

COVER PAGE FOR TEST REPORT

Product Category:	Information Technology Equipment Including Electrical Business Equipment
Product Category CCN:	NWGG, NWGQ7
Test Procedure:	Listing
Product:	Industrial Computer
Model/Type Reference:	ACP-5260XX-XXXXX, where X can be 0-9, A-Z and blank.
Rating(s):	I/P :100-240 V ac, 50-60 Hz, 8-4 A
Standards:	UL60950, Third Edition (2000)

Applicant Name and Address: ADVANTECH CO LTD
4TH FL
108-3 MING-CHUAN RD
SHING-TIEN CITY
TAIPEI HSIEN TAIWAN

This Report includes the following parts, in addition to this cover page:

1. Specific Technical Criteria
2. Clause Verdicts
3. Critical Components

This is to certify that representative samples of the products covered by this Test Report have been investigated by Underwriters Laboratories Inc. ('UL') 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 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.

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Pursuant to the Corporate Services Agreement between UL International Services Limited and UL, UL hereby accepts and issues this Test Report.

Test Report By:

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Leslie Shih
Engineer


Reviewed By:

Charlie Wu / ac

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SPECIFIC TECHNICAL CRITERIA

UL 60950	
Safety of information technology equipment	
Report Reference No	E180881-A25-UL-1
Compiled by	Leslie Shih <i>leslie Shih / ac</i>
Reviewed by	Charlie Wu <i>Charlie Wu / ac</i>
Date of issue	2003-10-29
Standards	UL60950, Third Edition (2000)
Test procedure	Listing
Non-standard test method	N/A
Test item description	Industrial Computer
Trademark	ADVANTECH
	
Model and/or type reference	ACP-5260XX-XXXXX, where X can be 0-9, A-Z and blank.
Rating(s)	I/P :100-240 V ac, 50-60 Hz, 8-4 A

Particulars: test item vs. test requirements

Equipment mobility: stationary
Operating condition: continuous
Mains supply tolerance (%): +6%, -10%
Test for IT power systems: No
IT testing, phase-phase voltage (V): N/A
Class of equipment: Class I (earthed)
Mass of equipment (kg): 31
Protection against ingress of water: IP20

Possible test case verdicts:

- test case does not apply to the test object: N / A
- test object does meet the requirement: Pass
- test object does not meet the requirement: Fail (acceptable only if a corresponding, less stringent national requirement is "Pass")

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	- Power Supply, HDD, CD-ROM, FDD and motherboard with CPU housed in metal enclosures.	
CC1.0	Model Differences	
CC1.1	N/A	
CD1.0	Additional Information	
CD1.1	N/A	
CE1.0	Engineering Consideration	
CE1.2	The product was submitted and tested for use at the manufacturer's recommended ambient temperature (Tmra) of:	50°C
CE1.3	The power supply means are	Detachable power cord, Pluggable A or B
CE1.4	The product is intended for use on the following systems	TN
CE1.5	The equipment disconnect device is considered to be	Appliance inlet

Issue Date: 2003-10-29
Correction 1 2004-01-14

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Report Reference #

E180881-A25-UL-1

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict

1.7.1	Type/model:	ACP-5260XX-XXXXX, where X can be 0-9, A-Z and blank.	Pass
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IEC 60950		
Clause	Requirement + Test	Result - Remark
		Verdict

TABLE: list of critical components							Pass
1.5.1	Object/part No.	Manufacturer/ trademark	type/model	technical data	Product Category CCN(s)	Required Marks of Conformity	
	01 Power Supply	Zippy Technology Corp. (EMACS)	RHI-6460P	I/P: 100-240 Vac, 47-63 Hz, 8-4A. O/P: +5V/40A, -5V/0.8A, +12V/27A, -12V/1.0A, +3.3V/30A, +5Vsb/2.0A	QQGQ2	UL	3-04
	02 Hard Disk Drive (Optional)	Various	Various	+5/+12Vdc, 1.5/1.8A maximum.	NWQG2	UL	3-04
	03 Floppy Disk Drive (Optional)	Various	Various	+5/+12Vdc, 1.5/1.8A maximum.	NWQG2	UL	3-04
	04 CD-ROM Drive (Optional)	Various	Various	+5/+12Vdc, 1.5/1.8A maximum.	NWQG2	UL	3-04
	05 RTC Battery	Rayovac Corp.	BR2335	3.0Vdc, 300mAh	BBCV2	UL	3-05
	06 Polyswitch	Tyco Electronics Corp.	RGE300	Trip current 3A	XGPU2	UL	3-05
	06 Alternate Polyswitch	Tyco Electronics Corp.	MiniSMDC110 series	Trip current 1.1A	XGPU2	UL	3-05
	07 EMI Filter (two provided)	Delta Electronics Inc.	06GEEG3E	250 V, 6 A (X: 0.1μF, Y: 2200pF *2)	AXUT2	UL	3-05
	07a X-Capacitor used in EMI Filter	ARCOTRONICS	R.46	Max. 0.1uF, 250Vac min. Class X1 or X2	FOWX2	UL	
	07b X-Capacitor used in EMI Filter (alternate)	HUA JUNG COMPONENTS CO LTD	MKP	Max. 0.1uF, 250Vac min. Class X1 or X2	FOWX2	UL	
	07c X-Capacitor used in EMI Filter (alternate)	MATSUSHITA ELECTRIC INDUSTRIAL CO LTD	NS-A	Max. 0.1uF, 250Vac min. Class X1 or X2	FOWX2	UL	
	07d X-Capacitor used in EMI Filter (alternate)	ISKRA KONDENZATORJI D	KNB 1532	Max. 0.1uF, 250Vac min. Class X1 or X2	FOWX2	UL	

IEC 60950					
Clause	Requirement + Test	Result - Remark		Verdict	
07e X-Capacitor used in EMI Filter(alternate)	OKAYA ELECTRIC INDUSTRIES CO LTD	PA	Max. 0.1uF, 250Vac min. Class X1 or X2	FOWX2	UL
07f Y-Capacitor used in EMI Filter	MURATA MFG CO LTD	KX, KH	Max. 2200pF, 250Vac min. Class Y1, Y2 or Y4	FOWX2	UL
07g Y-Capacitor used in EMI Filter (alternate)	PAN OVERSEAS ELECTRONIC CO LTD	AC, AH	Max. 2200pF, 250Vac min. Class Y1, Y2 or Y4	FOWX2	UL
07h Y-Capacitor used in EMI Filter(alternate)	SUCCESS ELECTRONICS CO LTD	SE	Max. 2200pF, 250Vac min. Class Y1, Y2 or Y4	FOWX2	UL
07i Y-Capacitor used in EMI Filter (alternate)	TDK CORP	CD, CS	Max. 2200pF, 250Vac min. Class Y1, Y2 or Y4	FOWX2	UL
08 Bleeder Resistor in series (Located between L and N of EMI Filter)	Various	Various	680 KO, 1/4 W	--	3-05
10 Front system Fan (three provided)	Delta Electronics Inc.	EFB1212SH	+12Vdc, 0.5A, 114.07 CFM	GPWV2	UL
10 Rear system Fan (two provided)	Delta electronics inc	BFB1012H	+12Vdc, 0.8A, 25.43 CFM	GPWV2	UL
11 Hard Disk Drive Fan (two provided)	Delta electronics inc	AFB0812SH	+12Vdc, 0.34A, 46.62 CFM	GPWV2	UL
12 CPU Fan	Delta electronics inc	EFB0612HHA	+12Vdc, 0.25A	GPWV2	UL
13 Enclosure	Various	--	Metal, 1.0 mm thick min.	--	3-01
14 PWB	Various	--	Rated V-1 or better, 105°C	ZPMV2	UL