TEST REPORT

EN 50133-2-1

Alarm systems — Access control systems for use in security Applications

Part 2-1: General requirements for Components

Report reference No. ..... :	140314044GZU-007
Tested by (name and signature) ..... :	Walt Wang
Approved by (name and signature) . :	Jeff Deng
Date of issue ..... :	January 12, 2015
Contents..... :	Total test report 11 pages including:
	Report text: pages 4-9
	Appendix A for product photos: page 10-11
Testing Laboratory name	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Address ..... :	Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China
Testing location ..... :	Same as above
Applicant's name	GUANGDONG BE-TECH SECURITY SYSTEMS LIMITED
Address..... :	No. 17, Keyuan 3 Road, Ronggui, Shunde High-Tech Zone, Foshan, Guangdong, P.R.China
Test specification	
Standard..... :	EN 50133-2-1:2000
Non-standard test method ..... :	None
Test Report Form No.	TTRF EN 50133-2-1: 2000 (E) A
TTRF Originator..... :	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Master TTRF..... :	Dated 2013-5
Test item Description	
Trademark ..... :	BE-TECH必达
Model and/or type reference ..... :	DTM
Manufacturer..... :	GUANGDONG BE-TECH SECURITY SYSTEMS LIMITED
Rating(s) ..... :	12V⎓, 1A

Copy of marking plate:

The artwork below may be only a draft.

Summary of testing:

The submitted samples were tested according to applicant's requirement and found to **COMPLY WITH** applicable clauses of EN 50133-2-1: 2000

Test item particulars	
Classification of installation and use ..... :	Fixed equipment, Class III
Test case verdicts	
Test case does not apply to the test object ……:	N/A
Test item does meet the requirement ……:	P (Pass)
Test item does not meet the requirement ……:	F (Fail)
Testing	
Date of receipt of test item ……:	May 3, 2014
Date(s) of performance of test ……:	May 10, 2014 - Dec. 30, 2014

General remarks

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"(See remark #)" refers to a remark appended to the report.
"(See Appendix #)" refers to an appendix appended to the report.
Throughout this report a comma (point) is used as the decimal separator.

When determining the test result, measurement uncertainty has been considered.

General product information:

The evaluated access control system is consisted of following components: a card reader, a main control board, one to four relay control boards which mounted in a metal box, and some mounting/wiring accessories.

And the system (by relay control board) is powered from an approved external AC/DC adaptor in compliance with EN 60950-1 of limited power source. The card reader and the main control board are get power from the relay control board.

The access card reader is evaluated, and it only could connected to access control system of model DTM. Which the system is evaluated in test report 140314044GZU-005.

EN 50133-2-1			
Clause	Requirement – Test	Result - Remark	Verdict
4	**Requirements**		--
4.1	General The manufacturer shall describe the functions embodied within the components submitted for certification and shall fulfill the appropriate functional requirements as detailed in EN 50133-1		P
4.2	Electrical safety The component shall comply with requirements included in 5.4.3 of EN 50133-1.	The system and its components complied with requirements of EN 60950-1	P
4.3	Electromagnetic compatibility The component shall comply with requirements included in 5.4.2 of EN 50133-1	The system and its components was complied with EMC requirement.	P
4.4	Environmental		--
4.4.1	Environmental test requirements The components used in an access control system shall conform to the environmental tests listed below from EN 50130-5 and from EN 50133-1.		P
	Details of equipment class (fixed, movable, portable) and environmental class (I, II, III, IV) shall be included in the manufacturer's documentation.	Fixed equipment per installation manual, environmental class II	P
4.4.1.1	Dry heat, operational test The test is described in EN 50130-5, Clause 8.		P
4.4.1.2	Cold, operational test The test is described in EN 50130-5,clause 10		P
4.4.1.3	Water, operational test The test is described in EN 50130-5, clause 16.		N/A
4.4.1.4	Impact, operational test (applicable only to recognition equipment and access point interface). The test is described in EN 50130-5, clause 20.		P
4.4.1.5	Vibration, sinusoidal endurance test The test is described in EN 50130-5, clause 23.		P
4.4.1.6	Supply voltage variations, operational test The test is described in EN 50133-1, clause 5.4.1.6. The word voltage in this clause means the supply voltage which is provide to the component.		P
4.4.1.7	Supply voltage dips and interruptions, operational test The test is described in EN 50133-1, clause 5.4.1.7.		P

EN 50133-2-1			
Clause	Requirement – Test	Result - Remark	Verdict
4.5	Power supply For each component of an access control system, the outputs and inputs of the power supply shall be protected against short circuit.	The system (by the relay board) is powered from an approved external AC/DC Adaptor in compliance with limited power source which has the output short circuit protection, and all other components are powered from the relay board.	P
	Requirements pertaining to 5.2.1 d of EN 50133-1 concerning power disconnection only apply when power is provided by the main distribution network. NOTE: if a power supply is provided with a secondary source of power, failure of the mains should be annunciated.	Connect the main power source by a external AC/DC Adaptor, no secondary source of power, and in compliance with 5.2.1 d of EN 50133-1	P
4.6	Housing		--
4.6.1	Opening It shall not be possible to open components or to remove components from their mounting without the use of tools(e.g. screwdriver, keys)		P
4.6.2	Adjustments		--
	Adjustment points(switches, potentiometers) shall be located inside the housing of the component.	No adjustment points	N/A
	The adjustment settings, which require the use of equipment(portable programmer) shall fulfil the requirements of 5.2.4 of EN 50133-1 in respect of programmability protection.	No adjustment settings	N/A
4.6.3	Cable outlets Where the construction of the housing does not provide for concealed cable entry(rear entry) this shall be clearly stated in the product documentation.		P
4.7	Documentation The manufacturer shall provide the following information:		P
	- the function of the components according to the diagram of an access control system (Figure 1 and list of 4.1 of EN 50133-1)		P
	- security classification (recognition and access class) if applicable (see EN 50133-1, 5.1);		N/A
	- environmental class and equipment class;	environmental Class II, fixed equipment	P
	- electrical specification (power supply, inputs, outputs);	12V⎓, 1A	P

EN 50133-2-1			
Clause	Requirement – Test	Result - Remark	Verdict
	- installation, commissioning, maintenance and operating instructions;		P
	- operating temperature and humidity range;	-10~40°C, 20-95%RH	P
	- IP & IK Codes	Indoor use unit	N/A
	- document listing all the information needed for document checking as specified in EN 50133-1, 6.2.1		P
4.8	Marking/identification Each access control system component shall be labelled.	The card reader is only connected with the control panel, and no other use; no specific label needed	N/A
	As a minimum, the label shall give the following information:		P
	— the name of the organization responsible for the conformity of the product (e.g. the manufacturer, importer);	Trade mark: BE-TECH	P
	— the product type;	Elevator controller, Type DTM	P
	— the manufacturing reference;	date marked	P
	— all markings required by other standards or directives.		P
	The marking shall be readable, fixed and durable. It may be fixed either to the inside or outside of the components. If the marking cannot be applied to the component, it shall be fixed on the outside of the packaging.	Marking adhered to inside metal box	P
	The marking is not required on the token.	No specific marking for Card reader	P
5	**Specific requirements**		--
5.1	Access point interface		--
	The access point interface shall be housed within a container equipped with tamper detection which operates when the container is opened by the normal means.	No access point, only floor button was controlled by the control system to be pushed or could not be pushed	N/A
	The access point interface shall be housed within a container providing means for concealed cable outlets or means allowing the monitoring of interconnections. This requirements dose not apply if the manufacturer's literature clearly states that the product is not suitable for use on the lower security side or non-secure side of an access controlled area.	After system installed, no accessible to interconnections of button floor and access control	N/A

EN 50133-2-1			
Clause	Requirement – Test	Result - Remark	Verdict
	The housing of the access point interface shall meat at least IP3X, according to EN 60529.		N/A
	Depending on the environmental class of equipment, this requirement becomes: - environmental class I, II IP30 - environmental class III IP32 - environmental class IV IP34		N/A
5.2	Recognition equipment		--
	If it is possible to grant access by simple manipulation, (for example: test button, maintenance facility, short circuit) the container of the recognition equipment shall be equipped with tamper detection which operates when the container is opened by normal means.	The recognition equipment-card reader recessed elevator car metal board to be fixed, no any access means except for authorized card to grant access	P
	The recognition equipment shall provide means for concealed cable outlets or means allowing the monitoring of interconnections, this requirement does not apply if the manufacturer's literature clearly states that the product is not suitable for use on the lower security side or non-secure side of an access controlled area.	Provide means for recess mounting and connection, no access to interconnections	P
	With the exception of the normal opening used for the token or biometric reading, the housing of the recognition equipment shall meet at least IP3X according to EN 60529.		P
	Depending on the environmental class of equipment, this requirement becomes: - environmental class I, II IP 30 - environmental class III IP 32 - environmental class IV IP 34	Environmental class II IP 30: card reader no openings accessible	P
	The housing of the recognition equipment shall meet at least the following IK rating, according to EN 50102. - environmental class I, II and III IK 04 - environmental class IV IK 06	Environmental class II IK 04: 0.5 J impact apply for card reader, working normally	P
6	Tests		--
6.1	Document checking, inspection and functional tests		--

EN 50133-2-1			
Clause	Requirement – Test	Result - Remark	Verdict
	The relevant methods of testing shall be selected from those listed in EN 50133-1, clause 6. The tests will depend on:		P
	- the function of the component,		P
	- the environmental class defined by the manufacturer (I, II, III, IV)	Class II	P
	- the equipment class defined by the manufacturer (fixed, movable or portable), all described in the product documentation.	Fixed equipment per installation manual	P
	All the necessary hardware (for example: simulator, etc) required to perform the test shall be provided with the product to be tested.		P
6.2	Environmental test		--
	The relevant environmental tests are defined in 4.4.		P
	In order to carry out the environmental tests, the following conditions shall be applied.		--
	1) the specimen shall be mounted in accordance with the instructions of the manufacturer in the normal condition of use.		P
	2) the impact operational test is only applicable for recognition equipment and access point interface. No impact shall made on the display.		P
	3) a relevant functional test (see EN 50133-1, 6.2.3) shall be carried out before the conditioning.		P
	4) the component shall be in the operating condition during the conditioning, with the exception of the vibration sinusoidal endurance test.		P
	5) the output information and visual indication shall be monitored to detect any permanent variation during the conditioning.		P
	6) a functional test shall be carried out during the conditioning for dry heat and cold operational tests.		P
	7) for the final measurements, a relevant inspection and function test shall be carried out after the conditioning.		P
	The pass/fail criteria are:		--
	- no mechanical damage shall occur which affects the operation or IP classification both inside and outside the container;	no mechanical damage	P

EN 50133-2-1			
Clause	Requirement – Test	Result - Remark	Verdict
	- the relevant inspection or functional test shall provide the same result before, during and after the conditioning;	Function normally	P
	- variations of specified values are acceptable if the value stays within the specified range, including the tolerance.		P

**********End of page**********

Appendix A - Product photos

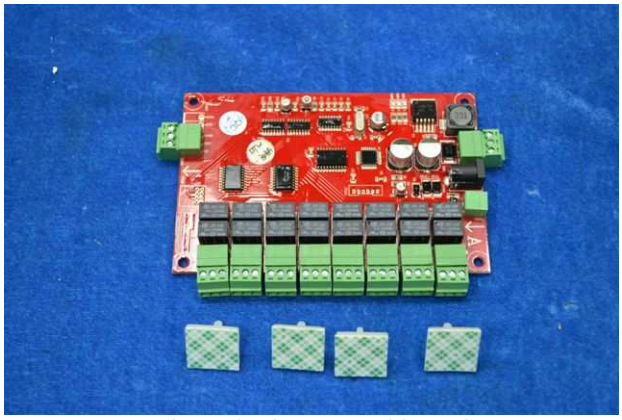
View of all product components

Testing Assembly View (32 LED lights simulated floor button indicator, and they are provided by the manufacturer)

Testing Assembly View

View of card reader board

View of access control main board



View of relay control board

**********End of report**********