

LVD Test Report

Project No. 50411205-LV Equipment Medical Station

Trade Name AAEON

Model No. ONYX-153HTx-yz, ONYX-173HTx-yz

Issued Date September. 16, 2005

Issued to

AAEON Technology Inc

5F,No.135,Lane 235, Pao Chaio Rd Hsin-Tien City, Taipei,Taiwan,R.O.C

Declaration:

CCS represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**., or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

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(Tested By): Safety Engineer

Max yu

(Reviewed By) : Reviewer

(Authorized Signature): Safety Lab. Supervisor

Compliance Certification Services Inc.

No.11, Wu-Gong 6th Rd, Wu Gu Industrial Park, Taipei Hsien, Taiwan

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TEST REPORT EN60601-1

Medical electrical equipment - Part 1: General requirements for safety

medical electrical equipment - Fart 1. General requirements for safety		
Report reference No	50512005-LV	
Tested by (+ signature)	See Cover Sheet	
Approved by (+ signature)	See Cover Sheet	
Date of receive	2005-08-12	
Test duration	2005-08-17 to 2005-08-31	
Testing laboratory	Compliance Certification Services Inc.	
Location	No.11, Wu-Gong 6th Rd, Wu Gu Industrial Park, Taipei Hsien, Taiwan, R.O.C.	
Applicant	AAEON Technology Inc	
Address:	5F,No.135,Lane 235, Pao Chaio Rd Hsin-Tien City, Taipei,Taiwan,R.O.C	
Standards	EN60601-1: 1990 + A1: 1993, A11: 1993, A12: 1993, A2: 1995 and A13: 1996 IEC 60601-1:1988 + am1:1991 + am2:1995 + am2 Corr.1: 1995	
Procedure deviation	N/A	
Non-standard test method	N/A	
Type of test equipment	Medical Station	
Trade mark	AAEON	
Model/Type designation	ONYX-153HTx-yz, ONYX-173HTx-yz("x","y","z" define, see page 4)	
Manufacturer	AAEON Technology Inc	
	5F,No.135,Lane 235, Pao Chaio Rd Hsin-Tien City, Taipei,Taiwan,R.O.C	
Rating	AC 100-240V,50-60Hz 2-1A	
Copyright TRF	This test report is based on a blank TRF that was prepared by KEMA. The copyright of blank test report is belong to the CCB body of KEMA.	

Test item particulars:

Equipment mobility Portable

Tested for IT power systems...... No

IT testing, phase-phase voltage (V)...... N/A

4.92Kg(ONYX-153HTx-yz)

Protection against ingress of water..... IPX0

Possible test case verdicts:

-Test case does not apply to the test object. N(.A.)
-Test object does meet the requirement. P(ass)
-Test object does not meet the requirement. F(ail)

General Remarks:

"(see remark #) refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator

The test results presented in this report relate only to the object tested.

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Comments:

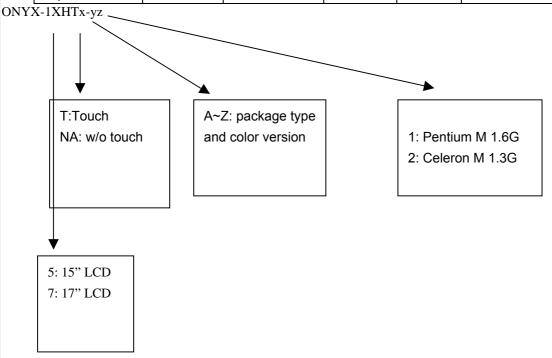
Brief description of the test sample:

Built-in power supply: I/P: 100-240Vac, 4A, 50-60Hz

The ONYX-153/173 are the flagships of AAEON's medical Stations. The high brightness LCD, Low Noise solution, integrated multimedia functions and extensive expansion options make them the perfect platform upon which to build comprehensive lifestyle computing applications. The ONYX-153/173 includes all the features of a powerful computer into a slim and attractive chassis. The ONYX-153 has a 15" 400 nits TFT display with 1024 x 768 resolution. The ONYX-173 has a 17" 300 nits TFT display with 1280 x 1024 resolution. Integrating with high brightness LCD is easier to analyze DICOM image. This model owns sidemount slim 8 in1 card reader, slim DVD ROM, and smart card reader to support vivid storage read/write and ID check by smart card reader. These two models designed with Pentium® M CPU by higher 2MB L2 cache to improve system effectiveness. It accommodates one 2.5" hard disk drive and up to 1GB DDR SDRAM. The ONYX-153/173 are compact, selectable WLAN and Giga LAN network compatible PC with full safety and medical approval and features to control a dedicated system with a wide variety of applications. Combining the ONYX-153/173 into your system can achieve both cost-saving and efficient improvements. Common applications include point of sale systems, healthcare utility, interactive information displays, automation control systems, general desktop use, multimedia recreation, and other medical requirements. The ONYX-153/173 are definitely your perfect choices.

Model difference as following

Serial	15" LCD	15" TS Dynapro	PCM-8200	OSD	AC ATX Power Supply
Onyx-153HT-A1	V		V	V	V
Onyx-153HTT-A1	V	V	V	V	V

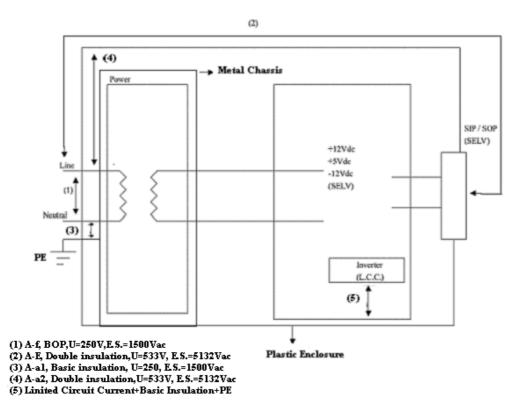


Unless otherwise specified, all tests were performed on model ONYX-173HTT-A1,ONYX-153HTT-A1 represent other similar models. The test sample is pre-production without serial number.

3	GENERAL REQUIREMENTS		Р
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.	Р
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		N

5	CLASSIFICATION		Р
5.1	Type of protection against electric shock		Р
	Class I equipment	1. Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide. 2. Mode of operation: Continuous 3. Type of protection against electric shock: Internally powered equipment 4. Degree of protection against the ingress of water: Not classified	Р
	Class II equipment		N
	Internally powered equipment		N
5.2	Degree of protection against electric shock		Р
	Type B applied part		N
	Type BF applied part		N
	Type CF applied part		N
	Not classified - no applied parts	No applied parts	Р
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.	Р
5.4	Methods of sterilization or disinfection		N
5.5	Equipment not suitable for use in the presence of flammable mixtures	The equipment is not an AP or APG category equipment.	Р
	Category AP equipment		N
	Category APG equipment		N
5.6	Mode of operation:	1	Р
	-continuous operation	Mode of operation : continuous	Р
	-short-time operation, specified operation; period:		

-intermittent operation, specified operation; rest period	-
-continuous operation with short-time, stated permissible loading time:	
-continuous operation with intermittent, stated	



6	IDENTIFICATION, MARKING AND DOCUMENTS		Р
6.1	Marking on the outside of equipment or equipment parts		Р
6.1c	Markings of the specific power supply affixed	Supplied by 100-240Vac 50- 60hz 2-1A with a Detachable power supply cord	Р
6.1d	If marking is not practicable due to size or nature of enclosure, information is included in accompanying documents	See above	Р
6.1e	Name and/or trademark of the manufacturer or supplier	AAEON Technology Inc	Р
6.1f	Model or type reference	See attachment B	Р
6.1g	Rated supply voltages or voltage range(s)	See attachment B	Р
	Number of phases	Single	Р
	Type of current	See attachment B	Р
6.1h	Rated frequency or rated frequency range(s) (Hz):	See attachment B	Р
6.1j	Rated power input (VA, W or A)	See attachment B	Р

6.1k Power output of auxiliary mains socket - outlets No power output socket Ν provided. 6.11 Class II symbol Class I Product Ν Р Symbol for degree of protection against ingress of Optional, IPX0 or ordinary water provided.....: equipment. Symbol for protection against electric shock.....: No applied part. Ν N 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 Symbol for protection of defibrillation-proof applied No applied parts. Ν parts No patient cable. Symbol 14 from Table DI for defibrillation-proof with Ν protection partly in patient cable 6.1m Mode of operation (if no marking, suitable for Optional, continuous Р continuous operation) operation. 6.1n Types and rating of external accessible fuses: No external accessible fuses Ν 6.1p Ratings of external output:: No external output. Ν Symbol for physiological effect(s): Ν 6.1q - attention, consult accompanying documents Ν non-ionizing radiation, or symbols as adopted by Ν ISO or IEC 417 6.1r Anaesthetic-proof symbol: AP or APG Ν 6.1sNo dangerous voltage Dangerous voltage symbol Ν 6.1t Special cooling requirements No special cooling Ν requirements 6.1u Limited mechanical stability Ν 6.1_v Protective packing requirement(s) No special measures have to Ν be taken during transport or storage. Marking(s) for unpacking safety hazard(s) Ν Equipment or accessories supplied sterile, Ν marked as sterile 6.1_y Potential equalization terminal No such terminal provided. Ν - Functional earth terminal No such terminal provided. Ν 6.1z Removable protective means No such means. Ν Р Durability of marking test The label was subjected to the permanence of marking test. The label was rubbed with cloth for 15sec, and then again for 15sec, with the cloth soaked with HEXANE. After this test there was no damage to the label. The marking on the label did not fade. There was not curling nor lifting of the label edge.

6.2	Marking on the inside of equipment or equipment pa	arts	Р
6.2a	Nominal voltage of permanently installed equipment	Not permanently installed equipment.	N
6.2b	Maximum power loading for heating elements or holders for heating lamps	These a heating elements at product inside	Р
6.2c	Dangerous voltage symbol	No dangerous voltage presents.	N
6.2d	Type of battery and mode of insertion	Lithium Battery, Sony Energy Devices Corp model: CR2032	Р
	- Marking referring to accompanying documents used for battery not intended to be changed by the operator	Warning instruction mark user Manuel	Р
6.2e	Fuses accessible with a tool identified either by type and rating or by a reference to diagram	Built-in power supply,fuse Model:MST by conquer; Model:392 by Wickmann	Р
6.2f	Protective earth terminal	Marked according to Symbol 6 of table D1.	Р
6.2g	Functional earth terminal		N
6.2h	Supply neutral conductor in permanently installed equipment (N)		N
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
	- Markings comply with IEC 445		N
6.2k	For permanently connected devices the supply connections are clearly marked adjacent to the terminals (or in accompanying documents for small equipment)		N
6.21	Statement for suitable wiring materials at temperatures over 75	No main wiring	N
6.2n	Capacitors and/or circuit parts marked as required in Sub-clause 15c		N
6.3	Marking of controls and instruments		Р
6.3a	Mains switch clearly identified		N
	- ON and OFF positions marked according to Symbols 15 and 16 of table D1 or indicated by an adjacent indicator light	Marked according to Symbols 15 and 16. The power supply cord is the mains disconnect indicated in accompanying documents.	Р
6.3b	Indication of different positions of control devices and switches		N
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.	Р
6.3f	The functions of operator controls and indicators are identified		N
6.3g	Numeric indications of parameters are in SI units except for units listed in Am. 2	No numeric indication used for control.	N
6.4	Symbols		Р

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- include an explanation of: the function of controls, displays and signals	See attachment user manual	Р
- the sequence of operation	See attachment user manual	Р
- the connection and disconnection of detachable parts and accessories	See attachment user manual	Р
- the replacement of material which is consumed during operation		N
- information regarding potential electromagnetic or other interference and advice regarding avoidance		N
- include: indications of recognized accessories, detachable parts and materials, if the use of other parts or materials can degrade minimum safety		N
- instructions concerning cleaning, preventive inspection and maintenance to be performed including the frequency of such maintenance		N
General information provided in instructions:		Р
- information for the safe performance or routine maintenance	See attachment user manual	Р
- parts on which preventive inspection and maintenance shall be performed by other persons including the periods to be applied	See attachment user manual	Р
- explanation of figures, symbols, warning statements and abbreviations on the equipment	See attachment user manual	Р
Signal output or signal input parts intended only for connection to specified equipment described	See attachment user manual	Р
Details about acceptable cleaning, disinfection or sterilization methods included		Р
Warning statement for mains operated equipment with additional power source		N
A warning to remove primary batteries if equipment is not likely to be used for some time		N
Instructions to ensure safe use and adequate maintenance of rechargeable batteries		N
Identification of specified external power supplies or battery chargers necessary to ensure compliance with the requirements of IEC 601-1		N
Identification of any risks associated with the disposal of waste products, residues, etc.	See "Safety & Warranty " in user manual	Р
- Advice in minimizing these risks	See "Safety & Warranty " in ser manual	Р
Technical description		Р
All characteristics essential for safe operation provided	See attachment user manual	Р
Required type and rating of fuses utilized in the mains supply circuit external to permanently installed equipment		N
 Instructions for replacement of interchangeable and/or detachable parts which are subject to deterioration during normal use 		N
	displays and signals - the sequence of operation - the connection and disconnection of detachable parts and accessories - the replacement of material which is consumed during operation - information regarding potential electromagnetic or other interference and advice regarding avoidance - include: indications of recognized accessories, detachable parts and materials, if the use of other parts or materials can degrade minimum safety - instructions concerning cleaning, preventive inspection and maintenance to be performed including the frequency of such maintenance General information provided in instructions: - information for the safe performance or routine maintenance - parts on which preventive inspection and maintenance shall be performed by other persons including the periods to be applied - explanation of figures, symbols, warning statements and abbreviations on the equipment Signal output or signal input parts intended only for connection to specified equipment described Details about acceptable cleaning, disinfection or sterilization methods included Warning statement for mains operated equipment with additional power source A warning to remove primary batteries if equipment is not likely to be used for some time Instructions to ensure safe use and adequate maintenance of rechargeable batteries Identification of specified external power supplies or battery chargers necessary to ensure compliance with the requirements of IEC 601-1 Identification of any risks associated with the disposal of waste products, residues, etc. - Advice in minimizing these risks Technical description All characteristics essential for safe operation provided Required type and rating of fuses utilized in the mains supply circuit external to permanently installed equipment - Instructions for replacement of interchangeable and/or detachable parts which are subject to	displays and signals - the sequence of operation - the sequence of operation - the connection and disconnection of detachable parts and accessories - the replacement of material which is consumed during operation - information regarding potential electromagnetic or other interference and advice regarding avoidance - include: indications of recognized accessories, detachable parts and materials, if the use of other parts or materials can degrade minimum safety - instructions concerning cleaning, preventive inspection and maintenance to be performed including the frequency of such maintenance General information provided in instructions: - information for the safe performance or routine maintenance - parts on which preventive inspection and maintenance shall be performed by other persons including the periods to be applied - explanation of figures, symbols, warning statements and abbreviations on the equipment Signal output or signal input parts intended only for connection to specified equipment described Details about acceptable cleaning, disinfection or sterilization methods included Warning statement for mains operated equipment with additional power source Instructions to ensure safe use and adequate maintenance of rechargeable batteries Identification of specified external power supplies or battery chargers necessary to ensure compliance with the requirements of IEC 601-1 Identification of any risks associated with the disposal of waste products, residues, etc. - Advice in minimizing these risks See "Safety & Warranty" in user manual Technical description All characteristics essential for safe operation provided Required type and rating of fuses utilized in the mains supply circuit external to permanently installed equipment - Instructions for replacement of interchangeable and/or detachable parts which are subject to

Instructions or reference information for repair of equipment parts designated by the manufacturer as repairable provided	See attachment user manual	Р
Environmental conditions for transport and storage specified in accompanying documents and marked on packaging		Р

7	POWER INPUT		Р
	Power Input Measurements	See Table 7.	Р

10	ENVIRONMENTAL CONDITIONS		Р
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 (-4° F ~ 140 ° F), Humidity: 5% ~ 90%	Р
10.2.2a	Rated voltage not exceeding 250 V for hand-held equipment	Not hand-held equipment.	N
	Rated voltage not exceeding 250 V d.c. or single-phase a.c. or 500 V polyphase a.c. for equipment up to 4kVA	100-240Vac, single-phase	Р
	Rated voltage not exceeding 500 V for all other equipment		N
	Rated input frequency not more than 1kHz	50-60 Hz	Р
10.2.2b	Internal replaceable electrical power source specified		N

14	REQUIREMENTS RELATED TO CLASSIFICATION		Р
14.4a	Class I and Class II equipment in addition to basic insulation provided with an additional protection	Double insulation between primary and secondary	Р
14.4b	Equipment supplied from external dc source of reverse polarity results in no safety hazard		N
14.5a	Dual classification for internally powered equipment with a means of connection to supply mains	Class I only.	N
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.	N
14.6c	Applied parts intended for direct cardiac application are of type CF	No applied parts.	N

15	LIMITATION OF VOLTAGE AND/OR ENERGY		Р
15b	Voltage measured one sec after disconnection of the mains plug does not exceed 60V	(see appended table 15b)	Р
	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

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	Marking provided for manual discharging	No components provided for manual discharging.	N
16	ENCLOSURES AND PROTECTIVE COVERS		Р
16a	Equipment enclosed to protect against contact with live parts, and with parts which can become live (finger, pin, hook test)		N
	Insertion or removal of lamps - protection against contact with live parts provided		N
16b	Opening in a top cover positioned that accessibility of live parts by a test rod is prevented	ONYX-173HTT-A1: Provided numerous circularity openings on rear. Top rear ventilation Openings each diameter 3.3 mm maximum, covering an area overall 350 by 35.5 mm.Lower rear ventilation Openings provide two areas, covering each area overall 23.0 by 35.0 mm, Openings each diameter 3.0 mm maximum ONYX-153HTT-A1: Provided numerous circularity openings on rear. Top rear ventilation Openings each diameter 3.3 mm maximum, covering an area overall 330 by 35.5 mm.	P
16c	Conductive parts accessible after the removal of handles, knobs, levers		N
	- have a resistance of not more than 0.2 Ohm		N
	- separated from live parts by one of the means described in Sub-clause 17g		N
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
16e	Removable enclosures protecting against contact w	vith live parts	Р
	- Removal possible only with the aid of a tool	Removable only with the aid of tool	Р
	- Use of automatic device making parts not live when the enclosure is opened or removed		N
	- Exception 16e applied to the following parts:		N
16f	Openings for the adjustment of controls using a tool. The tool not able to touch basic insulation or any live parts		N
17	SEPARATION		Р
17a	Separation method of the applied part from live part	ts:	N
	1) basic insulation: applied part earthed		N
	2) by protectively earthed conductive part (e.g. screen)		N

	by separate earthed intermediate circuit limiting leakage current to applied part in event of		N
	insulation failure		
	4) by double or reinforced insulation		N
	5) by protective impedances limiting current to applied part		N
	- Additional leakage current test in single fault conditions		N
17c	There is no conductive connection between applied parts and accessible conductive parts which are not protectively earthed	No applied part.	N
17d	Supplementary insulation between hand-held flexible shafts and motor shafts (Class I)	No such parts.	N
17g	Separation method of accessible parts other than ap	oplied parts from live parts:	Р
	1) basic insulation: accessible part earthed	The Accessible Part, protective earthed is separated from Live parts by Basic Insulation.	Р
	2) by protectively earthed conductive part (e.g. screen)		N
	by separate earthed intermediate circuit limiting leakage current to enclosure in event of insulation failure		N
	4) by double or reinforced insulation	Evaluated as part of the power supply.	Р
	5) by protective impedances limiting current to accessible part		N
	- Additional leakage current test in single fault conditions	See Table 19 for details.	Р
17h	Arrangements used to isolate defibrillation-proof applied parts so designed that:		N
	- no hazardous electrical energies appear during a discharge of a cardiac defibrillator		N
	- after exposure to the defibrillation voltage, the equipment continues to perform its intended function		N

18	PROTECTIVE EARTHING, FUNCTIONAL EARTHING AND POTENTIAL EQUALIZATION		Р
18a	Accessible parts of Class I equipment separated from live parts by basic insulation connected to the protective earth terminal	The Accessible Part, protectived earthed is separated from Live parts by Basic Insulation.	Р
18b	Protective earth terminals suitable for connection to the protective earth conductor		N
18e	Potential equalization conductor		N
	- Readily accessible		N
	- Accidental disconnection prevented in normal use		N
	- Conductor detachable without the use of a tool		N

	- Power supply cord does not incorporate a potential equalization conductor		N
	- Connection means marked with Symbol 9, Table DI		N
18f	For equipment without power supply cord, impedance between protective earth terminal and accessible metal part <= 0.1 Ohm		N
	- For equipment with an appliance inlet, impedance between protective earth contact and any accessible metal part <= 0.1 Ohm	See appended table 18 for details.	Р
	- For equipment with a non-detachable power supply cord, impedance between protective earth pin in mains plug and accessible metal part <= 0.2 Ohm		N
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
18k	Functional earth terminal not used to provide protective earthing		N
181	Class II equipment with isolated internal screens		N
	- insulation of screens and all internal wiring connected to them is double insulation or reinforced insulation		N
	- functional earth terminal clearly marked		N
	- explanation of functional earth terminal provided in the accompanying documents		N

19	CONTINUOUS LEAKAGE CURRENTS AND PATIENT AUXILIARY CURRENTS		Р
19.1b	Leakage currents	All combination of the conditions considered.	Р
	- earth leakage current	See Table 19 for details.	Р
	- enclosure leakage current	See Table 19 for details.	Р
	- patient leakage current		N
	- patient auxiliary current	No applied part.	N

20	DIELECTRIC STRENGTH		Р
	Overall compliance with Clause 20	See Table 20 for details.	Р
21	MECHANICAL STRENGTH	·	Р
21a	Sufficient rigidity of an enclosure tested by: force of 45 N	See Table 21 for details.	Р
21b	Sufficient strength of an enclosure tested by: impact hammer	See Table 21 for details.	Р
21c	On portable equipment carrying handles or grips withstand the requirements of the loading test	No handles provided.	N
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

21.5	Hand held equipment or equipment parts are safe after drop test	Not hand-held equipment.	N
21.6	Portable and mobile equipment is able to withstand rough handling	(see appended table 21)	Р

22	MOVING PARTS	N
22.2a	Moving parts of a transportable equipment are provided with guards which form an integral part of the equipment	N
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
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
	Guides or other safeguards are removable only with a tool	N
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
22.6	Parts of equipment subject to mechanical wear are accessible for inspection	N
22.7	Means provided for emergency switching of an electrically produced mechanical movement which could cause a safety hazard	N
	The means for emergency switching is readily identifiable and accessible and does not introduce a further safety hazard	N
	Devices for emergency stopping able to break the full load current of the relevant circuit, taking into account possible stalled motor currents	N
	Means for stopping of movements operate as a result of one single action	N

23	SURFACES, CORNERS AND EDGES		Р
	Rough surfaces, sharp corners and edges which may cause injury or damage avoided or covered	The edges are well rounded.	Р
24	STABILITY IN NORMAL USE (see appended ta	ble 24)	Р
24.1	Equipment does not overbalance during normal use when tilted through an angle of 10	The unit is intended to a stable mechanical Construction and does not overbalance	Р
24.3	Equipment overbalances when tilted through an angle of 10		N
	- does not overbalance when tilted through an angle of 5¢X in any position excluding transport		N
	- carry a warning notice stating that transport should only be undertaken in a certain position		N

	- in the position specified for transport does not overbalance when tilted to an angle of 10		N
24.6a	Equipment or its parts with a mass of more than 20	kg is provided with:	N
	- suitable handling devices (grips etc.), or		N
	- instructions for lifting and handling during assembly		N
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

25	EXPELLED PARTS	N
25.1	Protective means are provided where expelled parts of the equipment could be a hazard	N
25.2	Display vacuum tubes with a face dimension exceeding 16 cm are provided with adequate protection against implosion	N

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

29	X-RADIATION	N
29.2	EQUIPMENT not intended to produce X-radiation produces an exposure <= 130 nC/kg (0.5 mR)	N

36 ELECTROMAGNETIC COMPATIBILITY	N
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Equipment complies with IEC 601-1-2 Compliance documented by Ν the manufacturer. 37 COMMON REQUIREMENTS FOR CATEGORY AP AND CATEGORY APG Ν **FQUIPMENT** Requirements for category AP and APG equipment Not category AP or APG Ν (Cl. 37 - 41) equipment. 42 **EXCESSIVE TEMPERATURES** 42.1 Р Equipment does not attain temperatures exceeding the values given in Table Xa over the range of ambient temperatures per Clause 10.2.1 42.2 Equipment does not attain temperatures exceeding Ρ the values given in Table Xb at 25¢XC ambient 42.3 Applied parts not intended to supply heat have No applied part. Ν surface temperatures not exceeding 41¢XC 42.5 Guards to prevent contact with hot surfaces No hot accessible surface. Ν removable only with a tool 43 **FIRE PREVENTION** Р Ρ Strength and rigidity necessary to avoid a fire The equipment is well hazard constructed with regard to avoid fire hazard. 44 OVERFLOW, SPILLAGE, LEAKAGE, HUMIDITY, INGRESS OF LIQUIDS. Ρ CLEANING. STERILIZATION AND DISINFECTION 44.2 Equipment contain a liquid reservoir: Ν - the equipment is electrically safe after 15% overfill Ν steadily over a period of 1 min - transportable equipment is electrically safe after Ν additionally having been tilted through an angle of 15¢X in the least favorable direction(s) (if necessary with refilling) 44.3 Electrical properties of the equipment do not Ν change in connection of spillage test (200 ml of water) Liquid which might escape in a single fault 44.4 Ν condition does not wet parts which may cause a safety hazard 44.5 Equipment sufficiently protected against the effects See table 44 for details. Ρ of humidity 44.6 Enclosures designed to give a protection against Ν harmful ingress of water classified according to IEC

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safety provisions

Equipment capable of withstanding cleaning,

sterilization or disinfection without deterioration of

44.7

Ρ

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

48	BIOCOMPATIBILITY	N
	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

49	INTERRUPTION OF THE POWER SUPPLY		Р
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
49.2	Interruption and restoration of power supply does not result in a safety hazard other than interruption of intended function	No hazard	Р
49.3	Means are provided for removal of mechanical constraints on patient in case of a supply mains failure		N

51	PROTECTION AGAINST HAZARDOUS OUTPUT	N
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

Equipment with three-phase motors can safely

operate with one phase disconnected

52.5.10h

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

56	COMPONENTS AND GENERAL ASSEMBLY		Р
	List of critical components	See append table	Р
56.1b	Ratings of components not in conflict with the conditions of use in equipment	See below	Р
	Ratings of mains components are identified	See attachment B	Р
56.1d	Components, movements of which could result in a safety hazard mounted securely	The movement of components is prevented.	Р
56.1f	Conductors and connectors secured and/or insulated to prevent accidental detachment resulting in a safety hazard		Р
56.3a	Connectors provide separation required by Sub- clause 17g		Р
	Plugs for connection of patient circuit leads can not be connected to other outlets on the same equipment	No patient circuit.	N
	Medical gas connections not interchangeable	No medical gas connections.	N
56.3b	Accessible metal parts can not become live when detachable interconnection cord between different parts of equipment is loosened or broken		Р

No motor provided.

Ν

56.3c Leads with conductive connection to a patient are Ν constructed such that no conductive connection remote from the patient can contact earth or hazardous voltages. Connections of capacitors 56.4 Not connected between live parts and non-Ν No such parts protectively earthed accessible parts If connected between mains part and protectively No such parts Ν earthed metal parts comply with: IEC Publication 384-14 Enclosure of capacitors connected to mains part No such parts Ν and providing only basic insulation, is not secured to non-protectively earthed metal parts Capacitors or other spark-suppression devices are No such parts Ν not connected between contacts of thermal cutouts 56.5 Protective devices which cause disconnection from Ρ the supply mains by producing a short-circuit not provided in equipment 56.6 Temperature and overload control devices Ρ 56.6a Thermal cut-outs which have to be reset by a No thermostats provided. Ν soldering not fitted in equipment Thermal safety devices provided where necessary Ν to prevent operating temperatures exceeding the limits Audible warning provided where the loss of No audible warning provided. Ν function caused by operation of a thermal cut-out presents a safety hazard Self-resetting thermal cut-outs and self-resetting Ν over-current releases operated 200 times Non-self resetting over-current releases operated No such device provided. Ν 10 times Independent non-self-resetting thermal cut-out Ν provided where a failure of a thermostat could constitute a safety hazard 56.6b Thermostats with varying temperature settings Ν No thermostats provided. clearly indicated Operating temperature of thermal cut-outs Ν indicated 56.7 **Batteries** Ν 56.7a Battery compartments: Ν adequately ventilated Ρ See Table Additional Test for Р accidental short-circuiting is prevented details. 56.7b Incorrect polarity of connection prevented Not applicable Ν 56.8 Indicators - unless indication provided by other means (from the normal operation Р position), indicator lights are used (color see 6.7): - to indicate that equipment is energized See Sub-clause 6.3a and 6.7. Р

		·	
	- to indicate the operation of non-luminous heaters if a safety hazard could result		N
	- to indicate when output exists if a safety hazard could result		N
	- charging mode indicator provided		N
56.10	Actuating parts of controls		N
56.10b	Actuating parts are adequately secured to prevent them from working loose during normal use		N
	Controls are secured to prevent the movement relative to scale marking (safety related only)		N
	Detachable indicating devices are prevented from incorrect connection without the use of tool		N
56.10c	Stops are provided on rotating controls:		N
	- to prevent an unexpected change from maximum to minimum or vice versa where this could produce a safety hazard		N
	- to prevent damage to wiring		N
56.11	Cord-connected hand-held and foot-operated control	ol devices	N
56.11a	Contain voltages not exceeding 25 V a.c. or 60 V d.c. and isolated from the mains part by Cl. 17g		N
56.11b	Hand-held control devices comply with the requirement and test of Sub-clause 21.5		N
	- Foot-operated control devices designed to support the weight of an adult human being		N
56.11c	Devices not change their setting when inadvertently placed		N
56.11d	Foot-operated control devices are at least IPX 1		N
	- For surgical use, electrical switching parts are IPX 8		N
56.11e	Adequate strain relief at the cord entry provided		N

57	MAINS PARTS, COMPONENTS AND LAYOUT		Р
57.1	Isolation from supply mains		Р
57.1a	Equipment provides means to isolate its circuits electrically from the supply mains on all poles simultaneously		N
	Means for isolation incorporated in equipment or, if external, specified in the accompanying documents		N
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	Comply with Sub-clause 57.1a (See list of critical components table)	Р
57.1f	Mains switches not incorporated in a power supply cord	See list of critical components table	Р
57.1h	Appliance couplers and flexible cords with mains plugs provide compliance with Sub-clause 57.1a	See list of critical components table	Р
57.1m	Fuses and semiconductor devices not used as isolating devices		N

Date of Issue: September 16,2005 57.2 Mains connectors and appliance inlets

57.2	Mains connectors and appliance inlets		Р
57.2e	Auxiliary mains socket-outlets on non-permanently installed equipment of a type that cannot accept a mains plug		N
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
57.3	Power supply cords		Р
57.3a	Not more than one connection to a particular supply mains		N
	If alternative supply allowed, no safety hazards when more than one connection is made simultaneously	No alternative supply allowed.	N
	The mains plug has only one power supply cord	Non power supply cord	Р
	Non-permanently connected equipment provided with power supply cord or appliance inlet		N
57.3b	Power supply cords sufficiently robust to comply with the requirements of IEC 227, designation 53 and IEC 245, designation 53	UL Listed power supply cord optional provided.	Р
	Polyvinyl chloride insulated power supply cords not used for equipment having external metal parts with a temperature exceeding 75¢XC		N
57.3c	Nominal cross-sectional area of conductors of power supply cords not less than in Table XV		Р
57.3d	Stranded conductors not soldered if fixed by any clamping means		Р
57.4	Connection of power supply cords		Р
57.4a	Cord anchorages		Р
	Equipment provided with power supply cords has cord anchorages such that the conductors are relieved from strain, including twisting	UL Listed power supply cord optional provided	Р
	Tying the cord into a knot or tying the ends with string not used		N
	Cord anchorages made of insulating material or metal insulated from unearthed accessible metal parts by supplementary insulation	Supplementary insulation	Р
	Cord anchorages made of metal provided with an insulating lining	Provided with an insulating lining	Р
	Clamping screws do not bear directly on the cord insulation		N
	Screws associated with cable replacement are not used to secure other components		N
	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
57.4b	Power supply cord protected against excessive bending	UL Listed power supply cord optional provided.	Р
· ·			

57.4c	Adequate space inside equipment to allow the supply cable conductors to be introduced and connected	Evaluated as part of the power supply.	Р
57.5	Mains terminal devices and wiring of mains part		Р
	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
	If a conductor breaks away, barriers are provided such that creepage distances and air clearances cannot be reduced		N
	Screws and nuts which clamp external conductors not serve to fix any other component		N
57.5b	Terminals closely grouped with any protective earth terminal		Р
	Mains terminal devices accessible only with use of a tool		Р
	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		Р
57.5c	Internal wiring not subjected to stress when the means for clamping the conductors are tightened or loosened		Р
57.5d	Cord terminals not require special preparation of the conductor		N
57.6	Mains fuses and overcurrent releases		Р
	Fuses or over-current releases provided accordingly for Class I and Class II	Class I, fuses provided in each supply leads.	Р
	Current rating of mains fuses and over-current releases such that they reliably carry the normal operating current		Р
	Protective earth conductor not fused	Evaluated as part of the power supply.	Р
	Neutral conductor not fused for permanently installed equipment	Portable equipment.	N
57.8	Wiring of the mains part		Р
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		Р
57.8b	Cross-sectional area of conductors up to protective device not less than the minimum required for the power supply cord		Р
	Cross-sectional area of other wiring and the sizes of tracks on printed wiring circuits sufficient to prevent any fire hazard		Р
57.9	Mains supply transformers		Р
57.9.1	Overheating	Evaluated as part of the power supply.	Р

External to the transformer protective devices Evaluated as part of the power Ρ connected in such a way that failure of any supply. component cannot render the protective devices inoperative 57.9.1a Short-circuit of secondary windings not caused Evaluated as part of the power Ρ excessive temperature supply. Overload of secondary windings not caused Evaluated as part of the power Р 57.9.1b excessive temperature supply. 57.9.2 The dielectric strength of the electrical insulation of Ν a mains supply transformer such that it passes tests Р 57.9.4 Construction 57.9.4a Р Separation of primary and secondary windings separate bobbins or formers Ν - one bobbin with insulating partition Ν - one bobbin with concentric windings and having Ν copper screen with a thickness of not less than 0.13 mm - concentrically wound on one bobbin with windings Ρ separated by double insulation 57.9.4c Means provided to prevent displacement of end Ρ 57.9.4d Insulated overlap of not less than 3 mm if a Evaluated as part of the power Ν protective earthed screen has only one turn supply. 57.9.4e Insulation between the primary and secondary in transformers with double Р insulation - 1 insulation layer having a thickness of at least 1 Ν - at least 2 insulation layers with a total thickness of Evaluated as part of the power Р at least 0.3 mm supply. - three layers provided that each combination of Evaluated as part of the power Р two layers can withstand the dielectric strength test supply. for reinforced insulation 57.9.4q Exit of the wires of toroidal transformers provided Ν 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 57.10 Creepage distances and air clearances Р 57.10a Adapter had been evaluated compliance with at least the values of Table XVI as part of the power supply. The clearance and creapage of medical station comply with at least the values of Table XVI. Creepage distances for slot insulation of motors at No motor provided. Ν least 50% of the specified values

57.10b	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 creapage of medical station comply with at least the values of Table XVI.	Р
57.10c	Creepage distances or clearances of at least 4 mm are maintained between defibrillation-proof applied parts and other parts	No applied parts.	Z

58	PROTECTIVE EARTHING - TERMINALS AND CONNECTIONS			
58.1	Clamping means of the protective earth terminal			
	Not be able to loosen without the aid of a tool	No PE terminal	N	
	Screws for internal earth connections are covered or protected against loosening from outside	See below	N	
58.7	Earth pin of the appliance inlet regarded as the protective earth terminal	Evaluated as part of the power supply.	Р	
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.	Р	
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.	Р	

59	CONSTRUCTION AND LAYOUT			
59.1	Internal wiring		Р	
59.1a	Cables and wiring protected against contact with a moving part	The wires are route away from sharp edges and parts which could not damage insulation	Р	
	Wiring having basic insulation only protected by additional fixed sleeving	All component and parts are adequate arrangement that can not damage by opening or assembling equipment. Uninsulated conductors have been adequately fixed to prevent,	Р	
	Components are not likely to be damaged in the normal assembly or replacement of covers	ditto	Р	
59.1b	Movable leads are not bent around a radius of less than five times the outer diameter of the lead	The wires are route away from sharp edges and parts which could not damage insulation	Р	
59.1c	Insulating sleeving adequately secured	See below	Р	
	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.	Р	

Conductors subjected to temperatures exceeding Evaluated as part of the power Ρ have an insulation of heat-resistant material supply. 59.1d Aluminum wires of less than 16 mm2 cross-section Ν not used 59.1f Connecting cords between equipment parts Р considered as belonging to the equipment 59.2 Insulation Ρ Р 59.2b Mechanical strength and resistance to heat and Pass all types of insulation fires retained by all types of insulation 59.2c Insulation not likely to be impaired by deposition of See below Ρ dirt or by dust resulting from wear of parts Parts of rubber resistant to ageing No rubber provided. Ν Ρ 59.3 Excessive current and voltage protection Ρ Internal electrical power source provided with Fuse was provided by built-in device for protection against fire hazard approval power supply. Fuse elements replaceable without opening the Evaluated as part of the power Ρ enclosure fully enclosed in a fuseholder supply. Protective devices between an isolated applied part No applied part. Ν and the body of the equipment do not operate below 500 V r.m.s. 59.4 Oil containers Ν Oil containers adequately sealed Ν Container allow for the expansion of the oil Ν Oil containers in mobile equipment sealed to Ν prevent the loss of oil during transport Partially sealed oil-filled equipment or equipment Ν

parts provided with means for checking the oil level

56.1 Р **TABLE: list of critical components** Manufacturer/ technical data Standard Object/part No. type/model Approved trademark Min V-1, 105°C 01. Printed wiring Various Various UL94 UL board TN-7000 V-0, 60°C, min. 1.5mm 02. Teiiin UL94 UL Enclosure Chemicals thick. Overall 460 by 383 by 97.2 mm. Two pieces construction Input: 100-240Vac.4A.50-03 Built-in FSP group FSP180-50MP IEC 60601-1 VDE CE.UL Switching Power Inc 60Hz Output 5V,12A, UL 2601-1 5Vsb,2A 12V,12A, Supply 12V,0.8A, 3.3V,16.8A 04. 12Vdc.1900mA, provided Test in unit DC/AC on a stand of 7.2 mm Inverter height 05-01 105 Test in unit Transformer (T1,T2)06. Real Time CR2032 UL Sony Energy 3Vdc. Max abnormal UL 1642 **Devices Corp Clock Battery** Charging Current 10 mA 07. CPU Fan DFC601005L UL Young Lin 5Vdc, 0.2 A,14.35 CFM UL507 Tech Co.,Ltd 08.Hard Disk Various Various Generic ,5 Vdc ,0.55 A IEC 60950 TÜV Drive TÜV 09. DVD Rom Generic ,5 Vdc ,1.5 A IEC 60950 Various Various Drive (Optional) IEC 60825-1 10 4 ohm 2 W Test in unit Speaker (provide two) 17"TFT LCD 11 Chunghwa Test in unit LCD panel(For Picture CLAA170EA07Y model:ONYX-Tubes, Ltd. 173HTT-A1) 11-01 Chunghwa CLAA150XP03 15"TFT LCD Test in unit LCD panel(For **Picture** model:ONYX-Tubes, Ltd. 153HTT-A1) FEP, PTFE, PVC, TFE, UL 12 Various Various Internal Wire neoprene, polyimide or marked VW-1; minimum 60 V. 80°C. UL 13 Various Various Detachable, Hospital Power supply Grade, maximum 4.5 m long; min 125 V, 10 A, with Cord (Optional) NEMA 5-15P or 250 V, 10 A, with NEMA 6-15P, Type SVT or SPT-2, 18 AWG

supplementary information:

6.1 TABLE: marking durability P

Marking tested Remarks

Label No curl, Pass

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7	TABLE: power inpu	ıt					Р
Operating co	ndition	Voltage	Frequency	Current	Power	Rema	rks
Model:ONYX	(-173HTT-A1					Rating Current	
Maximum No	ormal load	90 Vac	50 Hz	867mA	75.3 W		
Maximum No	ormal load	90 Vac	60 Hz	852mA	75.4 W		
Maximum No	ormal load	100 Vac	50 Hz	774 mA	74.9 W	2 A	
Maximum No	ormal load	100 Vac	60 Hz	781 mA	75.1 W	2 A	
Maximum No	ormal load	250 Vac	50 Hz	343 mA	73.2 W	1A	
Maximum No	ormal load	250 Vac	60 Hz	350 mA	73.0 W	1A	
Maximum No	ormal load	265 Vac	50 Hz	322 mA	72.5 W		
Maximum No	ormal load	265 Vac	60 Hz	330 mA	72.5 W		
Model:ONYX	(-153HTT-A1						
Maximum No	ormal load	90 Vac	50 Hz	823mA	74.0 W		
Maximum No	ormal load	90 Vac	60 Hz	823mA	73.6 W		
Maximum No	ormal load	100 Vac	50 Hz	731 mA	73.3 W	2 A	
Maximum No	ormal load	100 Vac	60 Hz	731 mA	73.1 W	2 A	
Maximum No	ormal load	250 Vac	50 Hz	326 mA	71.7 W	1A	
Maximum No	ormal load	250 Vac	60 Hz	332 mA	71.8 W	1A	
Maximum No	ormal load	265 Vac	50 Hz	306 mA	71.6W		
Maximum No	ormal load	265 Vac	60 Hz	316 mA	71.8 W		

Maximum normal load was defined as follows: Cross reading and writing data between HDD, and CD-ROM in maximum speed, LCD with maximum brightness and contract, connect with 7USB ports. each ports with dummy load 0.5A

18	TABLE: protective earthing					Р
Test location		Test current (A)		Resistance (ohms)	R	emarks
AC Inlet ear	th pin to chassis near HDD	40	3.2	80mΩ	<0.1oh	ms

19	TABLE: leakage current					Р
Type of leakage current and test condition Supply Supply (including single faults) Supply voltage frequency		Measured max. value	Re	emarks		
Model:ONY	X-173HTT-A1					
Earth Leaka	ge Current (Fig. 16):	Vac	Hz	B/A (uA)		
ER, NC, S1	= 1, S5 = N	264	60	149.8/188.3	MD	
ER, NC, S1	= 1, S5 = R	264	60	150.4/188.5		
ER, SFC (N	eutral Open), S1 = 0, S5 = N	264	60	291.0/327.7		
ER, SFC (N	eutral Open), S1 = 0, S5 = R	264	60	293.1/327.5		
Enclosure L	eakage Current (Fig. 18):					
EN, NC, S1	= 1, S5 = N, S7 = 1	264	60	0.5/5.5		tween Metal r SIP/SOP
EN, NC, S1	= 1, S5 = R, S7 = 1	264	60	0.5/5.5		

EN, SFC (Neutral Open), S1 = 0, S5 = N, S7 = 1 264 60 7.6/9.0 EN, SFC (Neutral Open), S1 = 0, S5 = R, S7 = 1 264 60 7.8/8.8 EN, SFC (Ground Open), S1 = 1, S5 = N, S7 = 0 264 60 61.0/189.3 EN, SFC (Ground Open), S1 = 1, S5 = R, S7 = 0 264 60 70.2/189.6 EN, NC, S1 = 1, S5 = N, S7 = 1 MD2 between Touch 264 0.6/8.5 60 panel and Rear **Enclsoure** EN, NC, S1 = 1, S5 = R, S7 = 1 264 60 0.4/8.6 EN, SFC (Neutral Open), S1 = 0, S5 = N, S7 = 1 264 60 0.8/8.2 EN, SFC (Neutral Open), S1 = 0, S5 = R, S7 = 1 264 60 0.7/8.0EN, SFC (Ground Open), S1 = 1, S5 = N, S7 = 0 264 60 1.1/4.6 EN, SFC (Ground Open), S1 = 1, S5 = R, S7 = 0 264 60 1.2/4.5 Model:ONYX-153HTT-A1 Earth Leakage Current (Fig. 16): Vac Hz B/A (uA) ER, NC, S1 = 1, S5 = N 264 60 148.7/157.8 MD ER, NC, S1 = 1, S5 = R 60 264 148.2/161.5 ER, SFC (Neutral Open), S1 = 0, S5 = N 264 60 289.5/302.4 ER, SFC (Neutral Open), S1 = 0, S5 = R 264 60 290.3/305.1 Enclosure Leakage Current (Fig. 18): EN, NC, S1 = 1, S5 = N, S7 = 1 MD1 between Metal 264 60 0.8/0.9 part near SIP/SOP EN, NC, S1 = 1, S5 = R, S7 = 1 264 60 0.6/1.1 EN, SFC (Neutral Open), S1 = 0, S5 = N, S7 = 1 264 60 1.0/1.2 EN, SFC (Neutral Open), S1 = 0, S5 = R, S7 = 1 264 60 1.0/1.1 EN, SFC (Ground Open), S1 = 1, S5 = N, S7 = 0 264 60 157.4/158.2 EN, SFC (Ground Open), S1 = 1, S5 = R, S7 = 0 264 60 158.5/161.5 EN, NC, S1 = 1, S5 = N, S7 = 1 MD2 between Touch 264 60 0.7/0.7panel and Rear Enclsoure EN, NC, S1 = 1, S5 = R, S7 = 1 264 60 0.6/0.7 EN, SFC (Neutral Open), S1 = 0, S5 = N, S7 = 1 264 60 0.8/1.0 EN, SFC (Neutral Open), S1 = 0, S5 = R, S7 = 1 264 60 0.9/1.0 EN, SFC (Ground Open), S1 = 1, S5 = N, S7 = 0 264 60 1.3/1.4 EN, SFC (Ground Open), S1 = 1, S5 = R, S7 = 0 264 60 1.7/1.6 supplementary information:

Tests repeated under condition rated 264Vac/60 Hz

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

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0 - Switch open or set to reversed polarity

NC - Normal condition

SFC - Single fault condition

20	TABLE: die	lielectric strength				Р
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)	Ren	narks
Primary to P	E	BI	250Vrms	2121Vdc	Pass	
Primary to S	IP/SOP	DI	533Vrms	5132Vac	Pass	
Primary to E (with foil)	nclosure	DI	533Vrms	5132Vac	Pass	

21	TABLE: mechanical strength			Р
Part under test		Test (impact, drop, force, handle, rough handling, mobile)	Remark	(S
Enclosure or	utside near power	Force test (21a)	45N,Pass	
Enclosure or	utside near power	Impact test (21b)	0.5J,Pass	

42	TABLE: normal temper	ature			Р
Supply voltage: See below Model:ONYX-173HTT-A1					
Ambient ten	nperature: See below	Test Condition: Maxim	um normal load		
Measuring l	ocation		Measured temperature	Remark	is.
90V/264V 6	0Hz				
Power supp	ly:			Calculated, limitatio	n
1.T1 coil			52.9/52.5	68.0/66.8 , 130	
2.EL2 coil			55.9/53.7	71.0/68.0 , 130	
3.C7 body			55.5/54.5	70.6/68.8 , 105	
4.T2 coil			52.5/51.7	67.6/66.6 , 130	
5.PCB near	T1		64.5/63.5	79.6/77.8 , 130	
Inverter:					
6.T1 core			55.7/55.4	70.8/69.7 , 105	
7.L1 coil			64.0/63.2	79.1/77.5 , 105	
8.C1 body			60.1/59.0	75.2/73.3 , 105	
9.PWB near	r T1		62.0/61.6	77.1/75.9 , 105	
Main board					
10.U13 bod	y		59.4/58.8	74.5/73.1 , 105	
11.L3 coil			57.9/57.4	73.0/71.7 , 105	
12.L4 coil			59.6/59.1	74.7/73.4 , 105	
13.L6 coil			58.4/57.9	73.5/72.2 , 105	
14.L7 coil			59.0/58.5	74.1/72.8 , 105	
15.L9 coil			57.3/56.7	72.4/71.0 , 105	
16.Heatsink	of U10		56.4/56.0	71.5/70.3 , 105	
17.PCB nea	ar U10		57.9/57.4	73.0/71.7 , 105	
18.PCB of F	RAM		56.2/55.8	71.3/70.1 , 105	
19.HDD boo	dy		46.3/45.9	61.4/60.2 ,	
20.Enclosur	e of inside near power		36.7/37.0	51.8/51.3 , 60	
21.Enclsour	e of outside near power		33.8/34.8	48.9/49.1 , 60	
22.Ambient			24.9/25.7	40/40,	

supplementary information:

Maximum normal load was defined as follows: Cross reading and writing data between HDD, and CD-ROM in maximum speed, LCD with maximum brightness and contract, connect with 7 USB ports.each port with dummy load 0.5A

42	TABLE: normal tempe	rature			Р
Supply volt	age: See below	Model:ONYX-153HTT-	·A1		
Ambient temperature: See below Test Condition: Ma			um normal load		
Measuring	location		Measured temperature	Remarks	
90V/264V 6	60Hz				
Power supp	oly:			Calculated, limitation	
1.T1 coil			54.4/49.3	67.8/65.3 ,130	
2.EL2 coil			53.7/50.6	67.1/66.6 ,130	
3.C7 body			54.4/55.4	67.8/71.4 ,105	
4.T2 coil			51.2/52.8	64.6/68.8 ,130	
5.PCB near	r T1		63.7/62.5	77.1/78.5 ,130	
Inverter:					
6.T1 core			64.6/62.6	78.0/78.6 ,105	
7.L1 coil			66.3/68.9	79.7/84.9 ,105	
8.C1 body			65.0/66.7	78.4/82.7 ,105	
9.PWB nea	ar T1		56.4/63.1	69.8/79.1 ,105	
Main board					
10.U13 boo	dy		56.8/61.2	70.2/77.2 ,105	
11.L3 coil			53.8/59.0	67.2/75.0 ,105	
12.L4 coil			51.4/58.7	64.8/74.7 ,105	
13.L6 coil			51.2/57.3	64.6/73.3 ,105	
14.L7 coil			50.5/59.2	63.9/75.2 ,105	
15.L9 coil			50.8/57.7	64.2/73.7 ,105	
16.Heatsinl			48.4/55.3	61.8/71.3 ,105	
17.PCB nea			49.9/57.0	63.3/73.0 ,105	
18.PCB of I			47.7/54.7	61.1/70.7 ,105	
19.HDD bo	dy		38.5/50.7	51.9/66.7 ,	
20.Enclosu	re of inside near power		33.3/33.1	46.7/49.1 ,60	
	re of outside near power		28.6/35.2	42.0/51.2 ,60	
22.Ambient	t		26.6/24.0	40/40 ,	
supplemen	tary information:				
	normal load was defined as speed, LCD with maximum				

44	TABLE: overflow, spillage, leakage, humidity, ingress of liquids, cleaning, sterilization, desinfection				
Test type an	nd condition	Part under test	Re	emarks	
Humidity, 25	5 , 95%, 48 hrs	The unit	No Breal	kdown, Pass	
Cleaning, cle of dry cloth	ean the device, rub it with a piece	The unit	No Breal	kdown, Pass	
supplementary information:					
Dielectric Voltage Withstand Pri. to Enclosure: 2121 Vdc, Pri. to SELV: 5132 Vac					

52 Ρ **TABLE: abnormal operation** Observed results Remarks Test type, condition and clause reference Model:ONYX-173HTT-A1 Ventilation Openings blacked, Clause 52.5.5 NT,NC,NB, Temperature stabled,see T1 coil near attached heating chart for details Ventilation:54.2 PCB near T1:64.1 .Ambient:25.9 CPU Fan Locked, clause 52.5.6 NT,NC,NB, Temperature stabled,see T1 coil near attached heating chart for details Ventilation:53.0 PCB near T1:65.0, Ambient:26.2 Power Fan Locked.clause 52.5.6 NT,NC,NB, Temperature stabled,see T1 coil near attached heating chart for details Ventilation:96.8 PCB near T1:103.3 Ambient:25.5 Model:ONYX-173HTT-A1 NT,NC,NB, Temperature stabled.see Ventilation Openings blacked, Clause 52.5.5 T1 coil near attached heating chart for details Ventilation:56.9 PCB near T1:66.9 .Ambient:26.4 CPU Fan Locked, clause 52.5.6 NT,NC,NB, Temperature stabled,see T1 coil near attached heating chart for details Ventilation:56.4 Heatsnik of U10:81.4 , Ambient:26.0 Power Fan Locked, clause 52.5.6 Unit shut down NT,NC,NB, ,see T1 coil near attached heating chart for details Ventilation:86.3 PCB near T1:88.9 Ambient:26.4 supplementary information: NB - No indication of dielectric breakdown NC - Cheesecloth remained intact NT - Tissue paper remained intact

	TABLE: additional tests				
Clause	Test type and condition Remarks and observed result		Verdict		
55	Ball Drop, Impact Points: Both sides, rear enclosure (enclosure outside near power supply)	No cracking of the enclosure, and not created openings exposing live parts.	Pass		
	Mold stress Relief (70 ,7hrs)	No cracking of the enclosure, and not created openings exposing live parts.	Pass		
56.7	Reversed Battery Connection				
	CR2032, normal	0.001 mA	Pass		
	CR2032, D32 short	2.78mA	Pass		
	CR2032, R104short	0.1mA	Pass		

Lithium Battery, Sony Energytec Inc. model: CR2032, ,Max Abnormal Charging Current10 mA.

	TABLE: additional tests Limited current circuit measurements: IEC 609501				
Clause	Test type and condition	Remarks and observed results	Verdict		
2.4.1, 2.4.2	Limited current circuit measurements: IEC 609501	See below			

Inverter: P2 pin 1 to pin	2				
Fault	Volts Peak	Volts dc	mAp	mA dc	Frequency kHz
Normal	32.4		16.2		52.52
L1 Short	0(*)		0(*)		0(*)
C1 Short	0(*)		0(*)		0(*)
R16 Short	0(*)		0(*)		0(*)
Inverter: P2 pin 1 to ear	th				
Fault	Volts Peak	Volts dc	mAp	mA dc	Frequency kHz
Normal	0(*)		0(*)		0(*)
L1 Short	0(*)		0(*)		0(*)
C1 Short	0(*)		0(*)		0(*)
R16 Short	0(*)		0(*)		0(*)
Inverter: P2 pin 2 to ear	th	1		•	·
Fault	Volts Peak	Volts dc	mAp	mA dc	Frequency kHz
Normal	10.7		5.35		41.28
L1 Short	16.1		8.05		41.24
C1 Short	0(*)		0(*)		0(*)
R16 Short	1.64		0.81		62.1

Supplementary information:

Date of Issue: July 11,2005

⁽¹⁾The circuit's available current complied with the current limits of a limited current circuit

^{(2)&}quot; * ": Unit shut down instantly

Attachment

Attachment - A. EUT Photos

Attachment - B. Product ID Label

Attachment - C. User Manual

Attachment - D. Measuring Instrument List

Attachment - E. Sample of CE Declaration

Date of Issue: July 11,2005

Attachment -A.

EUT Photos

This Appendix-A. attached with total 4 pages EUT photograph, not including this page. EUT photos exhibition are follows

Photo # 1. Front View (ONYX-173HTx-yz)
Photo # 2. Front View (ONYX-153HT x-yz)
Photo # 3. Real View (ONYX-173HT x-yz)
Photo # 4. Real View (ONYX-153HT x-yz)
Photo # 5-6. Unit Partially Disassembled View
Photo # 7-8. Inverter View

Photo # 1 Front View (ONYX-173HTx-yz)

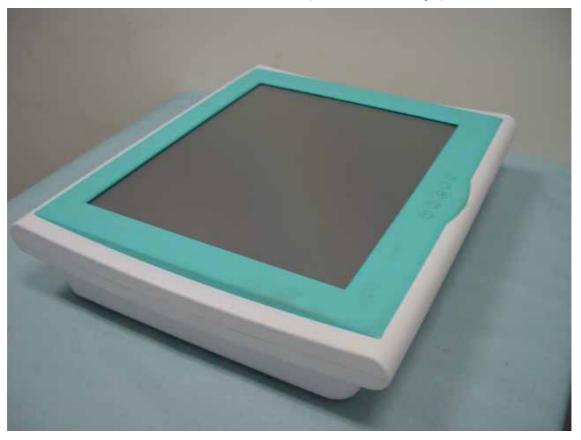
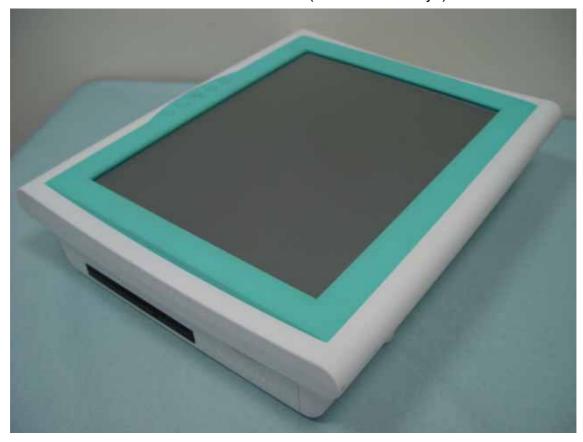


Photo # 2 Front View(ONYX-153HTx-yz)



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Photo #3 Real View (ONYX-173HTx-yz)



Photo #4 Real View (ONYX-153HTx-yz)



Page37



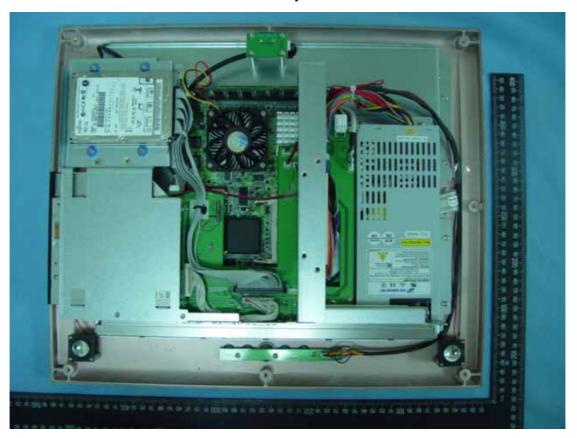


Photo # 6 Unit Partially Disassembled View



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Photo #7 Inverter View

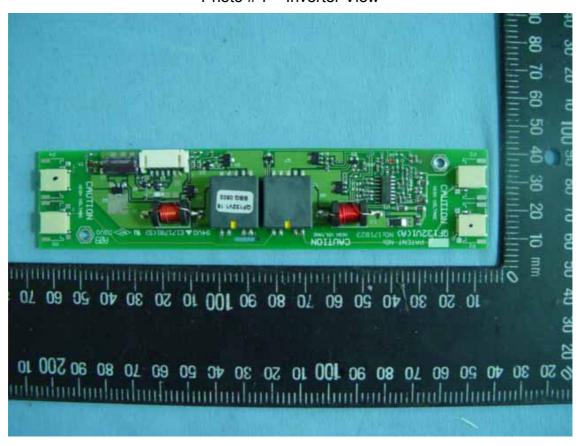
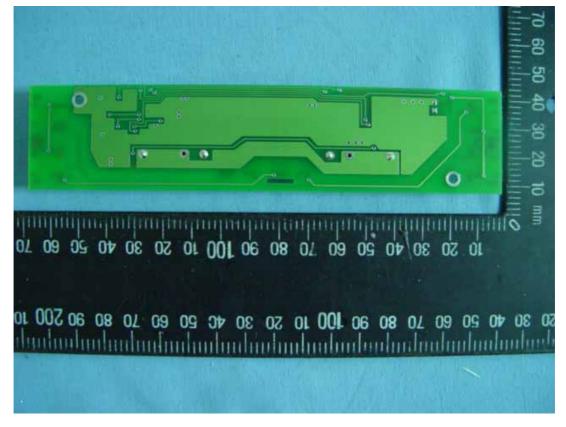


Photo #8 Inverter View



Attachment - B.

Product ID Label

This Appendix-B. attached with total 1 page Product ID Label drawing/sample, not including this page.





ONYX-153HTx-yz/ONYX-173HTx-yz

"x" may be T or blank,

"y" may be $A\sim Z$

"z" may be 1 or 2

Attachment - C. User manual

This Appendix-C. attached with total 13 page(s) user manual, not including this page.



ONYX-153/173

ONYX-153/173

15"/17" Pentium® M High Brightness Low Noise Medical Station

ONYX-153/173 Rev. A Manual 2nd Ed. Aug. 2005



Onyx-153/173

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Microsoft® Windows is a registered trademark of Microsoft® Corporation.

RTL is a trademark of Realtek Semi-Conductor Co., Ltd.

C&T is a trademark of Chips and Technologies, Inc.

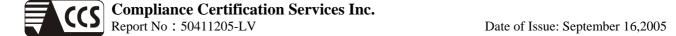
UMC is a trademark of United Microelectronics Corporation.

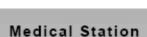
ITE is a trademark of Integrated Technology Express, Inc.

SiS is a trademark of Silicon Integrated Systems Corp.

VIA is a trademark of VIA Technology, Inc.

All other product names or trademarks are properties of their respective owners.





Onyx-153/173

Safety & Warranty

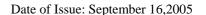
- Read these safety instructions carefully.
- Keep this user's manual for later reference.
- Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Put this equipment on a reliable surface during installation.Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
- Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- 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 over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.

Onyx-153/173

- 14. If any of the following situations arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the users manual.
 - The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.
- 15. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4°F) OR ABOVE 60° C (140° F). IT MAY DAMAGE THE EQUIPMENT.
- 16. External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL / IEC standard (e.g. UL 1950 for IT equipment and UL 60601-1 / IEC 60601 series for systems shall comply with the standard IEC 60601-1-1, Safety requirements for medical electrical systems. Equipment not complying with UL 60601-1 shall be kept outside the patient environment, as defined in the standard.

Caution:

It may cause the danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer.





Onyx-153/173

Classification

- 1. Degree of production against electric shock: not classified
- Degree of protection against the ingress of water: IPX0
- Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
- 4. Mode of operation: Continuous
- Type of protection against electric shock: Class I equipment

Medical Station

Onyx-153/173

FCC Safety





This device complies with Part 15 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.

Medical Station Onyx-153/173

Safety Symbol Description

The following safety symbols are the further explanations for your reference.

C UL US	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
Â	Attention, consult ACCOMPANYING DOCUMENTS.
	Ground wire Protective Ground wire.

ONYX-153/173

1.3 Specification

Hardware Specifications

Tidi divare openioacionis			
Display	ONYX-153: 15" XGA color TFT LCD		
	ONYX-173: 17" SXGA color TFT LCD		
CPU Board Supports Socket 478-based Intel®Pentium® M Pr			
	and Celeron®M up to 1.8GHz with FSB 400MHz		
Disk Drive	2.5" Hard Disk Drive (ATA100)		
Space	Suck-in DVD-ROM		
	8 in 1 card reader		
	Smart Card reader (optional)		
Expansion	One Mini PCI slot; One PCI expansion		
Button	Brightness: "+" / "-"; Sound: "+" / "-"; Power SW		
I/O	3 RS-232 ports, 1 RS-232/422/485 port 7 USB 2.0 ports 1 x on up side for Web-CAM 2 x internal for card reader and smart card (optional) 4 x on rear bracket 1 parallel port 1 PS/2 keyboard and 1 PS/2 mouse Sound: 1 x Line-in 1 x line-out 1 x Mic-in 2 x Speakers on back side ONYX-153 with 1W speaker		
	ONYX-173 with 2W speaker		

Medical Station	ONYX-153/173

LCD Specifications

Model Name	ONYX-153 series	ONYX-173 series
Display Type	15" color TFT LCD	17" color TFT LCD
Max. Resolution	1024 x 768	1280 x 1024
Max. Colors	16.7M	16.7M
Dot Size (mm)	0.297 x 0.297	0.297 x 0.297
Luminance (cd/m2)	400 (TYP)	300 (TYP)
Viewing Angle	170°(H)	150°(H)
	170°(V)	130°(V)
Operating	0°C~40°C	0°C~ 40°C
Temperature	(32°F~104°F)	(32°F~104°F)
Brightness Control	Yes	Yes
Back Light MTBF	50,000 Hrs	40,000 Hrs

Note:

All AAEON's LCD products are manufactured with High precision technology. However, there are a small number of defective pixels in all LCD panels that are not able to change color. This is a normal occurrence for all LCD displays from all manufacturers and should not be noticeable or objectionable under normal operation. AAEON LCD panels are qualified for industry standard conditions in the following: total 7 dead pixels on a screen or if there are 3 within 1 inch square area of each other on the display.

Medical Station	ONYX-153/173

Mechanical Specifications

Architecture	Close-frame		
Front Bezel	Plastic bezel with resistive touch screen		
Color	Blue-white (Sky series) and Green-white (Garden		
	series)		
Mounting /	VESA 75/100mm, ONYX-153 supports VESA 75		
Holder	only		
Construction	3mm ABS + PC TYPE Plastic housing		
Dimension	ONYX-153: 398 x 330 x 92.5 mm (15.7"x13"x3.6")		
(W x H x D)	ONYX-173: 460 x 385 x 97 mm (18.1"x97.8"x3.8")		
Carton	ONYX-153: 510x 213x465mm (20.1"x 8.4"x 18.3")		
Dimension	ONYX-173: 605x 230x 610mm (23.8"x 9.1"x 24")		
Net Weight	ONYX-153: 6.3Kg		
	ONYX-173: 7.6Kg		
Gross Weight	ONYX-153: 9.3Kg		
	ONYX-173: 10.6Kg		
Packing Filler	PE		

Power Supply Specifications

Power	180W	
Input Voltage	100~240 V AC, 4 A max. @ 50 ~ 60 Hz	
Output	+5 V@12 A, +12 V@12 A,	
Voltages	+3.3 V@16.8 A, +5 Vsb@2.0 A, -12 V@0.8 A	
MTBF	100,000 hrs operation at 25°C	



ONYX-153/173

Environmental Specifications

Operating Temperature	0°C to 40°C (32°F ~104°F)		
Storage & Transportation Termperature	-20°C to 60°C (-4°F ~140°F)		
Storage & Transportation Humidity	5% to 95%@ 40°C, non-condensing		
Vibration	0.5G / 5 ~ 500Hz (Random) / operation		
Shock	15G peak acceleration (11 msec.		
_	duration) / operation		
Drop	76cm (1 Corner, 3 Edge, 6 Surface)		
EMI / Safety	CE / FCC Class B/UL 60601-1/EN		
	60601-1		
Noise	35db		
Input Power Rating	100-240Vac 50-60Hz, 2-1A		
Power Consumption	70W		

TouchScreen (Optional)

Туре	8-wire, Analog Resistive
Interface	RS-232 interface
Resolution	2048 x 2048
Light Transmission	> 75%
Life Time	1 million activations

Medical Station

ONYX-153/173

A.2 Cleaning tools

Although many companies have created products to help improve the process of cleaning your computer and peripherals users can also use household items to clean their computers and peripherals. Below is a listing of items you may need or want to use while cleaning your computer or computer peripherals.

Keep in mind that some components in your computer may only be able to be cleaned using a product designed for cleaning that component, if this is the case it will be mentioned in the cleaning tips.

- Cloth A piece of cloth is the best tool to use when rubbing up a component. Although paper towels or tissues can be used on most hardware as well, we still recommend you to rub it with a piece of cloth.
- Water or rubbing alcohol You may moisten a piece of cloth a bit with some water or rubbing alcohol and rub it on the computer. Unknown solvents may be harmful to the plastics parts.
- Vacuum cleaner Absorb the dust, dirt, hair, cigarette
 particles, and other particles out of a computer can be one
 of the best methods of cleaning a computer. Over time
 these items can restrict the airflow in a computer and cause
 circuitry to corrode.

Medical Station

ONYX-153/173

- Cotton swabs Cotton swaps moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas in your keyboard, mouse, and other locations.
- Foam swabs Whenever possible it is better to use lint free swabs such as foam swabs.

Note:

We strongly recommended that you should shut down the system before you start to clean any single components.

Please follow the steps below.

- 1. Close all application programs.
- Close operating software.
- 3. Turn off power switch
- Remove all device
- Pull out power cable



Medical Station

ONYX-153/173

A.3 Scrap Computer Recycling

If the computer equipments need the maintenance or are beyond repair, we strongly recommended that you should inform us as soon as possible for the suitable solution. For the computers that are no longer useful or work well, please contact with worldwide distributors for recycling.

The worldwide distributors show on the following website:

ittp://www.aaeon.com/?Tablndex=Contact&TablD=Offices

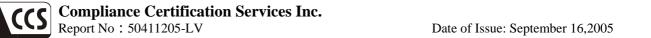
Note:

Follow the national requirement to dispose unit

Attachment - D. Measuring Instrument List

This Appendix-D. attached with total 1page Measuring Instrument List, not including this page.

ID NO	Instrument Type	Manufacture	Model Series No.	Scope	Calibration Date	Due Date
CR01	Hybrid Recorder	YOKOGAWA	437024 12B418988	-200~400 24 Chance	22.Mar.2005	21.Mar.2006
CR02	Hybrid Recorder	YOKOGAWA	437024 12B418986	-200~400 24 Chance	02.Jun.2005	01.Jun.2006
RT02	AC Ground Bond Tester	EXTECH	7306 1260133	40A/0~510m	21.May.2005	20.May.2006
HV03	DC Hi Voltage Tester	GOTECH	GT-7058-B TC0202297	30kv/60kv 600VA	24.Aug.2005	23.Aug.2006
LC01	Leakage Current Tester	SIMPSON	228 20468	10 mA	23.Mar.2005	22.Mar.2006
LC03	Line Leakage Tester	EXTECH	7611 1330411		02.Feb.2005	01.Feb.2006
MD01	Caliper	МІТИТОУО	500-196 02057850	0~150mm	08.Mar.2005	07.Mar.2006
MF01	Push Pull Gauge	ALGOL	NK-300 39403	0~30Kg	23.Mar.2005	22.Mar.2006
MB01	Steel Ball	-	H910502201	500g	18.Mar.2005	17.Mar.2006
MB02	Ball Pressure Tester	-	-	R=2.5mm, 20N	08.Mar.2005	07.Mar.2006
OS01	Digital Phosphor Oscilloscope	Tektronix	TDS3032 HV03F2GXJR	2.5GS/s/300M Hz	31.May.2005	30.May.2006
OS02	Differential Probe	BRYMEN	LDP-6002 031414	25 MHz 140V ±1400V	14.Feb.2005	13.Feb.2006
WT01	Electric Scale	EXCELL	DSB-931	5g-20Kg	23.May.2005	22.May.2006
IT01	Impact tester	PTL	F22.50 5050078	0.20J 0.35J 0.50J 0.70J 1.00J	15.Feb.2005	14.Feb.2006
PM01	Power Meter	YOKO GAWA	WT130 12B415314	20A / 600V	24.Mar.2005	23.Mar.2006
TC01	Tem & Hummi. Chamber	TAICHY	MHG-700QR 910388	-20 ~+150 98% RH	29.July.2005	28.July.2006



Attachment - E.

Sample of CE Declaration

Company Letter Head

CE Declaration of Conformity

For the following equipment: (Product Name) (Model Designation) is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) at the Amendment Directive (93/68/EEC). For the evaluation regarding the Directives the following standards were applied: The following importer/manufacturer is responsible for this declaration: (Company Name, Importer) (Company Address, Manufacturer) (Company Address, Manufacturer) Person responsible for this declaration: (Name, Surname, Importer) (Name, Surname, Manufacturer) (Position/Title) (Legal Signature) (Place) (Date)		
(Model Designation) is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) at the Amendment Directive (93/68/EEC). For the evaluation regarding the Directives the following standards were applied: The following importer/manufacturer is responsible for this declaration: (Company Name, Importer) (Company Address, Importer) (Company Address, Manufacturer) Person responsible for this declaration: (Name, Surname, Importer) (Position/Title) (Legal Signature) (Legal Signature)	For the following equipment:	
is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) at the Amendment Directive (93/68/EEC). For the evaluation regarding the Directives the following standards were applied: The following importer/manufacturer is responsible for this declaration: (Company Name, Importer) (Company Address, Importer) (Company Address, Manufacturer) Person responsible for this declaration: Person responsible for this declaration: (Name, Surname, Importer) (Position/Title) (Legal Signature) (Legal Signature)	(Product Name)	
Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) at the Amendment Directive (93/68/EEC). For the evaluation regarding the Directives the following standards were applied: The following importer/manufacturer is responsible for this declaration: (Company Name, Importer) (Company Address, Importer) (Company Address, Manufacturer) Person responsible for this declaration: (Name, Surname, Importer) (Name, Surname, Manufacturer) (Position/Title) (Legal Signature) (Legal Signature)	(Model Designation)	
(Company Name, Importer) (Company Address, Importer) (Company Address, Manufacturer) (Person responsible for this declaration: (Name, Surname, Importer) (Position/Title) (Legal Signature) (Company Name, Manufacturer) (Posmany Address, Manufacturer) (Name, Surname, Manufacturer) (Position/Title) (Legal Signature)	Directive on the Approximation of the Lav Electromagnetic Compatibility (89/336/EE the Amendment Directive (93/68/EEC). F	ws of the Member States relating to EC), Low-voltage Directive (73/23/EEC) and
(Company Address, Importer) Person responsible for this declaration: Person responsible for this declaration: (Name, Surname, Importer) (Position/Title) (Legal Signature) (Company Address, Manufacturer) Person responsible for this declaration: (Name, Surname, Manufacturer) (Position/Title)	The following importer/manufacturer is responsib	le for this declaration:
Person responsible for this declaration: (Name, Surname, Importer) (Position/Title) (Legal Signature) Person responsible for this declaration: (Name, Surname, Manufacturer) (Position/Title) (Legal Signature)	(Company Name, Importer)	(Company Name, Manufacturer)
(Name, Surname, Importer) (Position/Title) (Position/Title) (Legal Signature) (Legal Signature)	(Company Address, Importer)	(Company Address, Manufacturer)
(Position/Title) (Legal Signature) (Legal Signature)	Person responsible for this declaration:	Person responsible for this declaration:
(Legal Signature) (Legal Signature)	(Name, Surname, Importer)	(Name, Surname, Manufacturer)
	(Position/Title)	(Position/Title)
(Place) (Date) (Date)	(Legal Signature)	(Legal Signature)
	(Place) (Date)	(Place) (Date)