live parts		Pass
	- Removal possible only with the aid of a tool		Pass
	- Use of automatic device making parts not live when the enclosure is opened or removed		N/A
	- Exception 16e applied to the following parts		N/A
16f	Openings for the adjustment of controls using a tool. The tool not able to touch basic insulation or any live parts		Pass

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Clause	Requirement + Test	Result - Remark	Verdict
17	SEPARATION		Pass
17a	Separation method of the applied part from live parts:		N/A
	1) basic insulation: applied part earthed	No applied parts	N/A
	2) by protectively earthed conductive part (e.g. screen)		N/A
	3) by separate earthed intermediate circuit limiting leakage current to applied part in event of insulation failure		N/A
	4) by double or reinforced insulation		N/A
	5) by protective impedances limiting current to applied part		N/A
	- Additional leakage current test in single fault conditions		N/A
17c	There is no conductive connection between applied parts and accessible conductive parts which are not protectively earthed	No applied part.	N/A
17d	Supplementary insulation between hand-held flexible shafts and motor shafts (Class I)	No such parts.	N/A
17g	Separation method of accessible parts other than applied parts from live parts:		Pass
	1) basic insulation: accessible part earthed	Metal chassis inside of the plastic Enclosure for power adapter.	Pass
	2) by protectively earthed conductive part (e.g. screen)		N/A
	3) by separate earthed intermediate circuit limiting leakage current to enclosure in event of insulation failure		N/A
	4) by double or reinforced insulation		Pass
	5) by protective impedances limiting current to accessible part		Pass
	- Additional leakage current test in single fault conditions	(see appended table 19)	Pass
17h	Arrangements used to isolate defibrillation-proof applied parts so designed that:		N/A
	- no hazardous electrical energies appear during a discharge of a cardiac defibrillator		N/A
	- after exposure to the defibrillation voltage, the equipment continues to perform its intended function		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
18	PROTECTIVE EARTHING, FUNCTIONAL EARTHING AND POTENTIAL EQUALIZATION		Pass
18a	Accessible parts of Class I equipment separated from live parts by basic insulation connected to the protective earth terminal	Metal chassis inside of the plastic Enclosure for power adapter.	Pass
18b	Protective earth terminals suitable for connection to the protective earth conductor		Pass
18e	Potential equalization conductor		N/A
	- Readily accessible	Potential equalization conductor not provided	N/A
	- Accidental disconnection prevented in normal use		N/A
	- Conductor detachable without the use of a tool		N/A
	- Power supply cord does not incorporate a potential equalization conductor		N/A
	- Connection means marked with Symbol 9, Table DI		N/A
18f	For equipment without power supply cord, impedance between protective earth terminal and accessible metal part $\leq 0.1 \text{ Ohm}$		Pass
	- For equipment with an appliance inlet, impedance between protective earth contact and any accessible metal part $\leq 0.1 \text{ Ohm}$	(see appended table 18) Evaluated as part of the UL R/C power supply	Pass
	- For equipment with a non-detachable power supply cord, impedance between protective earth pin in mains plug and accessible metal part $\leq 0.2 \text{ Ohm}$	Appliance Inlet provided.	N/A
18g	If the impedance of protective earth connections other than in Cl. 18 f) exceeds 0.1 Ohm , the allowable value of the enclosure leakage current is not exceeded in single fault condition		N/A
18k	Functional earth terminal not used to provide protective earthing	No functional earth.	N/A
18l	Class II equipment with isolated internal screens		N/A
	- insulation of screens and all internal wiring connected to them is double insulation or reinforced insulation	Class I equipment	N/A
	- functional earth terminal clearly marked		N/A
	- explanation of functional earth terminal provided in the accompanying documents		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

19	CONTINUOUS LEAKAGE CURRENTS AND PATIENT AUXILIARY CURRENTS		Pass
19.1b	Leakage currents	(see appended table 19) All combination of the conditions considered.	Pass
	- earth leakage current	(see appended table 19)	Pass
	- enclosure leakage current	(see appended table 19)	Pass
	- patient leakage current		N/A
	- patient auxiliary current	No applied part.	N/A

20	DIELECTRIC STRENGTH		Pass
	Overall compliance with Clause 20	(see appended table 20)	Pass

21	MECHANICAL STRENGTH		Pass
21a	Sufficient rigidity of an enclosure tested by: force of 45 N	(see appended table 21)	Pass
21b	Sufficient strength of an enclosure tested by: impact hammer	(see appended table 21)	Pass
21c	On portable equipment carrying handles or grips withstand the requirements of the loading test	No handles provided.	N/A
21.3	No damage to parts of patient support and/or immobilization system after the loading test	No patient support and/or immobilization system.	N/A
21.5	Hand held equipment or equipment parts are safe after drop test	Not hand-held equipment.	N/A
21.6	Portable and mobile equipment is able to withstand rough handling		Pass

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Clause	Requirement + Test	Result - Remark	Verdict

22	MOVING PARTS		N/A
22.2a	Moving parts of a transportable equipment are provided with guards which form an integral part of the equipment	No moving parts	N/A
22.2b	Moving parts of a stationary equipment are provided with similar guards as above, unless it is evident that equivalent protection is separately provided during installation		N/A
22.3	Cords (ropes), chains and bands are provided with guides to prevent them from running off or from jumping out of their guiding devices		N/A
	Guides or other safeguards are removable only with a tool		N/A
22.4	Dangerous movements of equipment parts, which may cause physical injury to the patient, are possible only by the continuous activation by the operator		N/A
22.6	Parts of equipment subject to mechanical wear are accessible for inspection		N/A
22.7	Means provided for emergency switching of an electrically produced mechanical movement which could cause a safety hazard		N/A
	The means for emergency switching is readily identifiable and accessible and does not introduce a further safety hazard		N/A
	Devices for emergency stopping able to break the full load current of the relevant circuit, taking into account possible stalled motor currents		N/A
	Means for stopping of movements operate as a result of one single action		N/A

23	SURFACES, CORNERS AND EDGES		Pass
	Rough surfaces, sharp corners and edges which may cause injury or damage avoided or covered	The edges are well rounded.	Pass

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Clause	Requirement + Test	Result - Remark	Verdict

24	STABILITY IN NORMAL USE (see appended table 24)		Pass
24.1	Equipment does not overbalance during normal use when tilted through an angle of 10°		Pass
24.3	Equipment overbalances when tilted through an angle of 10°		N/A
	- does not overbalance when tilted through an angle of 5° in any position excluding transport		N/A
	- carry a warning notice stating that transport should only be undertaken in a certain position		N/A
	- in the position specified for transport does not overbalance when tilted to an angle of 10°		N/A
24.6a	Equipment or its parts with a mass of more than 20 kg is provided with:		N/A
	- suitable handling devices (grips etc.), or		N/A
	- instructions for lifting and handling during assembly		N/A
24.6b	On portable equipment with a mass of more than 20 kg carrying handle(s) is (are) so situated that equipment may be carried by 2 or more persons	Mass is less than 20 kg.	N/A

25	EXPULSED PARTS		N/A
25.1	Protective means are provided where expelled parts of the equipment could be a hazard	No expelled parts	N/A
25.2	Display vacuum tubes with a face dimension exceeding 16 cm are provided with adequate protection against implosion		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

28	SUSPENDED MASSES		N/A
28.3	Suspension system with safety device		N/A
	Safety device provided where the integrity of a suspension depends on parts which may have hidden defects, or on parts having safety factors not complying with Sub-clause 28.4	Not a suspension system.	N/A
	Safety device has safety factors complying with Sub-clause 28.4.2		N/A
	Clear indication to the operator that the safety device has been activated after failure of suspension means		N/A
28.4	Suspension systems of metal without safety devices		N/A
	1) Total load does not exceed the safe working load		N/A
	2) Safety factors not less than 4 where it is unlikely that supporting characteristics will be impaired		N/A
	3) Safety factors not less than 8 where impairment is expected		N/A
	4) Safety factors multiplied by 1.5 for metal having an elongation at break of less than 5%		N/A
	5) Sheaves, sprockets, band wheels and guides so constructed that the safety factors maintained till replacement		N/A

29	X-RADIATION		N/A
29.2	EQUIPMENT not intended to produce X-radiation produces an exposure ≤ 130 nC/kg (0.5 mR)	Equipment does not employ a CRT	N/A

36	ELECTROMAGNETIC COMPATIBILITY		Pass
	Equipment complies with IEC 601-1-2	Not evaluated by Underwriters Laboratories Inc. Compliance documented by the manufacturer.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

37	COMMON REQUIREMENTS FOR CATEGORY AP AND CATEGORY APG EQUIPMENT		N/A
	Requirements for category AP and APG equipment (Cl. 37 - 41)	Not category AP or APG equipment.	N/A

42	EXCESSIVE TEMPERATURES		Pass
42.1	Equipment does not attain temperatures exceeding the values given in Table Xa over the range of ambient temperatures per Clause 10.2.1	(see appended table 42)	Pass
42.2	Equipment does not attain temperatures exceeding the values given in Table Xb at 25°C ambient		Pass
42.3	Applied parts not intended to supply heat have surface temperatures not exceeding 41°C	No applied part.	N/A
42.5	Guards to prevent contact with hot surfaces removable only with a tool	No hot accessible surface.	N/A

43	FIRE PREVENTION		Pass
	Strength and rigidity necessary to avoid a fire hazard	The equipment is well constructed with regard to avoid fire hazard.	Pass

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Clause	Requirement + Test	Result - Remark	Verdict

44	OVERFLOW, SPILLAGE, LEAKAGE, HUMIDITY, INGRESS OF LIQUIDS, CLEANING, STERILIZATION AND DISINFECTION		Pass
44.2	Equipment contain a liquid reservoir:		N/A
	- the equipment is electrically safe after 15% overfill steadily over a period of 1 min	No liquid reservoirs	N/A
	- transportable equipment is electrically safe after additionally having been tilted through an angle of 15° in the least favorable direction(s) (if necessary with refilling)		N/A
44.3	Electrical properties of the equipment do not change in connection of spillage test (200 ml of water)		N/A
44.4	Liquid which might escape in a single fault condition does not wet parts which may cause a safety hazard		N/A
44.5	Equipment sufficiently protected against the effects of humidity	(see appended table 44)	Pass
44.6	Enclosures designed to give a protection against harmful ingress of water classified according to IEC Publication 529		N/A
44.7	Equipment capable of withstanding cleaning, sterilization or disinfection without deterioration of safety provisions		Pass

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Clause	Requirement + Test	Result - Remark	Verdict

45	PRESSURE VESSELS AND PARTS SUBJECT TO PRESSURE		N/A
45.2	Pressure vessel with pressure volume greater than 200 kPa x l and pressure greater than 50 kPa withstand the hydraulic test pressure	No pressure vessels or parts	N/A
45.3	Maximum pressure does not exceed the maximum permissible working pressure for individual parts		N/A
45.7	Unless excessive pressure can not occur, pressure-relief device provided		N/A
45.7a	a) Pressure-relief device connected as close as possible to the pressure vessel		N/A
45.7b	b) Readily accessible for inspection		N/A
45.7c	c) Not capable of being adjusted or rendered inoperative without a tool		N/A
45.7d	d) Discharge opening located that the released material is not directed towards person		N/A
45.7e	e) Discharge opening located that operation will not deposit material which may cause a safety hazard		N/A
45.7f	f) Adequate discharge capacity to ensure pressure does not exceed the maximum permissible working pressure		N/A
45.7g	g) No shut-off valve between a pressure-relief device and the parts intended to be protected		N/A
45.7h	h) Minimum number of cycles of operation: 100.000		N/A

48	BIOCOMPATIBILITY		N/A
	Parts of equipment and accessories intended to come into contact with biological tissues, cells or body fluids are evaluated in accordance with ISO 10993-1		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

49	INTERRUPTION OF THE POWER SUPPLY		Pass
49.1	Thermal cut-outs and over-current releases with automatic resetting not used if they may cause a safety hazard	No such devices.	N/A
49.2	Interruption and restoration of power supply does not result in a safety hazard other than interruption of intended function		Pass
49.3	Means are provided for removal of mechanical constraints on patient in case of a supply mains failure		N/A

51	PROTECTION AGAINST HAZARDOUS OUTPUT		N/A
51.4	Equipment furnishing both low-intensity and high-intensity outputs provided with means minimizing possibility of a high intensity output being selected accidentally		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

52	ABNORMAL OPERATION AND FAULT CONDITIONS		Pass
52.1	Equipment is so designed and manufactured that even in single fault condition no safety hazard as described under 52.4 exists (see 3.1 and Cl. 13)	(see appended table 52) Both normal and single fault condition considered.	Pass
	The safety of equipment incorporating programmable electronic systems is checked by applying IEC 601-1-4		N/A
52.5.2	Failure of thermostats presents no safety hazards	No thermostats provided.	N/A
52.5.3	Short-circuiting of either part of double insulation presents no safety hazard	Evaluated as part of the power supply.	Pass
52.5.5	Impairment of cooling: temperatures not exceeding 1.7 times the values of Clause 42 minus 17.5°C	(see appended table 52)	Pass
52.5.6	Locking of moving parts presents no safety hazard	No such parts.	N/A
52.5.7	Interruption and short-circuiting of motor capacitors presents no safety hazard	No motor provided.	N/A
52.5.8	Duration of motors locked rotor test in compliance with Cl. 52.5.8	No motor provided.	N/A
52.5.9	Failure of one component at a time presents no safety hazard	(see appended table 52)	Pass
52.5.10	Overload of heating elements presents no safety hazard	Evaluated as part of the power supply.	Pass
52.5.10f	Motors intended to be remotely controlled, automatically controlled, or liable to be operated continuously provided with running overload protection	No motor provided.	N/A
52.5.10h	Equipment with three-phase motors can safely operate with one phase disconnected	No motor provided.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
56	COMPONENTS AND GENERAL ASSEMBLY		Pass
	List of critical components	(see appended table 56.1)	Pass
56.1b	Ratings of components not in conflict with the conditions of use in equipment		Pass
	Ratings of mains components are identified	Evaluated as part of the power supply.	Pass
56.1d	Components, movements of which could result in a safety hazard mounted securely	The movement of components is prevented.	Pass
56.1f	Conductors and connectors secured and/or insulated to prevent accidental detachment resulting in a safety hazard		Pass
56.3a	Connectors provide separation required by Sub-clause 17g		Pass
	Plugs for connection of patient circuit leads can not be connected to other outlets on the same equipment	No patient circuit.	N/A
	Medical gas connections not interchangeable	No medical gas connections.	N/A
56.3b	Accessible metal parts can not become live when detachable interconnection cord between different parts of equipment is loosened or broken		Pass
56.3c	Leads with conductive connection to a patient are constructed such that no conductive connection remote from the patient can contact earth or hazardous voltages.		N/A
56.4	Connections of capacitors		Pass
	Not connected between live parts and non-protectively earthed accessible parts	Evaluated as part of the power supply.	Pass
	If connected between mains part and protectively earthed metal parts comply with: IEC Publication 384-14	Evaluated as part of the power supply.	Pass
	Enclosure of capacitors connected to mains part and providing only basic insulation, is not secured to non-protectively earthed metal parts	Evaluated as part of the power supply.	Pass
	Capacitors or other spark-suppression devices are not connected between contacts of thermal cut-outs	Evaluated as part of the power supply.	Pass
56.5	Protective devices which cause disconnection from the supply mains by producing a short-circuit not provided in equipment		Pass
56.6	Temperature and overload control devices		Pass

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Clause	Requirement + Test	Result - Remark	Verdict
56.6a	Thermal cut-outs which have to be reset by a soldering not fitted in equipment		N/A
	Thermal safety devices provided where necessary to prevent operating temperatures exceeding the limits	Thermal safety devices provided in battery pack.	Pass
	Audible warning provided where the loss of function caused by operation of a thermal cut-out presents a safety hazard	No audible warning provided.	N/A
	Self-resetting thermal cut-outs and self-resetting over-current releases operated 200 times		N/A
	Non-self resetting over-current releases operated 10 times	No such device provided.	N/A
	Independent non-self-resetting thermal cut-out provided where a failure of a thermostat could constitute a safety hazard	Provided in battery pack.	Pass
56.6b	Thermostats with varying temperature settings clearly indicated	No thermostats provided.	N/A
	Operating temperature of thermal cut-outs indicated		N/A
56.7	Batteries		Pass
56.7a	Battery compartments:		Pass
	- adequately ventilated		Pass
	- accidental short-circuiting is prevented		Pass
56.7b	Incorrect polarity of connection prevented		Pass
56.8	Indicators - unless indication provided by other means (from the normal operation position), indicator lights are used (color see 6.7):		Pass
	- to indicate that equipment is energized	See Sub-clause 6.3a and 6.7.	Pass
	- to indicate the operation of non-luminous heaters if a safety hazard could result	No heaters	N/A
	- to indicate when output exists if a safety hazard could result		N/A
	- charging mode indicator provided		N/A
56.10	Actuating parts of controls	No such parts	N/A
56.10b	Actuating parts are adequately secured to prevent them from working loose during normal use		N/A
	Controls are secured to prevent the movement relative to scale marking (safety related only)		N/A
	Detachable indicating devices are prevented from		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	incorrect connection without the use of tool		
56.10c	Stops are provided on rotating controls:		N/A
	- to prevent an unexpected change from maximum to minimum or vice versa where this could produce a safety hazard	No such parts	N/A
	- to prevent damage to wiring		N/A
56.11	Cord-connected hand-held and foot-operated control devices		N/A
56.11a	Contain voltages not exceeding 25 V a.c. or 60 V d.c. and isolated from the mains part by Cl. 17g	No hand-held or foot operated devices	N/A
56.11b	Hand-held control devices comply with the requirement and test of Sub-clause 21.5		N/A
	- Foot-operated control devices designed to support the weight of an adult human being		N/A
56.11c	Devices not change their setting when inadvertently placed		N/A
56.11d	Foot-operated control devices are at least IPX 1		N/A
	- For surgical use, electrical switching parts are IPX 8		N/A
56.11e	Adequate strain relief at the cord entry provided		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
57	MAINS PARTS, COMPONENTS AND LAYOUT		Pass
57.1	Isolation from supply mains		Pass
57.1a	Equipment provides means to isolate its circuits electrically from the supply mains on all poles simultaneously	Evaluated as part of the power supply.	Pass
	Means for isolation incorporated in equipment or, if external, specified in the accompanying documents	Required power supplies are called out in the User Manual	Pass
57.1d	Switches used to comply with Sub-clause 57.1a comply with the creepage distances and air clearances as specified in IEC Publication 328	No switches provided.	N/A
57.1f	Mains switches not incorporated in a power supply cord	No mains switch.	N/A
57.1h	Appliance couplers and flexible cords with mains plugs provide compliance with Sub-clause 57.1a		Pass
57.1m	Fuses and semiconductor devices not used as isolating devices	Evaluated as part of the power supply.	Pass
57.2	Mains connectors and appliance inlets		Pass
57.2e	Auxiliary mains socket-outlets on non-permanently installed equipment of a type that cannot accept a mains plug		N/A
57.2g	Unless functional earth needs to be provided, Class I appliance inlet is not used in Class II equipment	Class I equipment with Class I appliance inlet.	N/A
57.3	Power supply cords		Pass
57.3a	Not more than one connection to a particular supply mains	Only one connection to a particular supply mains.	Pass
	If alternative supply allowed, no safety hazards when more than one connection is made simultaneously	No alternative supply allowed.	N/A
	The mains plug has only one power supply cord		Pass
	Non-permanently connected equipment provided with power supply cord or appliance inlet	Appliance Inlet provided.	Pass
57.3b	Power supply cords sufficiently robust to comply with the requirements of IEC 227, designation 53 and IEC 245, designation 53		Pass
	Polyvinyl chloride insulated power supply cords not used for equipment having external metal parts with a temperature exceeding 75°C		N/A
57.3c	Nominal cross-sectional area of conductors of power supply cords not less than in Table XV		Pass

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Clause	Requirement + Test	Result - Remark	Verdict
57.3d	Stranded conductors not soldered if fixed by any clamping means		Pass
57.4	Connection of power supply cords		N/A
57.4a	Cord anchorages		N/A
	Equipment provided with power supply cords has cord anchorages such that the conductors are relieved from strain, including twisting		N/A
	Tying the cord into a knot or tying the ends with string not used		N/A
	Cord anchorages made of insulating material or metal insulated from unearthed accessible metal parts by supplementary insulation		N/A
	Cord anchorages made of metal provided with an insulating lining		N/A
	Clamping screws do not bear directly on the cord insulation		N/A
	Screws associated with cable replacement are not used to secure other components		N/A
	Conductors of the power supply cord arranged that the protective earth conductor is not subject to strain as long as the phase conductors are in contact with their terminals		N/A
57.4b	Power supply cord protected against excessive bending		N/A
57.4c	Adequate space inside equipment to allow the supply cable conductors to be introduced and connected	Evaluated as part of the power supply.	N/A
57.5	Mains terminal devices and wiring of mains part		N/A
	Mains connected equipment other than those with a detachable supply cord provided with mains terminals, where connections are made with screws, nuts or equally effective methods	Detachable supply cord used.	N/A
	If a conductor breaks away, barriers are provided such that creepage distances and air clearances cannot be reduced		N/A
	Screws and nuts which clamp external conductors not serve to fix any other component		N/A
57.5b	Terminals closely grouped with any protective earth terminal		N/A
	Mains terminal devices accessible only with use of a tool		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Mains terminal devices located or shielded that, should a wire of a stranded conductor escape when the conductors are fitted, there is no risk of accidental contact		N/A
57.5c	Internal wiring not subjected to stress when the means for clamping the conductors are tightened or loosened		N/A
57.5d	Cord terminals not require special preparation of the conductor		N/A
57.6	Mains fuses and overcurrent releases		Pass
	Fuses or over-current releases provided accordingly for Class I and Class II	Class I, fuses provided in each supply leads.	Pass
	Current rating of mains fuses and over-current releases such that they reliably carry the normal operating current		Pass
	Protective earth conductor not fused	Evaluated as part of the power supply.	Pass
	Neutral conductor not fused for permanently installed equipment	Portable equipment.	N/A
57.8	Wiring of the mains part		Pass
57.8a	Individual conductor in the mains part with insulation not at least electrically equivalent to that of the individual conductors of flexible supply cords complying with IEC Publications 227 or 245, treated as bare conductor		Pass
57.8b	Cross-sectional area of conductors up to protective device not less than the minimum required for the power supply cord		Pass
	Cross-sectional area of other wiring and the sizes of tracks on printed wiring circuits sufficient to prevent any fire hazard		Pass
57.9	Mains supply transformers		Pass
57.9.1	Overheating	Evaluated as part of the power supply.	Pass
	External to the transformer protective devices connected in such a way that failure of any component cannot render the protective devices inoperative	Evaluated as part of the power supply.	Pass
57.9.1a	Short-circuit of secondary windings not caused excessive temperature	Evaluated as part of the power supply.	Pass
57.9.1b	Overload of secondary windings not caused	Evaluated as part of the power	Pass

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Clause	Requirement + Test	Result - Remark	Verdict
	excessive temperature	supply.	
57.9.2	The dielectric strength of the electrical insulation of a mains supply transformer such that it passes tests	Switching power supply	N/A
57.9.4	Construction		Pass
57.9.4a	Separation of primary and secondary windings		Pass
	- separate bobbins or formers		N/A
	- one bobbin with insulating partition		N/A
	- one bobbin with concentric windings and having copper screen with a thickness of not less than 0.13 mm		N/A
	- concentrically wound on one bobbin with windings separated by double insulation		Pass
57.9.4c	Means provided to prevent displacement of end turns		Pass
57.9.4d	Insulated overlap of not less than 3 mm if a protective earthed screen has only one turn	Evaluated as part of the power supply.	N/A
57.9.4e	Insulation between the primary and secondary in transformers with double insulation		Pass
	- 1 insulation layer having a thickness of at least 1 mm		N/A
	- at least 2 insulation layers with a total thickness of at least 0.3 mm		N/A
	- three layers provided that each combination of two layers can withstand the dielectric strength test for reinforced insulation	Evaluated as part of the power supply.	Pass
57.9.4g	Exit of the wires of toroidal transformers provided with double sleeving complying with requirements for double insulation and having total thickness at least 0.3 mm extending at least 20 mm outside the winding		N/A
57.10	Creepage distances and air clearances		Pass
57.10a	Values: compliance with at least the values of Table XVI	(see insulation diagram) Adapter had been evaluated as part of the power supply. The clearance and creepage of Panel PC comply with at least the values of Table XVI.	Pass
	Creepage distances for slot insulation of motors at least 50% of the specified values	No motor provided.	N/A

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
57.10b	Minimum creepage distances and air clearances in the mains part between parts of opposite polarity not required if short-circuiting does not produce a safety hazard	Adapter had been evaluated as part of the power supply. The clearance and creepage of Panel PC comply with at least the values of Table XVI.	Pass
57.10c	Creepage distances or clearances of at least 4 mm are maintained between defibrillation-proof applied parts and other parts	No applied parts.	N/A

58	PROTECTIVE EARTHING - TERMINALS AND CONNECTIONS		Pass
58.1	Clamping means of the protective earth terminal		Pass
	Not be able to loosen without the aid of a tool	Evaluated as part of the power supply.	Pass
	Screws for internal earth connections are covered or protected against loosening from outside	Evaluated as part of the power supply.	Pass
58.7	Earth pin of the appliance inlet regarded as the protective earth terminal	Evaluated as part of the power supply.	Pass
58.8	The protective earth terminal not used for the mechanical connection or the fixing of any component not related to earthing	Evaluated as part of the power supply.	Pass
58.9	Where the protective earth connections are made via a plug or socket device the protective earth connection is made before and interrupted after the supply connections during connection and interrupting	Evaluated as part of the power supply.	Pass

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
59	CONSTRUCTION AND LAYOUT		Pass
59.1	Internal wiring		Pass
59.1a	Cables and wiring protected against contact with a moving part		Pass
	Wiring having basic insulation only protected by additional fixed sleeving		Pass
	Components are not likely to be damaged in the normal assembly or replacement of covers		Pass
59.1b	Movable leads are not bent around a radius of less than five times the outer diameter of the lead		Pass
59.1c	Insulating sleeving adequately secured		Pass
	If the sheath of a flexible cable or cord is used as supplementary insulation it complies with requirements of IEC 227 and IEC 245 and dielectric test	Evaluated as part of the power supply.	Pass
	Conductors subjected to temperatures exceeding 70°C have an insulation of heat-resistant material	Evaluated as part of the power supply.	Pass
59.1d	Aluminum wires of less than 16 mm ² cross-section not used		N/A
59.1f	Connecting cords between equipment parts considered as belonging to the equipment		Pass
59.2	Insulation		Pass
59.2b	Mechanical strength and resistance to heat and fires retained by all types of insulation		Pass
59.2c	Insulation not likely to be impaired by deposition of dirt or by dust resulting from wear of parts		Pass
	Parts of rubber resistant to ageing	No rubber provided.	N/A
59.3	Excessive current and voltage protection		Pass
	Internal electrical power source provided with device for protection against fire hazard	Thermal protectors are provided on the battery pack	Pass
	Fuse elements replaceable without opening the enclosure fully enclosed in a fuseholder	Fuses are inside the enclosure of power supply.	N/A
	Protective devices between an isolated applied part and the body of the equipment do not operate below 500 V r.m.s.	No applied part.	N/A
59.4	Oil containers		N/A
	Oil containers adequately sealed	No oil containers	N/A
	Container allow for the expansion of the oil		N/A

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict
	Oil containers in mobile equipment sealed to prevent the loss of oil during transport		N/A
	Partially sealed oil-filled equipment or equipment parts provided with means for checking the oil level		N/A

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

6.1	TABLE: marking durability		Pass
Marking tested		Remarks	
--		--	
supplementary information:			
Waived base on Label Construction.			

7	TABLE: power input					Pass
Operating condition		Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Remarks
Model POC-125, with P/S XPIQ, Type PCM80PS24		90	47	0.79	71	Alternate main board and battery pack. Battery pack discharged.
---		90	63	0.70	71	---
---		100	47	0.70	72	---
---		100	63	0.72	70	---
---		240	47	0.32	72	---
---		240	63	0.33	72	---
---		264	47	0.29	72	---
---		264	63	0.30	72	---
Model POC-125, with P/S Sinpro, Type MPU50-108		90	47	1.23	70	Alternate main board and battery pack. Battery pack discharged.
---		90	63	1.26	71	---
---		100	47	1.16	71	---
---		100	63	1.18	71	---
---		240	47	0.62	67	---
---		240	63	0.61	67	---
---		264	47	0.56	66	---
---		264	63	0.50	54	---
supplementary information:						
Use of Hitron Power Supply Evaluated in E180881-A26.						

15b	TABLE: residual voltage in attachment plug										Pass
Voltage measured between:		Measurements [V]								Remarks	
		1	2	3	4	5	6	7	8		9
---		--	--	--	--	--	--	--	--	--	--
supplementary information:											
Evaluated in separate report of power supply.											

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

15c	TABLE: residual voltage or energy in capacitors				N/A
Capacitor and its location	Residual voltage (V)	Time after disconnection (s)	Capacitance value (μF)	Residual energy (mJ)	Remarks
supplementary information:					

17h1	TABLE: defibrillation-proof applied parts				N/A
Test Condition: Fig. 50 or 51	Accessible part of measurement:	Applied part with test voltage	Test voltage polarity	Measured voltage between Y1 and Y2 (mV)	Remarks
supplementary information:					

17h2	TABLE: defibrillation-proof recovery time				N/A
Applied part with test voltage	Test voltage polarity	Recovery time from accompanying documents (s)	Measured recovery time (s)	Remarks	
supplementary information:					

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

18	TABLE: protective earthing				Pass
Test location	Test current (A)	Measured voltage (V)	Resistance (ohms)	Remarks	
---	---	--	---	Evaluated as part of the Power Supply UL R/C investigation	
supplementary information:					
Evaluated in separate report of power supply.					

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

19	TABLE: leakage current			Pass
Type of leakage current and test condition (including single faults)	Supply voltage (V)	Supply frequency (Hz)	Measured max. value (µA)	Remarks
Earth Leakage Current, Figure 17	--	--	B/A	--
ER, NC (S1, S2, S3=1) S5=1, MD1	264	60	113/115	--
ER, NC (S1, S2, S3=1) S5=0, MD1	264	60	123/126	--
ER, SFC; S1=0 (S2, S3, S5=1), MD1	264	60	211/211	--
ER, SFC; S1=0 (S2, S3, S5=0), MD1	264	60	218/220	--
ER, SFC; S2 or S3=0 (S1, S5=1), MD1	264	60	113/116	--
ER, SFC; S2 or S3=0 (S1, S5=0), MD1	264	60	123/125	--
Enclosure Leakage Current, Figure 19	--	--	--	--
EN, NC (S1=1), S5=1, MD1	264	60	61/64	--
EN, NC (S1=1), S5=0, MD1	264	60	64/64	--
EN, SFC; S1=0, S5=1, MD1	264	60	112/114	--
EN, SFC; S1=0, S5=0, MD1	264	60	114/115	--
EN, NC; S1, S2, S3=1, S1, S5=1, MD3	264	60	61/63	--
EN, NC; S1, S2, S3=1, S1, S5=0, MD3	264	60	62/64	--
EN, SFC; S1=0, (S2, S3=1), S5=1, MD3	264	60	115/115	--
EN, SFC; S1=0, (S2, S3=1), S5=0, MD3	264	60	115/116	--
EN, SFC; S2 or S3=0, (S1=1), S5=1, MD3	264	60	61/62	--
EN, SFC; S2 or S3=0, (S1=1), S5=0, MD3	264	60	61/62	--
EN, SFC; (S1, S2, S3=1), S5=1, MD3	264	60	61/62	--
EN, SFC; (S1, S2, S3=1), S5=0, MD3	264	60	62/62	--
EN, NC (S1, S2, S3=1), S5=1, MD4	264	60	40/42	--
EN, NC (S1, S2, S3=1), S5=0, MD4	264	60	40/42	--
EN, SFC; S1=0, (S2, S3=1), S5=1, MD4	264	60	55/55	--
EN, SFC; S1=0, (S2, S3=1), S5=0, MD4	264	60	55/56	--
EN, SFC; S2 or S3=0, (S1=1), S5=1, MD4	264	60	40/41	--
EN, SFC; S2 or S3=0, (S1=1), S5=0, MD4	264	60	40/42	--
EN, SFC; (S1, S2, S3=1), S5=1, MD4	264	60	40/42	--
EN, SFC; (S1, S2, S3=1) S5, MD4	264	60	40/41	--
Type of Leakage current and test condition	--	--	--	--
Plastic EN to metal part	12.6Vdc	--	4.0/5.0	Internal powered by battery pack, and adapter is not connected to unit.
Metal Part to Metal Part	12.6Vdc	--	4.0/5.0	Internal powered by battery pack, and adapter is not connected to unit.
Enclosure Leakage Current: Alternate LCD Panel with inverter	--	--	--	Alternate Panel Model: G121SN01. Inverter Model: LV-12DLC-A
EN, NC, S1 = 1, S5 = N, S7 = 1	264	60	3.0	MD1 between Touch Screen and Earth

IEC 60601				
Clause	Requirement + Test	Result - Remark		Verdict
EN, NC, S1 = 1, S5 = R, S7 = 1	264	60	2.0	MD1 between Touch Screen and Earth
EN, SFC (Neutral Open), S1 = 0, S5 = N, S7 = 1	264	60	4.0	MD1 between Touch Screen and Earth
EN, SFC (Neutral Open), S1 = 0, S5 = R, S7 = 1	264	60	4.0	MD1 between Touch Screen and Earth
EN, SFC (Ground Open), S1 = 1, S5 = N, S7 = 0	264	60	10.0	MD1 between Touch Screen and Earth
EN, SFC (Ground Open), S1 = 1, S5 = R, S7 = 0	264	60	10.0	MD1 between Touch Screen and Earth
EN, SFC (SC HV to LV DC inverter), S1 = 1, S5 = N	264	60	3.0	17g.5 MD1 between front panel and earth
EN, SFC (SC HV to LV DC inverter), S1 = 0, S5 = R	264	60	3.0	17g.5 MD1 between front panel and earth
EN, SFC (SC HV to LV DC inverter), S1 = 1, S5 = N	264	60	3.0	17g.5 MD1 between plastic enclosure and earth
EN, SFC (SC HV to LV DC inverter), S1 = 0, S5 = R	264	60	3.0	17g.5 MD1 between plastic enclosure and earth
EN, NC, S1 = 1, S5 = N, S7 = 1	264	60	3.0	MD1 between Touch Screen and Earth
Enclosure and Single Fault Conditions for POC-125	--	--	--	Tested with Sinpro, MPU50-108 power supply to represent worst case
EN, NC, S1 = 1, S5 = N, S7 = 1	264	47	1.5	MD1 between Plastic Enclosure and Earth
EN, NC, S1 = 1, S5 = R, S7 = 1	264	47	1.1	MD1 between Plastic Enclosure and Earth
EN, SFC (Neutral Open), S1 = 0, S5 = N, S7 = 1	264	47	1.3	MD1 between Plastic Enclosure and Earth
EN, SFC (Neutral Open), S1 = 0, S5 = R, S7 = 1	264	47	1.2	MD1 between Plastic Enclosure and Earth
EN, SFC (Ground Open), S1 = 1, S5 = N, S7 = 0	264	47	5.9	MD1 between Plastic Enclosure and Earth
EN, SFC (Ground Open), S1 = 1, S5 = R, S7 = 0	264	47	5.1	MD1 between Plastic Enclosure and Earth
EN, SFC, S1 = 1, S5 = N, S7 = 1 Short Battery to Ground (CN1 P6/7 to P1/2)	264	47	1.1	MD1 between Plastic Enclosure and Earth. Tested with new battery pack POC125
EN, SFC, S1 = 1, S5 = R, S7 = 1 Short Battery to Ground (CN1 P6/7 to P1/2)	264	47	1.0	MD1 between Plastic Enclosure and Earth. Tested with new battery pack POC125

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Clause	Requirement + Test	Result - Remark	Verdict

supplementary information:

Tests conducted for Model POC-123: Power Adapter: Hitron, Model: HES49-24021, Battery: Samsung Sdi Co Ltd, Model ICR18650-20. Battery is charging when tests conducted. Tests conducted for Model POC-125: Power Adaptor, Sinpro MPU50-108, battery pack POC125.

ER - Earth leakage current
 EN - Enclosure leakage current
 P - Patient leakage current
 PM - Patient leakage current with mains on the applied parts
 PA - Patient auxiliary current
 Fig. 15 - refers to Fig. 15 in IEC601-1
 MD - Measuring device

A - After humidity conditioning
 B - Before humidity conditioning
 1 - Switch closed or set to normal polarity
 0 - Switch open or set to reversed polarity
 NC - Normal condition
 SFC - Single fault condition

20	TABLE: dielectric strength				Pass
Insulation under test (area from insulation diagram)	Insulation type: (OP-operational / BI-basic / SI-supplementary / DI-double / RI-reinforced)	Reference voltage (V)	Test voltage (V)	Remarks	
Primary to Enclosure	DI	240 Vac	4000Vac	Pass	
Primary to SIP/SOP	DI	240 Vac	4000Vac	Pass	
supplementary information:					
N/A					

21	TABLE: mechanical strength		Pass
Part under test	Test (impact, drop, force, handle, rough handling, mobile)	Remarks	
--	--	--	
supplementary information:			
Evaluated in E180881-A26.			

24	TABLE: - stability		Pass
Part under test	Test condition	Remarks	
--	--	--	
supplementary information:			
Evaluated in E180881-A26.			

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

29	TABLE: X - radiation			N/A
Part under test		Test condition	Measured radiation (mR)	Remarks
supplementary information:				

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

42	TABLE: normal temperature		Pass
Supply voltage: See Below Ambient temperature: See Below		Test Condition: See Below	
Measuring location		Measured temperature (°C)	Remarks
POC-125, with battery pack POC125 and SinproMPU50-108 power adaptor		90V, 63 Hz	Battery Pack fully discharged. USB's loaded to 5V
Ambient		23	--
Cell 1		56	--
Cell 2		56	--
Cell 3		55	--
Thermal cutoff (SCP1)		57	--
Thermostat (BPF2)		55	--
Q1 body		56	--
Q2 Body		56	--
U3 body		56	--
POC-125, with battery pack POC125 and SinproMPU50-108 power adaptor		90V, 63 Hz	Impairment of Cooling. Blocked Vents. Battery Pack fully discharged. USB's loaded to 5V
Ambient		23	--
Cell 1		59	--
Cell 2		60	--
Cell 3		59	--
Thermal cutoff (SCP1)		61	--
Thermostat (BPF2)		59	--
Q1 body		60	--
Q2 Body		60	--
U3 body		59	--
Enclosure inside above battery pack		42	--
Enclosure outside above battery pack		31	--
COR - indicates measurements taken using change-of-resistance method			
supplementary information:			
Model POC-123, with Hitron Power Adaptor Evaluated in E180881-A26.			

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

44	TABLE: overflow, spillage, leakage, humidity, ingress of liquids, cleaning, sterilization, disinfection		Pass
Test type and condition		Part under test	Remarks
Humidity, 32 degree C, 93±2%, 120 hrs		The unit with adapter	No Breakdown.
supplementary information:			
N/A			

45	TABLE: hydrostatic pressure and pressure-relief device cycling test			N/A
Test type and condition		Part under test	Test pressure	Remarks
supplementary information:				

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

52	TABLE: abnormal operation		Pass
Test type, condition and clause reference		Observed results	Remarks
Abnormal Testing of POC-125 below was conducted with Tested with Sinpro, MPU50-108 power supply and battery pack POC125		--	--
Short Circuit, D3 Battery Charger Circuit: Battery fully discharged. Tested during recharging		Vpk= 264 (rated input did not change) Ipk= 0.030 to 0.067 (cycle) Elapsed Time= 1 sec Components Damaged: None	How test terminated: Unit cycle protection operated immediately
Short Circuit, U3 (P1-P8) Battery Charger Circuit: Battery fully discharged. Tested during recharging		Vpk= 264 (rated input did not change) Ipk= 0.037 to 0.075 (cycle) Elapsed Time= 1 hour Components Damaged: None	Cell Temp = 28°C Thermal Protector Temp= 39°C Ambient = 23°C How test terminated: Unit cycle protection operated immediately. Test continued until battery fully charged.
Short Circuit, D7 Battery Charger Circuit: Battery fully discharged		Vpk=264 (rated input did not change) Ipk= 0.082 to 0.358 Elapsed Time= 1 hour Components Damaged: None	Cell Temp = 37°C Thermal Protector Temp= 38°C Ambient = 22°C How test terminated: Unit cycle protection operated immediately. Test continued until battery fully charged.
Short Circuit Q1 (P2-P8) Battery Pack Circuit: Battery full charged		Vpk = 11.32V Ipk = 0.035A Elapsed Time= 5 sec Components Damaged: None	How test terminated: Battery operated normally. Same condition as temperature test so test not continued
Short Circuit U1 (P18-P17) Battery Pack Circuit: Battery Pack fully charged		Vpk = 11.39V Ipk = 0.010A Elapsed Time= 45 minutes Components Damaged: None	Cell Temp = 58°C Thermal Protector Temp=62°C Ambient = 22°C How test terminated: Test continued thermal equilibrium
56.7- REVERSED BATTERY CONNECTION. Battery Pack fully charged		Test time: 1 second How Test Terminated: No operation.	Test terminated after confirming no battery operation
56.7- REVERSED BATTERY CONNECTION. Battery Pack fully discharged		Temp of Cells: 49°C Temp of Thermal Protector: 50°C	Test time: 5 hrs How Test Terminated: Thermal

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

		Stability, battery fully charged
supplementary information: Model POC-123 with Hitron Power Adaptor Evaluated in E180881-A26.		

IEC 60601		
Clause	Requirement + Test	Result - Remark
		Verdict

TABLE: list of critical components							Pass
Object/part No.	Manufacturer/ trademark	type/model	technical data	Product Category CCN(s)	Required Marks of Conformity	Photo ID, Item # or other sorting identifier	
Power Adapter for use with POC-123	Hiltron Electronics Corp	HES49-24021	Input 100-240 Vac, 50/60 Hz Output 24 Vdc, 2.1 A	QQHM2	UL R/C	3-01	
Alternate Power Adapter for use with POC-125	XPIQ Inc.	PCM80PS24	Input 100-240 Vac, 47-63 Hz Output 24 Vdc, 3.33 A	QQHM2	UL R/C	3-01	
Alternate Power Adapter for use with POC-125	Sinpro	MPU50-108	Input 100-240 Vac, 47-63 Hz Output 24 Vdc, 2.08 A	QQHM2	UL R/C	3-01	
Enclosure	GE PLASTICS GLOBAL PRODUCTS FOR WORLDWIDE PROCUREMENT	C2800 (1) (5) (6) (7) (9) (11)	V-0 or better, minimum 2.3mm thick, 65 °C min. See Enclosure 4-01 for details.	QMFZ2	UL R/C	4-01	
Enclosure Metalized Coating	Basistak Co., Ltd. Taipei, Taiwan	599-B3730 & 599- B4540	Only Spray on inside of enclosure GE PLASTICS GLOBAL PRODUCTS FOR WORLDWIDE PROCUREMENT, model C2800, maximum operating temperature 80 degree C.	QMRX2	UL R/C	3-11	
Base	Various	Various	Metal, overall 286 by 193 by 179 mm, weighted 1.75 kg.	N/A	N/A	3-04	
PWB	Various	Various	V-1 or better, 105°C min.	ZPMV2	UL R/C	3-03	
LCD Panel	IMES Co., Ltd.	M121-53DR	TFT type, SVGA 12.1 inch	N/A	N/A	3-03	
Alternate	Tottori SANYO	MXS121022010	TFT type, SVGA 12.1 inch	N/A	N/A	3-03	

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Clause	Requirement + Test	Verdict

Alternate	Electric Co., Ltd Totori SANYO Electric Co., Ltd	TM121SV- 22L11A	TFT type, SVGA 12.1 inch	N/A	N/A	3-03
Alternate	AU Optonics Corporation	G121SN01	TFT type, SVGA 12.1 inch	N/A	N/A	3-03
HDD Drive (Optional)	Various	Various	Generic, 5 Vdc, 0.55 A max.	NWQG2	UL R/C	3-03
CD / DVD-ROM / CD- RW Drive (Optional)	Various	Various	Generic, 5 Vdc, 0.9 A, laser Class I	NWQG2	UL R/C	3-03
Lithium Battery	Toshiba Battery Co Ltd	CR2032	3 Vdc, Max. Abnormal Charging Current 10 mA	BBCV2	UL R/C	3-03
Alternate	Rayovac Corp	BR2032	3 Vdc, Max. Abnormal Charging Current 4 mA	BBCV2	UL R/C	3-03
Inverter	Lecerf Technology Co., Ltd	1201-C-1	I/P: 12 V, 1300 mA, Output: 560 Vrms, 5.3 mA	N/A	Suitability of this component determined during this evaluation	4-02
- Transformer (T1, T2) (for Inverter)	Lecerf Technology Co., Ltd	X03	Class 105°C. See Enclosure Diagrams for Construction Details	N/A	Suitability of this component determined during this evaluation	4-02
- Capacitor (C6, C8)	--	--	27 pF, 3000 V	N/A	N/A	4-02
Alternate Inverter	Lecerf Technology Co., Ltd	LV-12DLC-A	Input: 12 V, 1000 mA, Output: 560 Vrms, 6 mA	N/A	Suitability of this component determined during this evaluation	4-02
Alternate Transformer	Lecerf Technology Co., Ltd	X09	Class 105°C. See Enclosure Diagrams for Construction details	N/A	Suitability of this component determined during this evaluation	4-02

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Clause	Requirement + Test	Result - Remark
		Verdict

Polyswitch (FS5, FS6) (for USB connector)	Tyco Corp. (Raychem)	miniSMDC110	8 Vdc, 1.1 A(Ih), 2.2 A(Ii)	XGPU2		determined during this evaluation	UL R/C	3-03	
Polyswitch (FS7) (for keyboard and mouse connector)	Tyco Corp. (Raychem)	miniSMDC110	8 Vdc, 1.1A (Ih), 2.2A (Ii)	XGPU2		UL R/C		3-03	
Battery Pack for POC-123 (optional)	Advantech	PPC-L126-BP	11.10 V, 4000 mAh	N/A		Suitability of this component determined during this evaluation	UL R/C	3-07	
- Battery cell (Li-Ion type) (6 cells provide, 2 parallel, 3 series)	Samsung Sdi Co Ltd	ICR18650-20	3.7 V, 2000 mAh	BBCV2		UL R/C		3-07	
- PTC device (polyswitch)	Raychem Corp.	LR4-550	20 Vdc, 5.5 A	XGPU2		UL R/C		3-07	
- Fuse Cut-off (TF12)	Uchihashi Estec Co., Ltd.	448	4 A, 50 Vdc, 135°C	XCMQ2		UL R/C		3-07	
Battery Pack for POC-125. Consists of items below - (optional)	Advantech (Manufactured by: Perfect Source Co., Ltd)	POC-125 (PN 0262AT0125311J)	11.10 V, 2400 mAh	N/A		Suitability of this component determined during this evaluation	UL R/C	3-08	
- Battery cell (Li-Ion type) (6 cells provide, 1 parallel, 3 series)	Samsung Sdi Co Ltd	ICR18650-24	2.4 V, 2000 mAh	BBCV2		UL R/C		3-08	
- Thermal Cut-off (SCP1)	NEC Schott Components Corp	D6X	12 A, 32 Vdc, 139°C	XCMQ2		UL R/C		3-08	
- Thermal Protector (TH1)	Uchiya Thermostat Co., Ltd	BPF2	80°C, 15A, 18V	XAPX2		UL R/C		3-08	

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

Label Material (E214164-A1-UL-2 Reissue 1)	Li Yi Industrial Co., Ltd.	LY-101	Minimum 50°C	PGDQ2	UL R/C	3-05
Power Cord	Various	Various	Listed Hospital grade, type SJE, SJT or SJO min. 18AWG, 10A, 60 °C	ELBZ	UL	

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

56.10	TABLE: actuating parts and controls		N/A
Part under test	Torque applied	Remarks	
supplementary information:			

56.11b	TABLE: foot operated control devices-loading		N/A
Part under test	Observed results	Remarks	
supplementary information:			

57.4	TABLE: cord anchorages			N/A
Cord under test	Mass of equipment	Pull	Torque	Remarks
supplementary information:				

57.4b	TABLE: cord bending			N/A
Cord under test	Test mass	Measured curvature	Remarks	
supplementary information:				

IEC 60601			
Clause	Requirement + Test	Result - Remark	Verdict

57.9.1a	TABLE: transformer short circuit					Pass
Winding under test	Protection	Measured temperatures (°C)			Test duration	Remarks
		Primary	Secondary	Ambient		
--	--	--	--	--	--	--
supplementary information:						
Evaluated in separate report of power supply.						

57.9.1b	TABLE: overload						Pass
Winding under test	Protection	Measured temperatures (°C)			Test duration	Test current or thermal cutout temp.	Remarks
		Primary	Secondary	Ambient			
--	--	--	--	--	--	--	--
supplementary information:							
Evaluated in separate report of power supply.							

57.9.2	TABLE: transformer dielectric strength				N/A
Transformer under test	Test voltage applied to	Test voltage	Test frequency	Remarks	
supplementary information:					

	TABLE: additional tests		Pass
Clause	Test type and condition	Remarks and observed results	Verdict
59.2	Ball Pressure Test, Location Enclosure, Material Chi Mei PA-765A, 2.6 mm thickness. Condition 75°C, 1.07 mm	Dent Diameter 0.88 mm	Pass
supplementary information:			
Clause 55 Mechanical abuse ball drop test and Mold Stress Relief test are evaluated under E180881-A26.			

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Enclosure
National Differences

Canada
USA

IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict

Canada - Differences to IEC 60601-1:1988 + A1:1991 + A2:1995			
6	Canadian difference to this clause no longer applicable		Pass
6.61	Point of connection of gas cylinders:		N/A
6.61	- is gas specific	No gas cylinders or connections	N/A
6.61	- is non-interchangeable		N/A
6.61	- is identified		N/A
56.3a	Medical gas inlet connectors:		N/A
56.3a	- are gas specific	No medical gas connections.	N/A
56.3a	- are non-interchangeable		N/A
56.3a	- are DISS type complying with CGA V-5		N/A
56.3a	- are configured to permit the supply from assemblies complying with CAN/CSA - Z5359-04 (replaces Z305.2)		N/A
56.6a	Where consequential loss of function caused by operation of a thermal cut-out presents a safety hazard, both visible and audible warnings provided		N/A
57.2g	Mains plug of non-permanent installed equipment:		Pass
57.2g	- if molded on type - hospital grade complying with CSA C22.2, No. 21		Pass
57.2g	- hospital grade disassembly type complying with CSA C22.2, No. 42		N/A
57.2g	- if Class II equipment - polarized hospital grade CSA configuration 1-15P	Class I equipment.	N/A
57.3b	Detachable power supply cords:		Pass
57.3b	- unlikely to be detached accidentally		Pass
57.3b	- impedance of earth contacts presents no safety hazard		Pass
57.3b	- possibility of replacement by a cord which could make equipment hazards minimized		Pass
57.3b	- complies with CSA C22.2 NO. 21		Pass
57.3b	- not smaller than No. 18 AWG		Pass
57.3b	- minimum serviceability of Type SJ for mobile equipment or Type SV for other		Pass
57.9	Canadian difference to this clause no longer		N/A

IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict

	applicable		
58.2	Canadian difference to this clause no longer applicable		N/A
59.1	Connecting cables comply with Canadian Electrical Code, Part I		Pass
60	Canadian difference to this clause no longer applicable		N/A

IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict

USA - Differences to IEC 60601-1:1988 + A1:1991 + A2:1995			
3.100.1a	Printed wiring boards comply with U.S. National or internationally harmonized component standards unless they are connected totally in a SELV circuit limited to 15 W, or less, maximum available power and whose failure will not result in a Safety Hazard.	PWB complies with U.S. National standards.	Pass
3.100.1b	Lithium batteries comply with U.S. National or internationally harmonized component standards	R/C Lithium batteries provided.	Pass
3.100.1c	Optical isolators comply with U.S. National or internationally harmonized component standards unless they are connected totally in a SELV circuit limited to 15 W, or less, maximum available power and whose failure will not result in a Safety Hazard.	Optical isolators evaluated as part of the power supply.	Pass
3.100.1d	Wiring and tubing comply with U.S. National or internationally harmonized component standards unless they are connected totally in a SELV circuit limited to 15 W, or less, maximum available power and whose failure will not result in a Safety Hazard.	Wiring and tubing comply with U.S. National standards.	Pass
3.100.1e	CRT's > 5 inches comply with U.S. National or internationally harmonized component standards	No CRT provided.	N/A
3.101.1	Primary circuit components up to isolation transformer meet U.S. national or international harmonized component standards		Pass
6	a) All words except the signal words in "CAUTION", "WARNING", and "DANGER" markings at least 1.6 mm (1/16 inch) high	Markings at least 1.6 mm (1/16 inch) high.	Pass
6	b) Signal words "CAUTION", "WARNING", and "DANGER" at least 2.8 mm (7/64 inch)	Signal words at least 2.8 mm (7/64 inch) high.	Pass
6	c) Letters in contrast color to the background		Pass
6	Equipment capable of emitting ionizing radiation provided with warning statement	Not emits ionizing radiation.	N/A
6	If equipment produced in more than one factory, factory identification marked on the equipment	Factory ID provided.	Pass
6	Multiple-voltage equipment intended for permanent connection marked with voltage for which it is connected when shipped	Not permanent connected.	N/A
6.2l	Statement for suitable wiring materials at temperatures over 60 °C		N/A
6.6a	Identification of the content of gas cylinders in accordance with the color coding requirement of ANSI/NFPA99.	No gas cylinders or connections	N/A

IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict
6.8	Cord-connected equipment provided with instructions to indicate type of attachment plug for alternate voltage	Power supply cord appropriate for expected voltage provided with equipment.	N/A
10.2.2a	Rated voltage not exceeding 250 Vdc or single phase ac or 600 V polyphase ac for equipment up to 4kVA	100-240 Vac, single phase	Pass
10.2.2a	Rated voltage not exceeding 600 V for all other equipment		N/A
14	Fixed equipment and permanent equipment is Class I	Not fixed or permanent equipment	N/A
18m	Earthing of X-ray equipment: All parts operating at over 600 V ac, 850 V dc, or 850 V peak are enclosed in protectively earthed enclosures		N/A
18m	Earthing of X-ray equipment: Connections from high-voltage equipment to other high voltage components made with high voltage shielded cables		N/A
18n	Accessible non-current carrying conductive parts are protectively earthed	Not X-ray equipment.	N/A
19	Enclosure and earth leakage currents comply with U.S. limits	(see appended table 19)	Pass
22	When risk of injury can occur, end stops are provided	No moving parts	N/A
22	End stops have mechanical strength as determined by the test		N/A
22.4	Dangerous movements of equipment parts which may cause physical injury to the patient or operator are possible only by the continuous activation by the operator		N/A
22.7a	Emergency off switch has red actuator	No such parts	N/A
22.7a	Emergency off switch: once actuated, maintains the equipment in "off" condition until action, different from that used to actuate, is performed		N/A
22.7a	Emergency off switch is readily accessible to operator		N/A
22.7b	Emergency off switch is marked with word "STOP" or symbol 5110 of IEC 878 in compliance with U.S. Clause 6		N/A
22.7b	Emergency off switch: separate and independent of		N/A

IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict
	the intended movement control		
28.3	No evidence of damage to a safety catch after test		N/A
28.3	Safety catch marking provided		N/A
28.4	No damage to structural parts as a result of loading test		N/A
42	Insulation systems with measured temperatures exceeding Class A 105°C (based on 40°C ambient) comply with UL1446	Evaluated as part of the power supply.	Pass
55	Polymeric enclosures and external combustible surfaces		Pass
55	Polymeric enclosures comply with: Conductive coatings applied to nonmetallic surfaces comply with UL 746C	No Conductive coatings provided.	N/A
55	External combustible surface of more than 9.47 m2 or single dimension of 3.7 m have flame spread rating not exceeding 75 (Steiner Tunnel Test)	No such surface provided.	N/A
55	External combustible surface of more than 4.74 m2 but not exceeding 9.47 m2 have flame spread rating not exceeding 75 (Radiant Panel or Steiner Tunnel Test)	No such surface provided.	N/A
55	Polymeric enclosures for transportable equipment rated 94V-2 or better		Pass
55	Polymeric enclosures for fixed or stationary equipment rated 94V-0 or better	Transportable equipment.	N/A
55	Polymeric enclosures withstand 6.78 Nm impact test	See Table Additional Test for details.	Pass
55	Polymeric enclosures: no deformation after mold stress test	See Table Additional Test for details.	Pass
55	Polymeric enclosures of hand-held equipment withstands 1.22 m drop test	Not hand-held equipment.	N/A
56.3a	Connector, pin, plug attached to patient connected lead or contact cannot engage any part on the equipment, including separable cord set	No patient connections	N/A
56.3a	Connector, pin, plug attached to patient connected lead or contact cannot make contact with live parts of power receptacle outlet (if product can be used without professional supervision)		N/A
57	Permanently connected equipment provided with field wiring provision in accordance with NEC, ANSI/NFPA 70	Transportable equipment.	N/A
57.2	Power cord mains plug is "Hospital Grade" type		Pass

IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict
57.2	Grounding reliability marking provided		Pass
57.2	Plug for radiography equipment acceptable for current not less than 50 % of maximum input	Not radiography equipment.	N/A
57.2	Plug acceptable for use with current not less than 125 % of rated current	The attachment plug shall be acceptable for use with a current not less than 125 percent of the rated current.	Pass
57.2	Plug acceptable for voltage for which the equipment is configured when shipped		Pass
57.2	Polarized plug wired such that the center contact of edison-base lampholder, single-pole switch or single-pole overcurrent device connected in ungrounded side		N/A
57.3b	Detachable power supply cord unlikely to become detached accidentally		Pass
57.3b	Flexible cord is of type acceptable for application		Pass
57.3b	Flexible cord not smaller than 18 AWG		Pass
57.3b	Flexible cord complies with serviceability requirements		Pass
57.5b	If leads are provided for connection to branch circuit, the free end is in separate compartment		N/A
57.5b	If leads are provided for connection to branch circuit, the free length of leads inside field-wiring compartment is at least 152 mm long		N/A
58.2	Connections are mechanically secured in addition to soldering	Evaluated as part of the power supply.	Pass
59.1	Installation of connecting cords between parts of equipment in compliance with NEC		Pass
59.1	Cable type acceptable for external interconnection		Pass
400	Oxygen		N/A
400.1	At least one of the following three requirements is satisfied:	Not for use in Oxygen rich atmospheres	N/A
400.1.1	Electrical components separated by barrier per 400.2		N/A
400.1.2	Compartments with electrical components ventilated per 400.3		N/A
400.1.3	Electrical components comply with 400.4 so that cannot be a source of ignition		N/A
400.2	Barrier required by 400.1 is sealed at all joints and		N/A

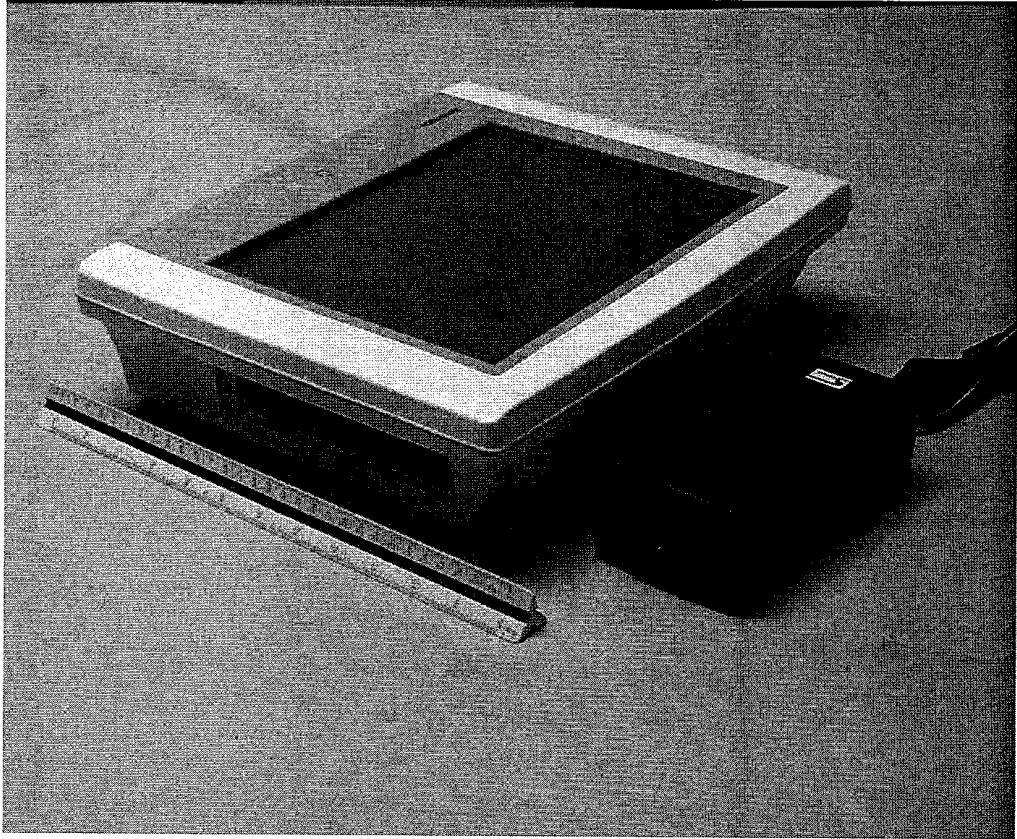
IEC 60601			
SubClause	Difference + Test	Result - Remark	Verdict

	holes		
400.3	Ventilation required by 400.1 is such that oxygen content does not exceed 4% above ambient		N/A
400.4	Under N.C. and S.F.C. the product of the value of no load rms voltage and short circuit rms current less than 10 VA		N/A
400.4	Surface temperature of components below 300°C in N.C. and S.F.C		N/A
400.5	External exhaust gas outlets located at least 20 cm from any electrical component mounted on the outside		N/A
400.6	Hospital beds intended for use with oxygen administering equipment provided with required markings		N/A
400.7	Pendant controls on hospital beds with oxygen administering equipment marked as required		N/A
400.8	Instructions for installation are in compliance with requirements of this clause		N/A
600.1	Separate power units packed with equipment		Pass
600.1	Separate power units provided with correlation marking		Pass
600.2.1	Direct plug-in unit construction and performance comply with required sections of UL1310	Power Supply provided with Appliance Inlet.	N/A
600.2.2	Direct plug-in unit external temperature rise during overheating test do not exceed 65°C	Adapter with Appliance inlet	N/A
600.2.3	If direct plug-in unit provided with a mounting tab - unit marked as required by UL1310	Adapter provided with Appliance Inlet.	N/A

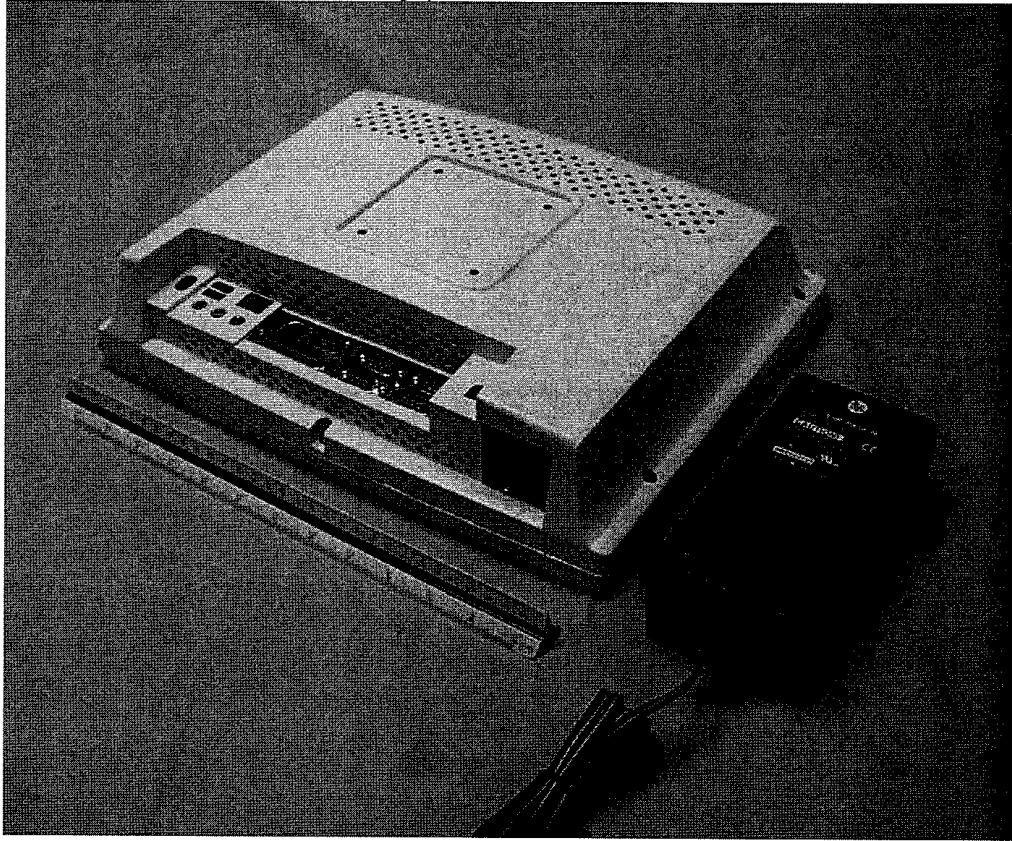
Enclosure
Photographs

Supplement Id	Description
3-01	Front View
3-02	Rear View
3-03	Inside View
3-04	Base
3-05	Battery front view
3-06	Battery rear view
3-07	Battery inside view
3-08	Battery Pack for use with POC125
3-09	New Battery Pack PCB, for use with POC125
3-10	POC-125 Rear View with new battery pack
3-11	Plastic enclosure inside with metal coating

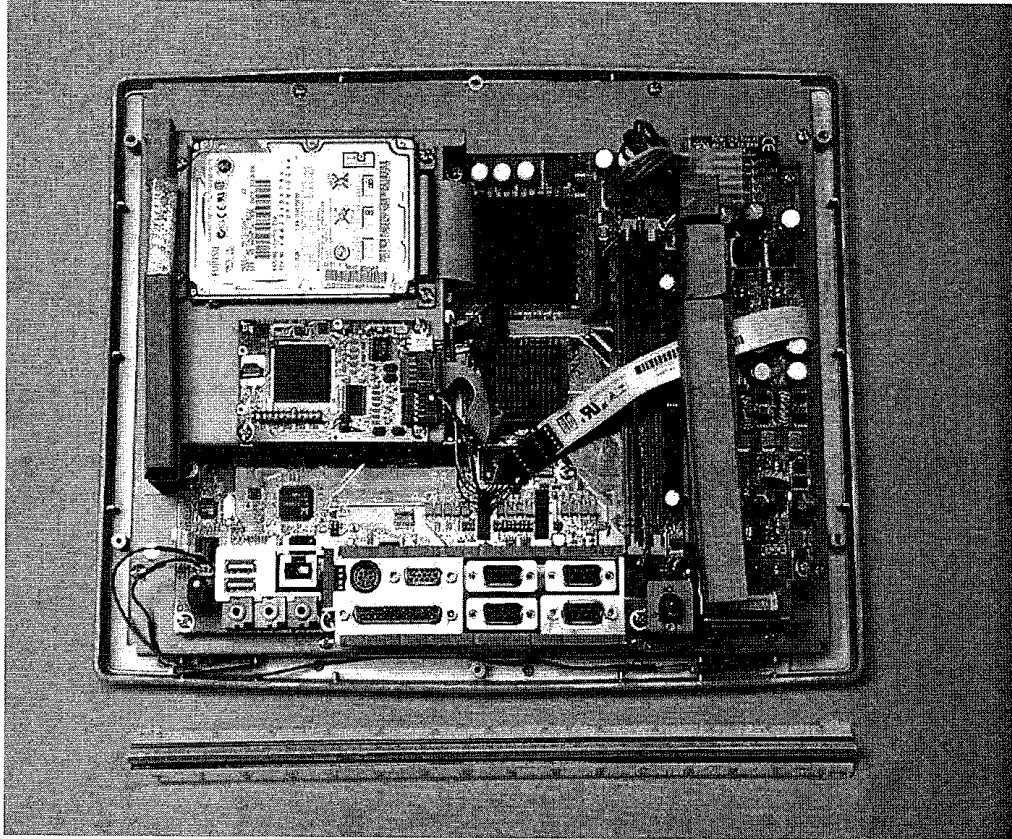
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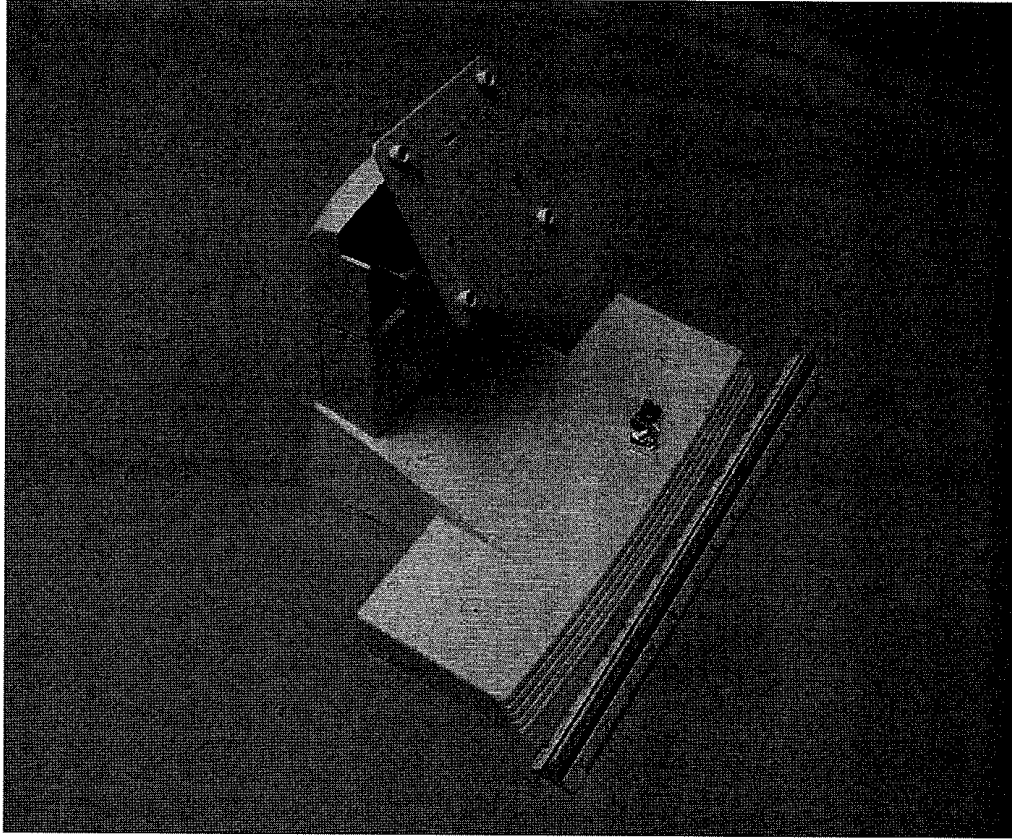
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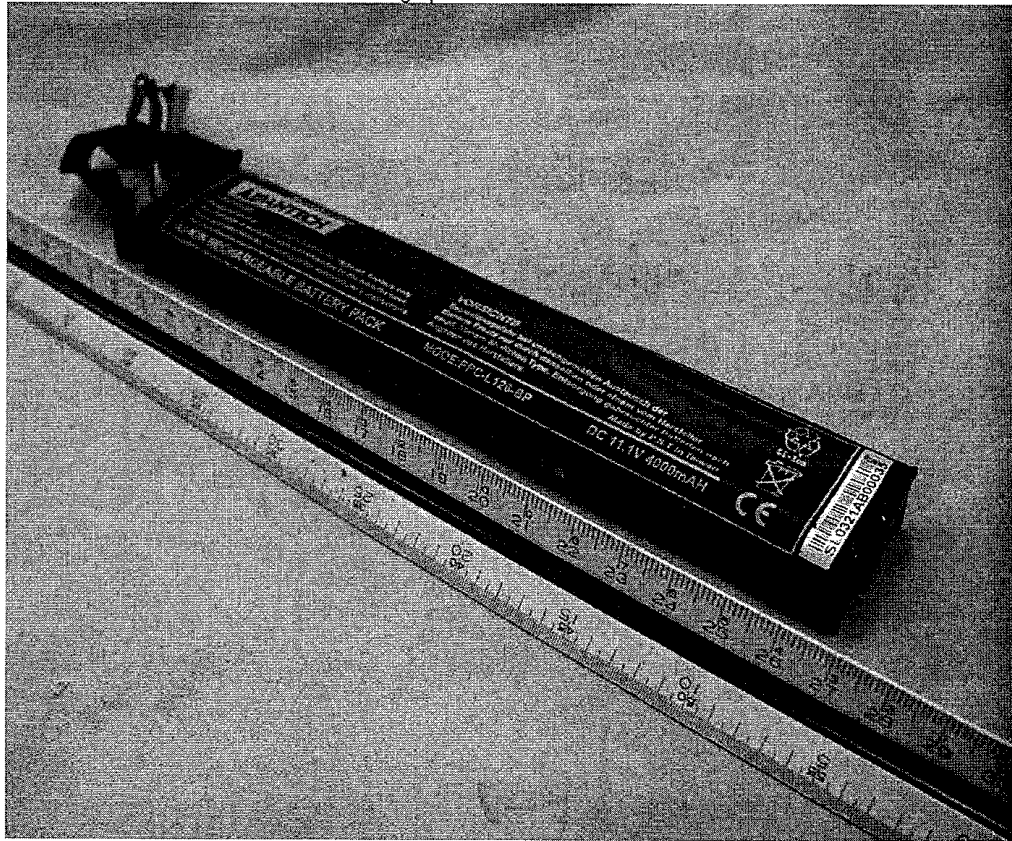
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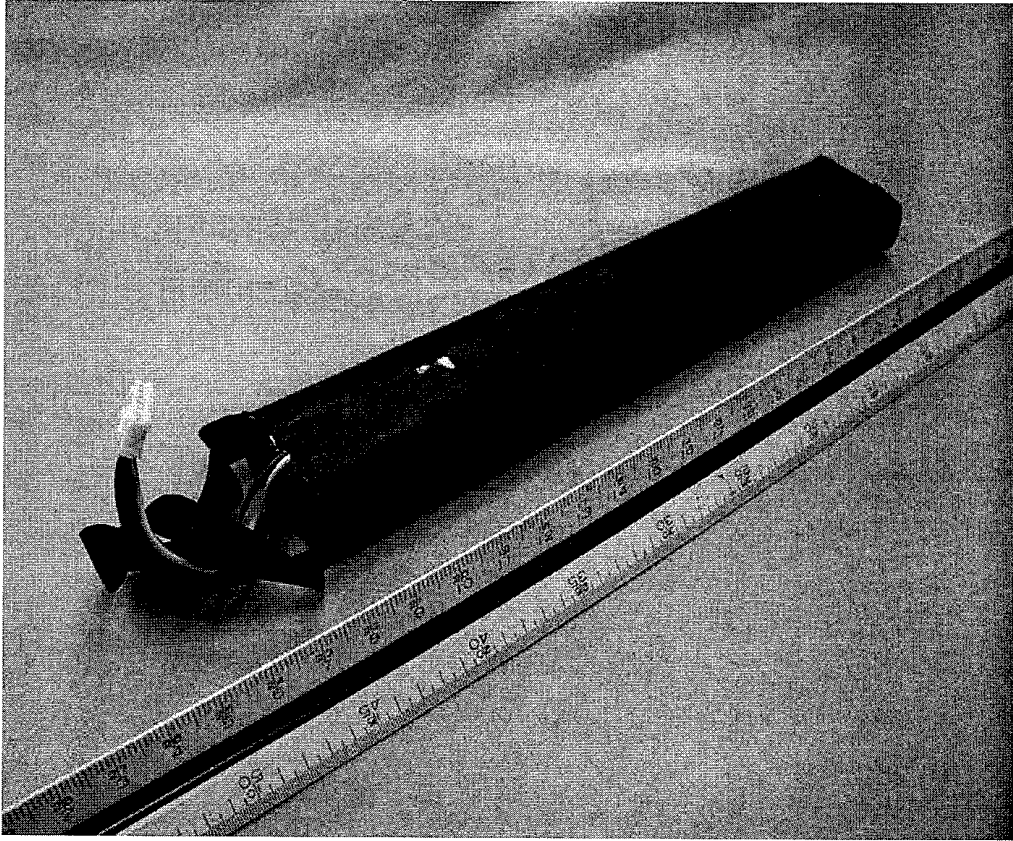
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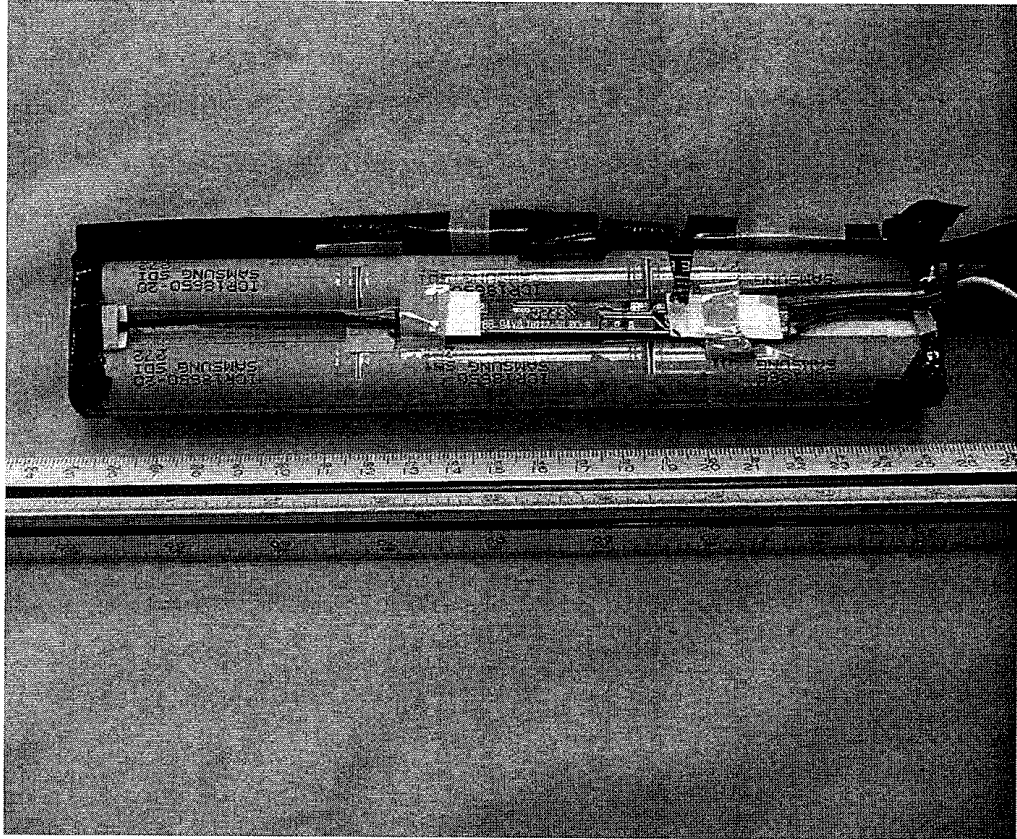
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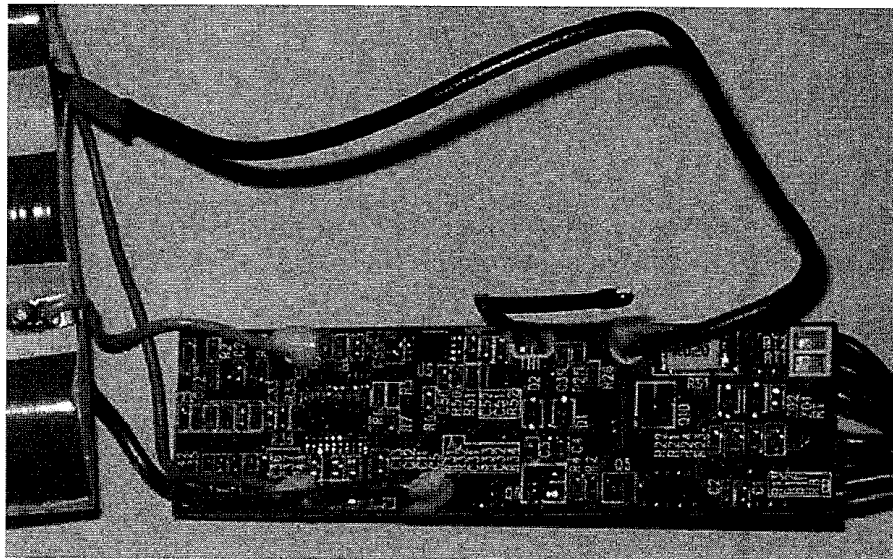
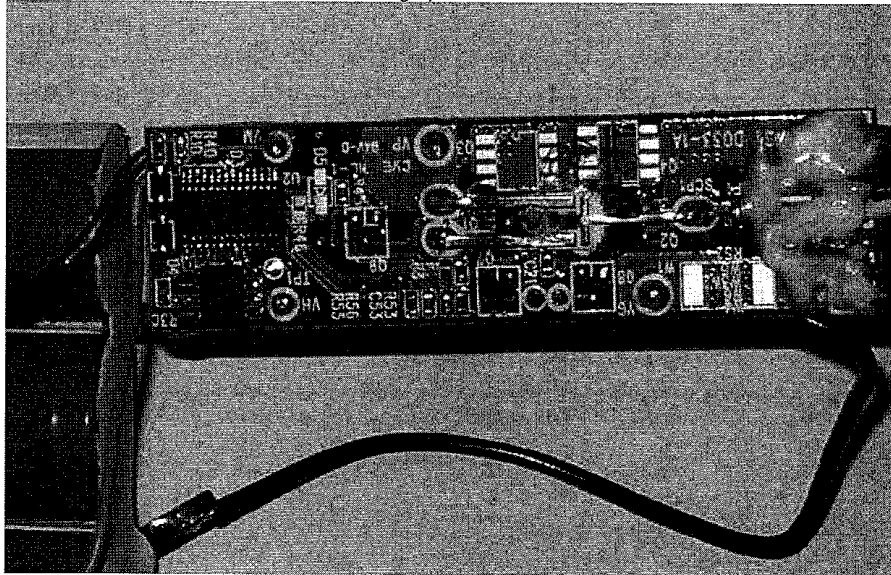
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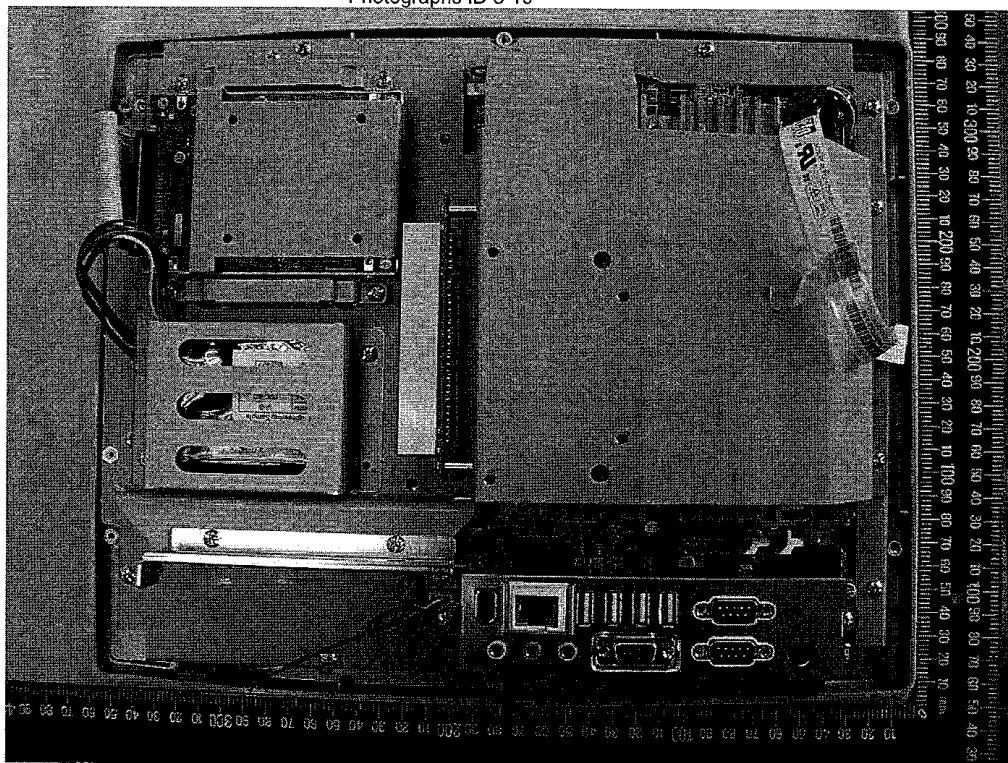
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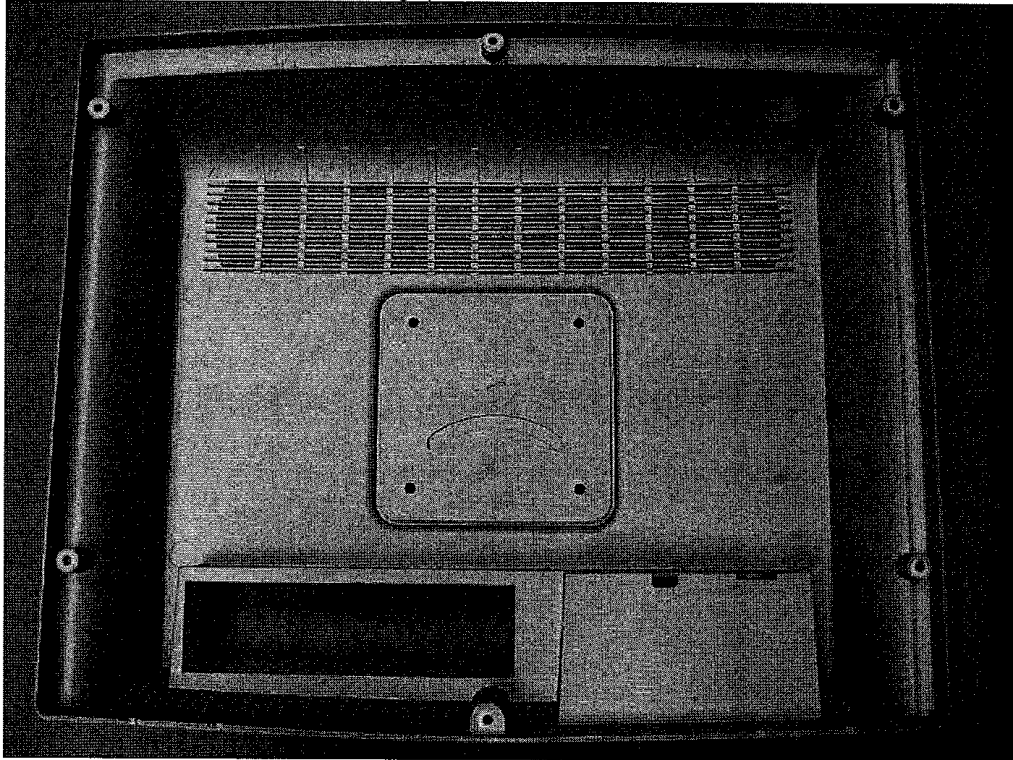
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Photographs ID 3-10



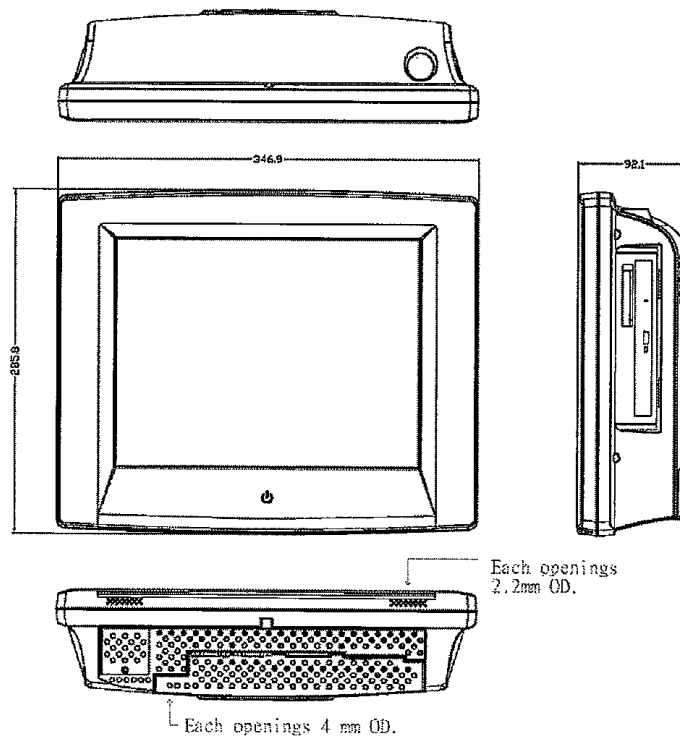
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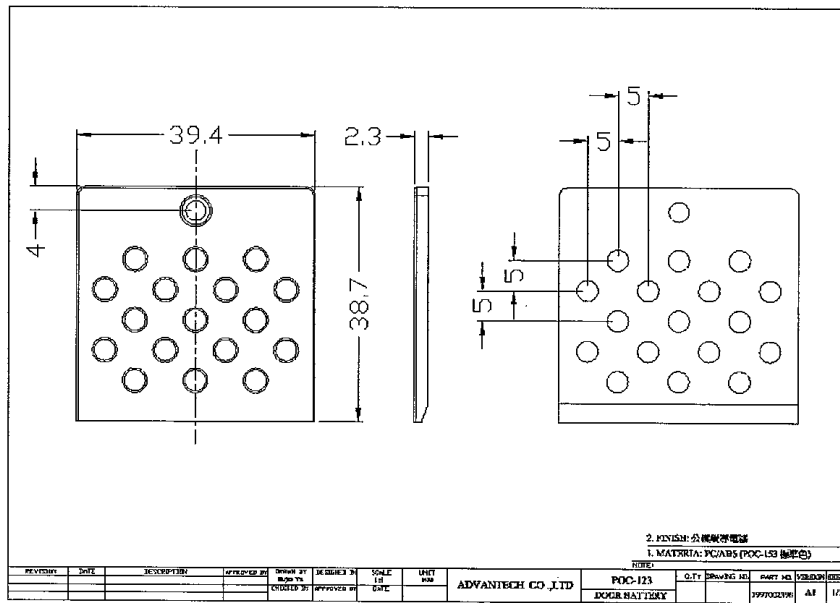
Enclosure
Diagrams

Supplement Id	Description
4-01	Enclosure Dimensions
4-02	Inverter Spec
4-03	Alternate Transformer Specification

Diagrams ID 4-01



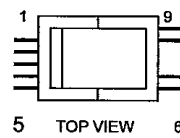
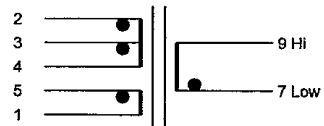
Diagrams ID 4-01



Diagrams ID 4-02

Transformer Specification(X03)

P12



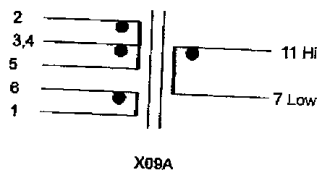
Winding specification

Coil	Terminal	Winding spec.	Remarks
W1	2~3	2UEW 0.26	9 Ts
W2	3~4	2UEW 0.26	9 Ts
W3	5~1	2UEW 0.26	3 Ts
W4	7~9	2UEW 0.05	1350 Ts

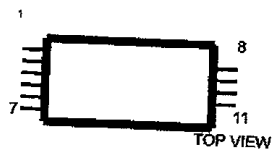
Diagrams ID 4-03

**Transformer Specification**

Model: X09A



X09A



TOP VIEW

Winding specification

Coll	Terminal	Windingspec.	Remarks
W1	2~3,4	2UEW 0.2	11Ts
W2	3,4~5	2UEW 0.2	11Ts
W3	6~1	2UEW 0.2	2 Ts
W4	7~11	2UEW 0.04	1650 Ts

Diagrams ID 4-03



Electrical characteristics

PItem	Terminal	Inductance	D.C.R	Condition
W1	2~3,4	6uH	50mΩ	F 1Khz
W2	3,4~5	6uh	50mΩ	Ta 25℃
W3	6~1	0.5uH	30mΩ	
W4	11~7	130mH	190mΩ	

Hi pot

P in	Pri to Sec	Sec to Sec	Pri to core	Sec to Core
	500VAC/5mA/1Min		1500VAC/5mA/1Min	

Diagrams ID 4-03



Transformer Parts List

Item	Name	Material	Manufacture	Safety	
1	Core	U-core	NICERA	JAPAN	
2	Bobbin	L.C.P	HO GIN	UL	
3	Coil wire Pri.	Polyurethane	RIKEN	UL	
4	Coil wire Second	Polyurethane	RIKEN	UL	
5	Tape	Polyester	3M	UL	
6	Tape	Polyester	NITO	UL	



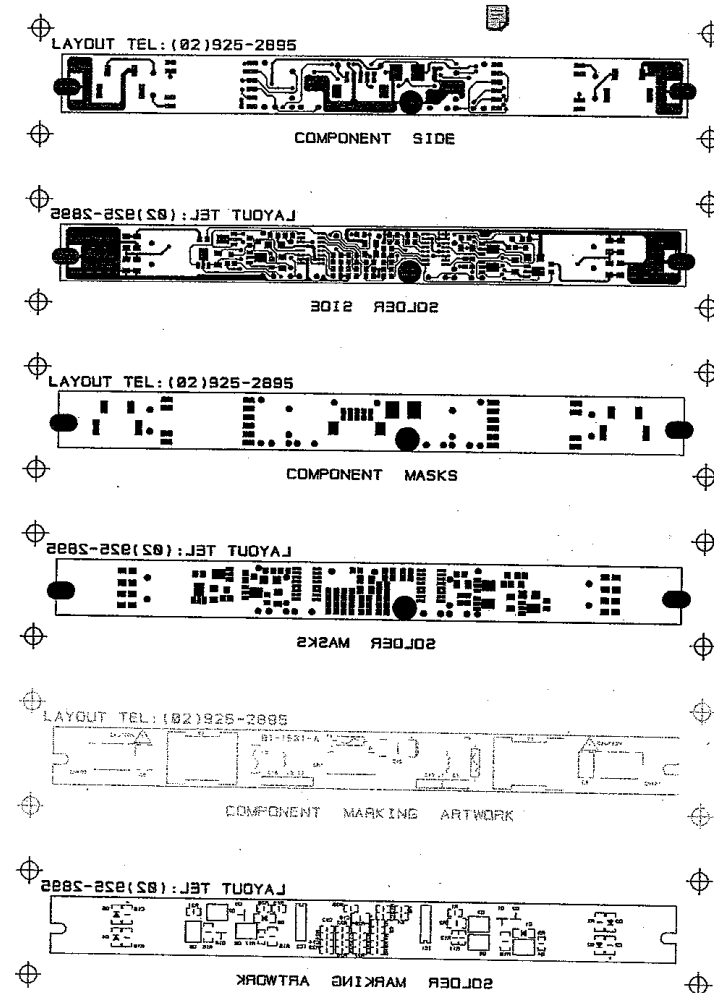
MTBF

Enclosure
Schematics + PWB

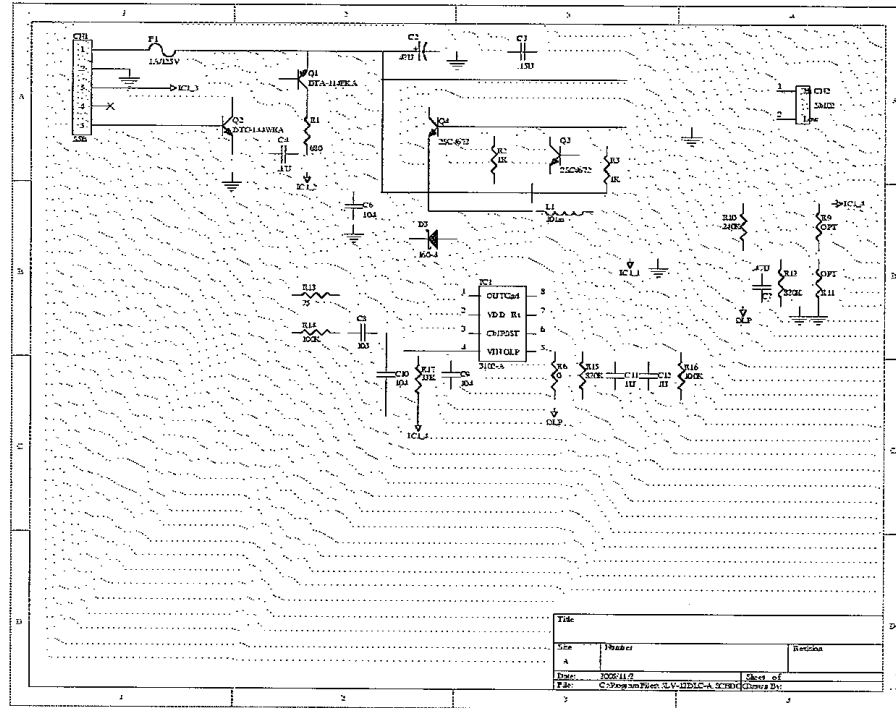
Supplement Id	Description
5-01	PWB and Trace Layout
5-02	Alternate Inverter Schematic
5-03	Trace Layout Alternate Inverter LV-12DLC

Schematics ID 5-01

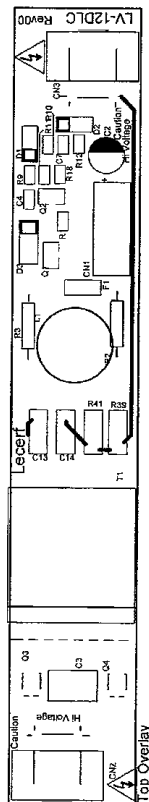
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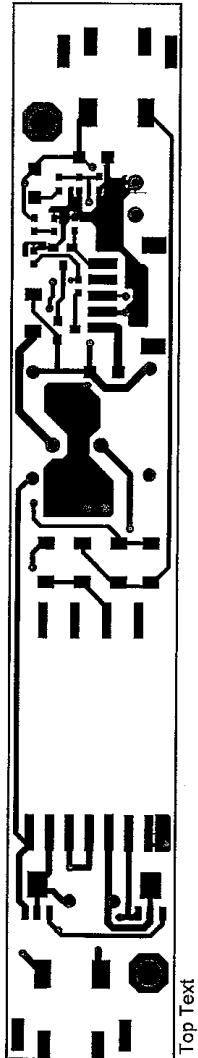
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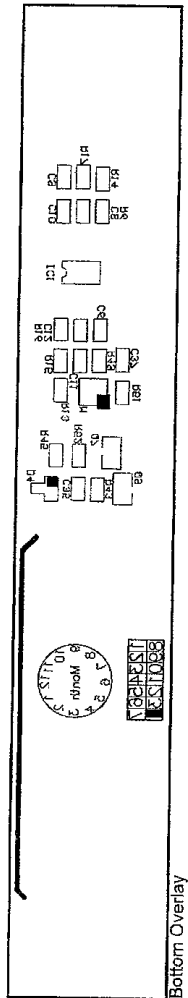
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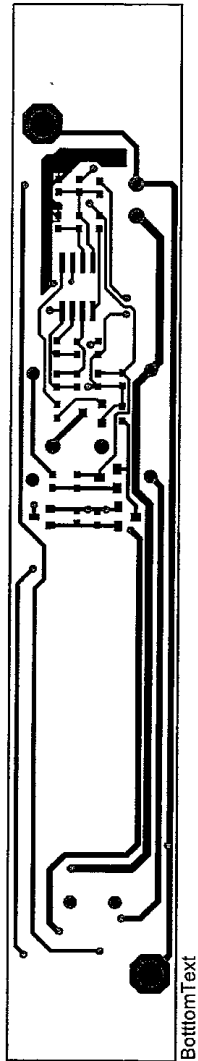
Schematics ID 5-03



Schematics ID 5-03



Schematics ID 5-03



Issue Date: 2008-03-28

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Report Reference #

E214164-A1-UL-2

Enclosure
Manuals

Supplement Id	Description
6-01	Manual

Manuals ID 6-01

POC-123

VIA Eden Processor-based
Fanless Point-of-Care Terminal
with 12.1" TFT-LCD

Users Manual

Manuals ID 6-01

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<http://www.advantech.com/medical>

For technical support and service, please visit our support website at:

<http://support.advantech.com>

This manual is for the POC-123.

Part No. 2008012320

1st Edition, Printed in Taiwan August 2003

Manuals ID 6-01

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with this user's manual, it may cause harmful interference to radio communications. Note that even when this equipment is installed and used in accordance with this user's manual, there is still no guarantee that interference will not occur. If this equipment is believed to be causing harmful interference to radio or television reception, this can be determined by turning the equipment on and off. If interference is occurring, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment to a power outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Warning! *Any changes or modifications made to the equipment which are not expressly approved by the relevant standards authority could void your authority to operate the equipment.*

**CAUTION!**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Manuals ID 6-01

Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- POC-123 series panel PC
- User's manual
- Accessories for POC-123
 - Y-shaped adapter for PS/2 mouse and keyboard
 - Warranty card
 - Power cord: USA type
- AC/DC power adapter Manufacturer: Hiron Electronics corp. Model: HES49-2401, Fuse: T3.15A/250Vac
- Driver CD-ROM disc
- Mounting kits and packet of screws

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Additional Information and Assistance

Step 1. Visit the Advantech web site at www.advantech.com where you can find the latest information about the product.

Step 2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages

Manuals ID 6-01

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User's Manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If one of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the user's manual.
 - e. The equipment has been dropped and damaged.
 - f. The equipment has obvious signs of breakage.
15. **DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE MAY GO BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS COULD DAMAGE THE EQUIPMENT. THE EQUIPMENT SHOULD BE IN A CONTROLLED ENVIRONMENT.**
16. **CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER, DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.**

The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70 dB (A).

DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

Manuals ID 6-01

17. CLASSIFICATION:

- Class I Equipment
- No applied part
- IPXO
- Continuous Operation
- AP/APG: NO

18. Disconnect device: Appliance inlet.

19. Follow the national requirement to dispose unit.

20. Maintenance: to properly maintain and clean the surfaces, use only approved products or clean with a dry applicator

21. Contact information:

Advantech Co., Ltd
No.1, Alley 20, Lane 26, Rueiguang Road Neihu District, Taipei,
Taiwan 114, R.O.C.
TEL: (02)27927818

22. Do not leave this equipment in an environment where the storage temperature may go below -20 deg C (-4 deg F) or above 60 deg C (140 deg F)

23. Insertion battery pack

Type: PPC-L126-BP (11.10Vdc, 4000 mAh)

Note: The battery pack not intended to be changed by the operator

24.



XXXX

MEDICAL EQUIPMENT
WITH RESPECT TO ELECTRIC SHOCK,
FIRE AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL 60601-1, AND
CAN/CSA C22.2 NO. 601.1

Enclosure
Miscellaneous

Supplement Id	Description
7-01	Label
7-02	Label (POC-123)
7-03	Label (POC-125, without battery pack)
7-04	Label (POC-125B, with battery pack)

20980123F0



MADE IN TAIWAN

S/N :

This device complies with the requirements in part 15 of the FCC rule: 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.

To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel.

Power Adapter: Bitron Type DES49-24021



Medical Equipment

CLASSIFIED
UL
E214164
UL 60951-1
Class I
10X0
AP/APG NC


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
Misc ID 7-02

2000000860




ADVANTECH

No.1, Alley 20, Lane 26, Rueiguang Road
Neihu District, Taipei, Taiwan 114
MADE IN TAIWAN

Panel PC
MODEL: POC-123
Input: 18-25V  3.5A
Factory: T1
SN:

E214164
48XJ

Medical Equipment
With Respect to Electric Shock,
Fire, and Mechanical Hazards Only.
In Accordance with IEC 60501-1,
CANCSA C22.2 No. 601.1

FC
This device complies with the requirements in 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.

Caution:
To prevent electric shock, do not remove cover. No user serviceable
parts inside. Refer servicing to qualified personnel.
Only use the adapter:
Hitron, Model: HES49-24021 Input: 100-240Vac, 50/60Hz, 1.0A

Underwriters Laboratories Inc.




Misc ID 7-03



2000000860

ADVANTECH

No.1, Alley 20, Lane 26, Rueiguang Road
Neihu District, Taipei, Taiwan 114
MADE IN TAIWAN

Panel PC
MODEL: POC-125
Input: 24V $\overline{\text{---}}$ 2.0A max.
Factory: T1
SN:

CE  

Medical Equipment
With Respect to Electric Shock,
Fire, and Mechanical Hazards Only.
In Accordance with UL 60601-1,
CAN/CSA C22.2 No. 601.1

FC
This device complies with the requirements in 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.

Caution:
To prevent electric shock, Do not remove cover. No user serviceable
parts inside. Refer servicing to qualified personnel.
Only use the adapter:
XPIQ, Model: PCM80PS24 Input: 100-240Vac, 1.1-0.45A, 47-63Hz
SINPRO, Model: MPU50-108 Input: 100-240Vac, 1.35A-0.8A, 47-63Hz




Misc ID 7-04

2000000860




ADVANTECH

No.1, Alley 20, Lane 26, Rueiguang Road
Neihu District, Taipei, Taiwan 114
MADE IN TAIWAN

Panel PC
MODEL: POC-125B
Input: 24V $\overline{\text{---}}$ 2.7A max.
Factory: T1
SN:

E214164
40XJ

Medical Equipment
With Respect to Electric Shock,
Fire, and Mechanical Hazards Only.
In Accordance with UL 60601-1,
CAN/CSA C22.2 No. 601.1

FC
This device complies with the requirements in 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.

Caution:
To prevent electric shock, Do not remove cover. No user serviceable
parts inside. Refer servicing to qualified personnel.
Only use the adapter:
XPIQ, Model: PCM80PS24 Input: 100-240Vac, 1.1-0.45A, 47-63Hz

Enclosure

Test Record

Description
Test Record 1

Test Record No. 1

No tests were considered necessary due to only add "Optional" to Battery Pack and change SELV input rating of Panel PC. No safety consideration will be required. The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standard for Medical Electrical Equipment, Part 1 : General Requirements for Safety, UL 60601-1, First Edition, including revisions through revision date April 26, 2006, which includes the Second Amendment of IEC60601-1., and Canadian Standard for Medical Electrical Equipment, CAN/CSA C22.2, No. 601.1-M90, including Update No. 2 through revision date November, 2003.