

Representative dimensions: (for more specific data, refer to the assembly diagrams and Definition specification below.)

	DZUS mounted	Panel mounted
Faceplate width	146.0mm	158.0mm
Faceplate height	57.2mm	60.0mm
Rear enclosure height	54.1mm	54.1mm
Depth (from front face to rear face)	22.2mm	22.2mm

Assembly diagram numbers:

Hardware Configuration

DZUS mount	DRW_DZ5_001
Panel mount	DRW_DZ5_006

Definition specification reference: TEC_DZ5_004 – Design Specification

Drawing nomenclature reference: TEC_002 – Numbering of parts and controlled documents

Quality control procedure reference: QUA_001 – Flightcell quality manual

Details of approvals obtained for similar equipment: n/a

Performance:

The Flightcell DZM Remote Head meets all the specifications and requirements as outlined in this document. The main performance specifications are listed below.

Display	160 x 80 Mono Graphics LCD
Backlighting	LED NVIS-B (standard) LED NVIS-A (option)
Keypad	16 keys (4x4 matrix)
Interface	RS-485, RS-232
DC Power Source	+12V - +32VDC (28V nominal) Max current: ~0.2A @ 28VDC
Connector	Main connector: DA-15 Plug, Mating connector: M24308/2-2F (or equivalent)

Declarations:

The limits of declared performance and those implied by the declarations below are not intended to be absolute, but are intended to indicate performance which has been shown by tests.

The following declarations to the relevant sections of the standards stated, relating to environmental and operating conditions on the aircraft apply:

1. RTCA DO-160G

The declarations required by the Radio Technical Commission for Aeronautics RTCA DO-160G are summarised in – RTCA DO-160 Test Categories.

Test Facility:

National Technical Systems
1146 Massachusetts Avenue
Boxborough, MA 01719

2. Internal Batteries

The unit does not contain any internal batteries.

3. Mounting

The unit is designed to be mounted either in a DZUS 5.25” rack or in a freestanding bracket.

4. Cooling Requirements

No special cooling required.

5. Ingress of fluids, sand and dust

The unit is designed to be protected against the fluids, sand and dust to a rating of IP54.

A rating of IP54 means that the unit is protected against ingress of dust in sufficient quantities to interfere with satisfactory operation of the unit and against harmful ingress of water when subjected to water splashing against the enclosure from any direction).

6. Storage

The unit should be stored at a temperature of not less than -55°C and not more than +85°C.

7. Operating temperature

The ambient operating temperature range for the unit is -40°C to +70°C.

8. Storage Life

The shelf storage life is not less than 5 years under controlled storage conditions.

Certification:

I hereby certify that the information contained in this Declaration of Design and Performance is accurate and made under the authority of Flightcell International Ltd.

Flightcell International Ltd. cannot be held responsible for the satisfactory operation of equipment used beyond the above declared-conditions without prior agreement.

Signed:



Position:

Production Design Engineer

Date:

9th December 2014

RTCA DO-160 Test Categories.

System Name: Flightcell DZM Remote Head

Model Number: DZP_05-XXX

Revision & Change number of DO-160: G

Date Tested: Testing completed 31st July 2014.

CONDITIONS	DO-160G Section#	Description of Tests
Temperature & Altitude	4.0	Equipment tested to categories A2, B2, F1
Low Temperature	4.5.1	No Forced cooling required
High Temperature	4.5.2 & 4.5.3	
In-Flight Loss of Cooling	4.5.4	
Altitude	4.6.1	Equipment identified as category X, no test performed.
Decompression	4.6.2	
Overpressure	4.6.3	
Temperature Variation	5.0	Equipment tested to category B.
Humidity	6.0	Equipment identified as category X, no test performed.
Operational Shocks & Crash Safety	7.0	Equipment identified as category X, no test performed.
Vibration	8.0	Equipment identified as category X, no test performed.
Explosive Atmosphere	9.0	Equipment identified as category X, no test performed.
Waterproofness	10.0	Equipment identified as category X, no test performed.
Fluids Susceptibility	11.0	Equipment identified as category X, no test performed.
Sand and Dust	12.0	Equipment identified as category X, no test performed.
Fungus	13.0	Equipment identified as category X, no test performed.
Salt Fog	14.0	Equipment identified as category X, no test performed.
Magnetic Effect	15.0	Equipment identified as category X, no test performed.
Power Input	16.0	Equipment identified as category X, no test performed.
Voltage Spike	17.0	Equipment identified as category X, no test performed.
Audio Frequency Susceptibility	18.0	Equipment identified as category X, no test performed.
Induced Signal Susceptibility	19.0	Equipment identified as category X, no test performed.
Radio Frequency Susceptibility	20.0	Equipment tested for conducted susceptibility to category S and for radiated susceptibility to category S.
Radio Frequency Emissions	21.0	Equipment tested to category M.
Lightning Induced Transient Effects	22.0	Equipment identified as category X, no test performed.
Lightning Direct Effects	23.0	Equipment identified as category X, no test performed.
Icing	24.0	Equipment identified as category X, no test performed.
Electrostatic Discharge	25.0	Equipment identified as category X, no test performed.
Fire, Flammability	26.0	Equipment identified as category X, no test performed.
Other Tests		

REMARKS:

- Nameplate marking: DO-160G Env.Cat [(A2)(B2)(F1)]BXXXXXXXXXXZZXXX[SS]MXXXXXXXXXX
- Section 21.0 RF Emissions - Radiated only