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COMMERCIAL-IN-CONFIDENCE

TEST HOUSE CERTIFICATE

CLIENT Protechnic Ltd
Unit 1, West End Trading Estate
Blackfriars Road
Nailsea, Bristol, BS48 4DJ

DOCUMENT 75912592 THC 06 Issue 1

CLIENT'S ORDER NUMBER 4586

INCOMING RELEASE NOTE Not released

DATE OF RECEIPT 3 February 2011

EQUIPMENT UNDER TEST (EUT) EXO Flight Case

MODEL/PART NUMBER(S) EXO

SERIAL NUMBER(S) Identified as EUT 2

TEST PLAN/ISSUE/DATE N/A

TEST SPECIFICATION/ISSUE/DATE IEC 60529 Edition 2.1 2001-02.
Ingress Protection IP6x Dust Test.
Degrees of protection provided by enclosures (IP Code).
Test conditions 13.4 & 13.6 (Pages 45, 47 & 49).

DEVIATIONS FROM THE STANDARD None

DATE OF TEST 15 February 2011

TEST(S) DESCRIPTION IP6X Dust Test, Category 1 Enclosure

RESULT(S) OF TEST

This certificate relates only to the actual item tested.

Initial Inspection (at TÜV SÜD Product Service): The customer stated that the case was in good condition to begin the test sequence. The top lid was removed and relocated without problem, then resecured for the test. The operation of the EUT latch mechanisms was satisfactory. EUT dimensions: 592mm (W) x 393mm (D) x 277mm (H). Mass (gross weight): 9.0kg.

The dust test was completed (at Particle Technology Ltd) for this single flight case.

Final Inspection (at TÜV SÜD Product Service): Upon completion of the testing the Equipment Under Test (EUT) was visually inspected both internally and externally. The top lid was removed and relocated without problem. The operation of the EUT latch mechanisms was satisfactory. There was no noticeable binding of the moving parts, namely the latch mechanisms. A fine covering of dust was observed to the inside of the flight case at test completion. No damage or degradation was observed to the remainder of the test piece.

TEST(S) APPLIED

For tests applied and test results, refer to the separate Particle Technology Ltd test certificate overleaf.

Approved by
.....
R M Thompson
Authorised Signatory



Date
.....



Product Service

DOCUMENT 75902592 THC 06 Issue 1

CONTINUATION PAGE

	Particle Technology Ltd, Station Yard Industrial Estate, Hatton, Derbyshire, DE65 5DU, United Kingdom Tel: +44(0)1283 520365 www.particletechnology.com	
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TEST CERTIFICATE

CLIENT: TÜV SÜD Product Service
 Octagon House
 Concorde Way
 Fareham
 Hampshire
 PO15 5RL

CERTIFICATE NUMBER 8733 – Issue 1

CUSTOMER ORDER NUMBER 11001815

DATE OF RECEIPT

11 January 2011

EQUIPMENT SUPPLIER

Protechnic Ltd, Unit 1, West End Trading Estate, Blackfriars Road, Nailsea, BS48 4DJ

TEST ITEM(S)

Description	Model Number	Serial Number
EXO Flight Case	Not Supplied	Not Supplied

TEST SPECIFICATION / ISSUE

IEC 60529, Edition 2.1, IP6X, Cat 1 Enclosure

DATE OF TEST

15 January 2011

TEST(S) APPLIED

Protection Against Solid Foreign Objects, Dust-tight

Initially the test items were examined for apertures and openings using a 1 mm diameter 100 mm long probe. A 6mm hole was drill beneath the handle of the case which was used to apply a vacuum of 19.9 mbar. The flow rate was measured at 1100 cm³/min; this equated to 1 volume/hour therefore an 8 hr test was required. The test conditions were as follows:


Dust Grade: BS EN 60529 Talc
 Concentration: 2 kg/m³
 Duration: 8 hrs
 Temp/Humidity: 19.8 °C / 42% rh

RESULT(S) OF TEST

No conspicuous damage was noticed on the exterior of the unit. Excess dust was removed by light brushing to allow internal inspection. There was a small amount of dust ingress into the EXO Flight Case.

COMPLIANCE

The EXO Flight Case does not conform to the standard required by IEC 60529, Edition 2.1, IP6X, Category 1 Enclosure

Approved by 
 G J Spicer, MEng
 Quality Manager

Date: 11 April 2012