

Page 1 of 4

Test Report Number 9685 Issue 1		Product Assessment and Reliability Centre Ltd Unit 4 Alverdiscott Road Industrial Estate Bideford, Devon, EX39 4LQ
Date of Issue:	20/11/2018	Telephone: +44 (0) 1237 421255 info@parctest.co.uk www.parctest.co.uk
Reason for	N/A	Commercial in Confidence

Date Samples Arrived:	30/10/2018	<b>Customer Name</b>	Michael Slade
Date Testing Started:	06/11/2018	and Address:	Hansford Sensors Ltd
Date Testing Completed:	07/11/2018		Artisan, Hillbottom Road
			Sands Industrial Estate
<b>Customer Purchase Order No:</b>	10312		High Wycombe
			HP12 4HJ

Description of Test Samples:	Identity/Serial Numbers:
1 off HS-100 series Accelerometer with 2 Pin MS Connector	Sample 1

Test(s) Performed in the following order unless otherwise specified:		In Accordance With:	
Water Ingress Test – IPX8	UKAS	In accordance with BS EN 60529:1992+A2:2013	

### **Report Summary:**

The sample content was subjected to the test above, the details of which are contained in this test report.

Following the removal of the sample from the immersion tank, it was dabbed free of excess water. The sample was cut open in line with customer instructions emailed to PARC 01/11/2018. During the opening of the sample no visual evidence of water ingress was recorded by the PARC engineer.

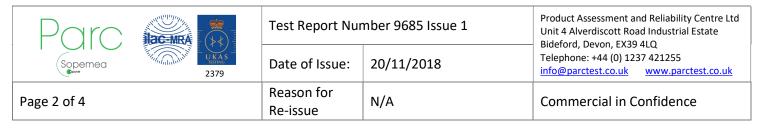
Customer advised in an email dated 12/11/2018 that water ingress is to be checked for within the Accelerometer with 2 Pin MS Connector only, and that the cable assembly and exterior connector is of no concern.

The customer was emailed on the 07/11/2018 with post-test inspection photographs.

On completion of testing the sample was returned to the customer for further examination.

Distribution:  1. PARC Ltd File 2. Michael Slade	Test Engineer:	Tom Josling	
Sample Disposal: Sample/s returned to customer via courier	Approved by:	Sam Wort, Senior Test Engineer	

This report shall not be reproduced, except in full, without the written approval of the testing laboratory. PARC performs all its product testing under a rigorous Quality Management System. PARC is accredited by UKAS to BS EN ISO/IEC 17025:2005, the "General Requirements for the Competence of Testing and Calibration Laboratories". Details of PARC's UKAS accredited tests and a copy of its UKAS Schedule of Accreditation are available upon request. Tests marked "non-UKAS" are currently not covered by PARC's UKAS 17025:2005 accreditation. All testing, whether UKAS or non-UKAS, is performed within the same Quality Management System and to the same levels of calibration and traceability. The results contained in this report relate only to the samples tested. Any opinions expressed within this report are not included in the UKAS Accreditation Schedule for this Laboratory.



# 1. Sample Content

Description of Test Samples:	Identity/Serial Numbers:
1 off HS-100 series Accelerometer with 2 Pin MS Connector	Sample 1

# 2. Initial Inspection

The sample content exterior was subjected to an initial visual inspection (non-UKAS). No obvious damage was noted.



(intentionally blank)

This report shall not be reproduced, except in full, without the written approval of the testing laboratory. PARC performs all its product testing under a rigorous Quality Management System. PARC is accredited by UKAS to BS EN ISO/IEC 17025:2005, the "General Requirements for the Competence of Testing and Calibration Laboratories". Details of PARC's UKAS accredited tests and a copy of its UKAS Schedule of Accreditation are available upon request. Tests marked "non-UKAS" are currently not covered by PARC's UKAS 17025:2005 accreditation. All testing, whether UKAS or non-UKAS, is performed within the same Quality Management System and to the same levels of calibration and traceability. The results contained in this report relate only to the samples tested. Any opinions expressed within this report are not included in the UKAS Accreditation Schedule for this Laboratory.

Por lacura	Test Report Number 9685 Issue 1		Product Assessment and Reliability Centre Ltd Unit 4 Alverdiscott Road Industrial Estate Bideford, Devon, EX39 4LQ
Sopemea 2379	Date of Issue:	20/11/2018	Telephone: +44 (0) 1237 421255 info@parctest.co.uk www.parctest.co.uk
Page 3 of 4	Reason for Re-issue	N/A	Commercial in Confidence

#### 3. Test Procedure

#### 3.1 Water Ingress Test - IPX8

#### 3.1.1 Test Definition

Sample 1 was subjected to an IPX8 water ingress test, carried out in accordance with BS EN 60529:1992+A2:2013 using the following conditions:

• Immersion depth: 1.75m

• Test duration: 24 hours

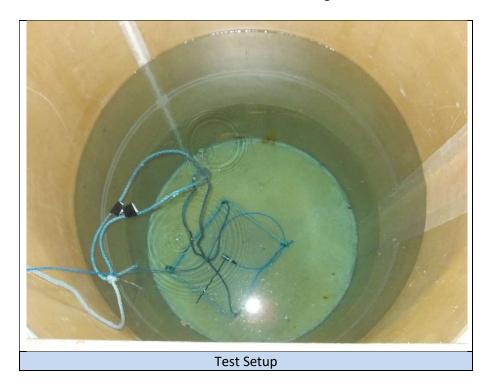
Temperature difference between sample and water less than 5°C

#### 3.1.2 Test Equipment Used

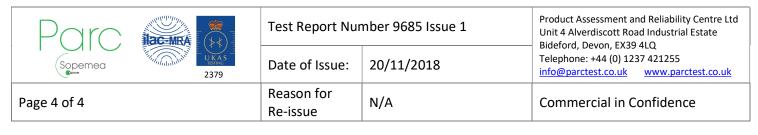
Test Equipment	PARC ID	<b>Calibration Due Date</b>
Immersion Tank	282	N/A
Fluke Thermometer	596	05/09/2019
Thermocouple	1060	08/01/2019
Steel Rule	738	Indication only
Timer	630	22/11/2018

# 3.1.3 Test Photos

Sample 1 was placed in an immersion tank for 24 hours as shown in the image below:

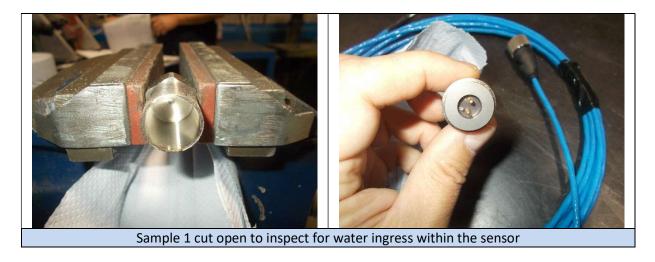


This report shall not be reproduced, except in full, without the written approval of the testing laboratory. PARC performs all its product testing under a rigorous Quality Management System. PARC is accredited by UKAS to BS EN ISO/IEC 17025:2005, the "General Requirements for the Competence of Testing and Calibration Laboratories". Details of PARC's UKAS accredited tests and a copy of its UKAS Schedule of Accreditation are available upon request. Tests marked "non-UKAS" are currently not covered by PARC's UKAS 17025:2005 accreditation. All testing, whether UKAS or non-UKAS, is performed within the same Quality Management System and to the same levels of calibration and traceability. The results contained in this report relate only to the samples tested. Any opinions expressed within this report are not included in the UKAS Accreditation Schedule for this Laboratory.



#### 3.1.4 Test Results/Plots

Typical photos of the sample during post-test visual inspection for water ingress are shown below:



#### 4. Report Summary

The sample content was subjected to the test detailed within this report.

Following the removal of the sample from the immersion tank, it was dabbed free of excess water. The sample was cut open in line with customer instructions emailed to PARC 01/11/2018. During the opening of the sample no visual evidence of water ingress was recorded by the PARC engineer.

Customer advised in an email dated 12/11/2018 that water ingress is to be checked for within the Accelerometer with 2 Pin MS Connector only, and that the cable assembly and exterior connector is of no concern.

The customer was emailed on the 07/11/2018 with post-test inspection photographs.

On completion of testing the sample was returned to the customer for further examination.

**End of Test Report**