

  	Test Report Number:	4E14170	Product Assessment and Reliability Centre Ltd Unit 4 Alverdiscott Road Industrial Estate Bideford, Devon, EX39 4LQ Telephone: +44 (0) 1237 421255 info@parctest.co.uk www.parctest.co.uk
	Issue:	1	
Page 1 of 6	Date of Issue:	03/11/2025	Commercial in Confidence

SECTION A			
Date EUT Arrived:	27/10/2025	Company Name and Address: Hansford Sensors Artisan, Hillbottom Road, Sands Industrial Estate High Wycombe, Bucks HP12 4HJ	
Date Testing Started:	29/10/2025		
Date Testing Completed:	31/10/2025		
Customer Purchase Order No.:	29069		

SECTION B	
Description of Equipment Under Test (EUT):	Identity/Serial Numbers:
2 off HS-420d Sensor	PARC ID: EUT 1 PARC ID: EUT 2

SECTION C		
Tests performed in order unless otherwise specified:		Using the parameters and methodology of:
IP6X Dust Ingress	UKAS	BS EN 60529:1992+A2:2013
IPX8 Water Ingress	UKAS	BS EN 60529:1992+A2:2013

SECTION D
Executive Summary:
The Equipment Under Test (EUT) was subjected to the test(s) identified in Section C; details are contained in this report. Following dust exposure, the EUT was opened and inspected to signs of ingress. During this inspection, no dust was noted inside the enclosure of EUT 1. Following water exposure, the EUT was opened and inspected to signs of ingress. During this inspection, no water was noted inside the enclosure of EUT 2. On completion of testing, the EUT was returned to the customer via courier.

SECTION E			
Distribution: 1. PARC File 2. Ricardo Peneda	Test Engineer:	Louis Tregidga	
EUT Disposal: EUT returned to customer via courier	Approved By:	Kevin Parsons, Head of Certification	

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Page 2 of 6	Date of Issue:	03/11/2025	Commercial in Confidence

1. Initial Inspection (Not UKAS Accredited)

Prior to testing, the EUT was subjected to a visual inspection of the external surfaces. No obvious damage was noted. The results provided in this report apply to the EUT tested as received from the customer, unless otherwise stated.

2. Test Procedure

2.1. IP6X Dust Ingress

2.1.1. Test Definition

Using the parameters and methodology of BS EN 60529:1992+A2:2013, the EUT was subjected to the following conditions:

- EUT 1 used for testing
- Initial inspection by use of a 1 mm probe at a force of 1 N
- Vacuum drawn, pressure: 19 mbar
- Test duration: 8 hours, as defined by initial vacuum survey
- Visual inspection performed following dust exposure
- Dust Type: 60529 TALC

2.1.2. Test Equipment Used

Table 1 – Test Equipment		
Test Equipment	PARC ID	Calibration Due Date
Dust Chamber	2	01/10/2026
Dust Chamber Pressure Gauge	2a	03/10/2026
1 mm Probe	417	07/12/2025
Force Gauge	1102	04/12/2025
Room Logger	770	07/02/2026

2.1.3. Test Photos



Figure 1 – Typical Probe Inspection Photo

No apertures or openings identified that allow penetration of a 1 mm probe.

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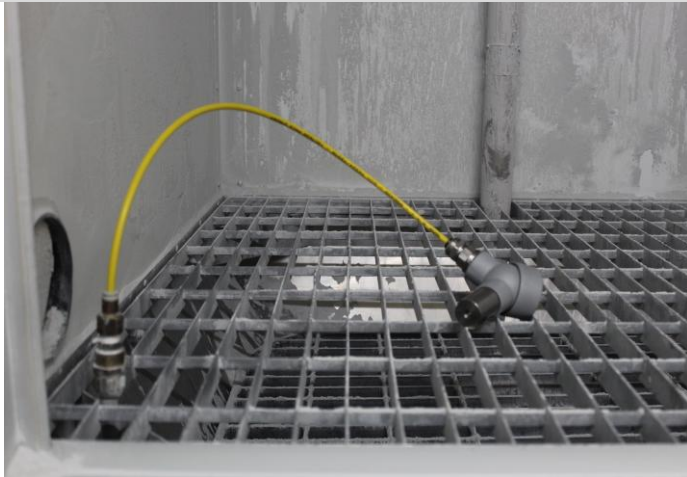


Figure 2 – EUT Prior to Testing

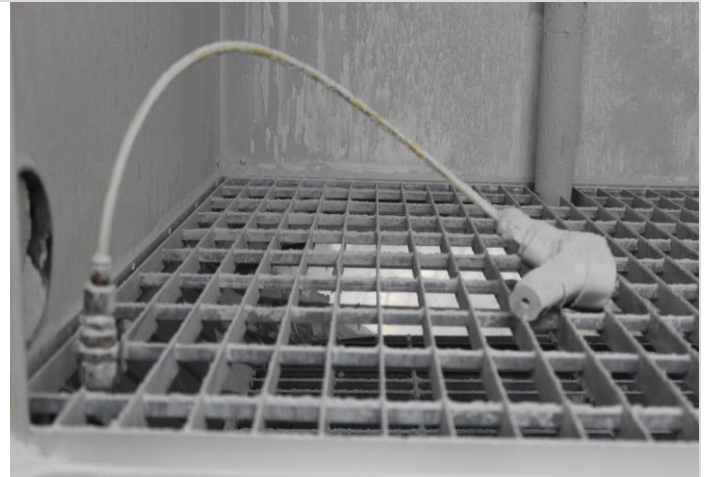


Figure 3 – EUT on Completion of Dust Exposure

2.1.4. Test Results



Figure 4 – Typical Inspection Photo



Figure 5 – Typical Inspection Photo

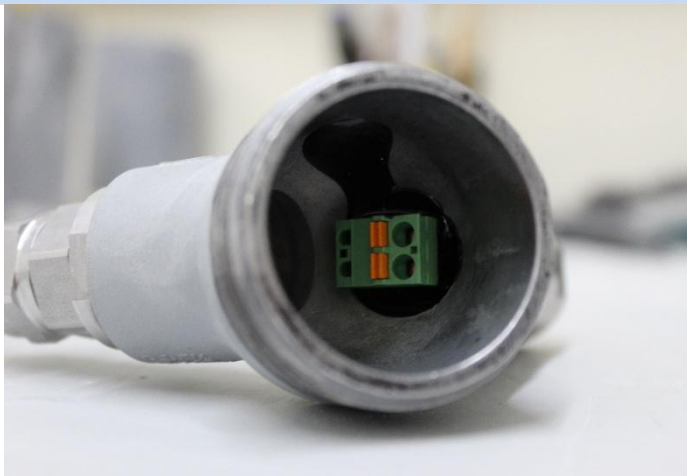


Figure 6 – Typical Inspection Photo



Figure 7 – Typical Inspection Photo

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Upon completion of the test, a visual inspection was carried out (not UKAS accredited). No obvious changes in the condition of the EUT were noted, and the EUT completed the test in the condition as received from the customer.

On completion of testing, the EUT was disassembled to inspect for signs of ingress; no dust was noted inside the enclosure of EUT 1.

2.2. IPX8 Water Ingress

2.2.1. Test Definition

Using the parameters and methodology of BS EN 60529:1992+A2:2013, the EUT was subjected to the following conditions:

- EUT 2 used for testing
- Immersion Depth: 2 m
- Duration: 24 hrs
- Temperature differential between EUT & water: less than 5 °C

2.2.2. Test Equipment Used

Table 2 – Test Equipment		
Test Equipment	PARC ID	Calibration Due Date
Immersion Tank	282	N/A
Digital Thermometer	596	30/09/2026
Thermocouple	1227	17/03/2026
Verified Steel Rule	737	Visually Checked Before Use
Digital Timer	1258	17/02/2026
Room Logger	771	07/02/2026

2.2.3. Test Photos



Figure 8 – EUT 2 on Wire Rack

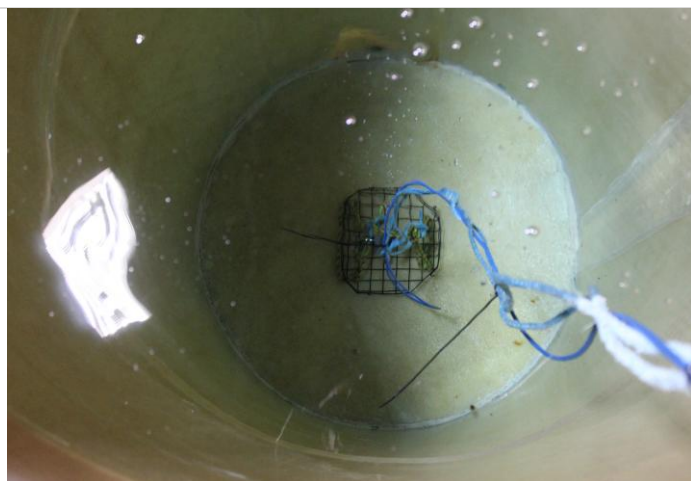


Figure 9 – EUT 2 During Test

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	Issue:	1	
Page 5 of 6	Date of Issue:	03/11/2025	Commercial in Confidence

2.2.5. Test Results



Figure 10 – Typical Inspection Photo

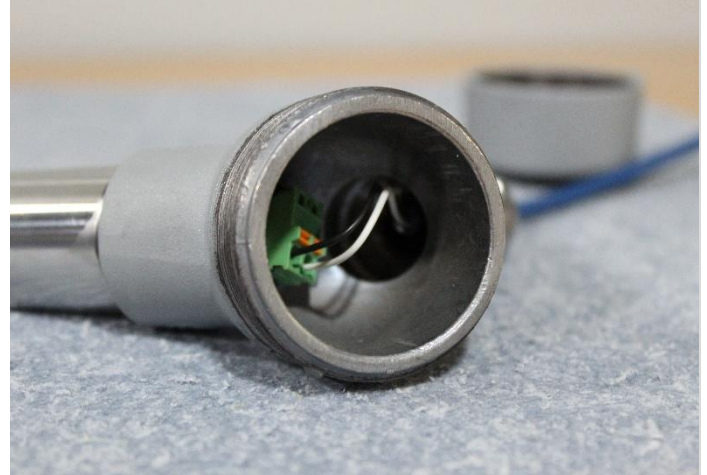


Figure 11 – Typical Inspection Photo



Figure 12 – Typical Inspection Photo



Figure 13 – Typical Inspection Photo

Upon completion of the test, a visual inspection was carried out (not UKAS accredited). No obvious changes in the condition of the EUT were noted, and the EUT completed the test in the condition as received from the customer.

On completion of testing, the EUT was disassembled to inspect for signs of ingress; no water was noted inside the enclosure of EUT 2.

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Page 6 of 6	Date of Issue:	03/11/2025	Commercial in Confidence

3. Report Summary

The Equipment Under Test (EUT) was subjected to the test(s) detailed in this report.

Following dust exposure, the EUT was opened and inspected to signs of ingress. During this inspection, no dust was noted inside the enclosure of EUT 1.

Following water exposure, the EUT was opened and inspected to signs of ingress. During this inspection, no water was noted inside the enclosure of EUT 2.

On completion of testing, the EUT was returned to the customer via courier.

End of Test Report