



**CENTRE OF TESTING SERVICE
INTERNATIONAL**

OPERATE ACCORDING TO ISO/IEC 17025

TEST REPORT

TEST REPORT NUMBER : CGZ3140311-00591-L-D

CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl.2 South Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park,
Ningbo, China

TEST REPORT

Table of contents

Applicant	BRIGADE ELECTRONICS PLC
Address	Brigade House, The Mills, Station Road, South Darenth, Kent, DA4 9BD, United Kingdom Contact: Bernd John; TEL: +44-1322420310; FAX: /;
Manufacturer/ factory	BRIGADE ELECTRONICS PLC
Sample Description	Brigade Backsense Radar
Trade Mark	Brigade
Model/Type reference	BS-7030(Test EUT) BS-7045, BS-7060, BS-8000 and future variants BS- XXXXXXXXXXXX where the "X" can represent any character or number for different configurations, all the models use same Radar sensor, only the LED Display is different.
Following identical model(s)	
Taking/Receiving Date	24 December 2013
Test Address	CTS (Ningbo) Testing Service Technology Co., Ltd. Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China Tel: +86-574-87912121 (16 lines) Fax: +86-574-87907993
Test Date	31 December 2013
Test Item*	IP69K rating according ISO-20653: 2013
Test Requested*	IP69K test
Test Results	See follow result
Note	All information was provided by the applicant or detected at the sample. This report shall not be copied partly without the written approval of CTS.

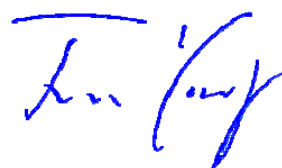
Tested by:



Reviewed by:



Approved by:



 Date:
11 March 2014

 Date:
11 March 2014

 Date:
11 March 2014

* -means the content is provided by applicant.

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TEST REPORT

1. Test results

No.	Test Sample Name	Test Item	Test Results	Verdict
1.	Brigade Backsense Radar BS-7030	1. First code element: 6K: Dust-tight test, The radar system always working, with underpressure 8h.	After Test, small amount of dust got into to protective black outer housing but it does not affect the function. Dust particles have not entered in the internal sensor housing.	PASS
		2. Second code element 9K: High-pressure/steam-jet cleaning The radar system always working, with $80 \pm 5^{\circ}\text{C}$ water, 8000~10000 kPa; spray at 0° , 30° , 60° , 90° , 30s per position.	After Test, small amount of water vapours got into to protective black outer housing but it does not affect the function. Water vapours has not entered in the Internal sensor housing.	PASS

Remark:

1. First code element: 6K, Degree of protection requirements, dust shall not penetrate.
It is requested by client's standard - if only small amount of dust into the black outer housing, but doesn't affect the function, can work normally, it could be verdict "PASS".
2. Second code element 9K: Degree of protection requirements, water which is directed against the enclosure from any direction shall not have any detrimental effect.

-----end of report-----

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