Always Connected Aircraft

Flightcell DZMx

Always Connected

GLOBAL VOICE

Satellite & Cellular Voice Calls

Full global coverage via Iridium satellite and low cost cellular option when in range.

Crystal Clear Audio

DZMx is a full digital audio system (input / output) for optimal sound quality and clarity when you need it most.

Wifi & Bluetooth

GLOBAL DATA

Industry Specific Applications

Specialised data applications transmit mission specific data for improved aircraft management and more accurate billing.

- Fire fighting payload and drop-zone data
- Medical - transmit 12-Lead ECG data
- DZMx Connect App for mission critical messaging

GLOBAL TRACKING

DZMx offers dual network, uninterrupted GPS tracking via both satellite and cellular networks to significantly reduce your tracking costs.

Fully unlocked feed connecting to all major tracking providers.

Choose your own operator.

Flightcell DZMx connects your aircraft to the world via the Iridium satellite and cellular broadband networks.

Compact All in One Communication System

All electronics are housed in one compact unit - there's nothing in the avionics bay, and minimal wiring, which means substantial savings on installation costs.

The Flightcell DZMx comes with a 12 month warranty, or an optional five (5) year warranty can be purchased.

Key Features

User-Friendly Interface

Easy to use, with an intuitive and familiar keypad layout.

- Soft touch, backlit silicone keypad
- Pre-configured quick messaging
- Miskey prevention guard
- Convex keys for accurate gloved operation
- Easy to use LCD menu

Night Vision Options

Both keypad and LCD displays have night vision compliant back-lighting.

- NVIS B compliant
- NVIS A compliant option (MIL3009)

Mounting Options

- DZUS (5.5")
- GA radio rack (6.25")
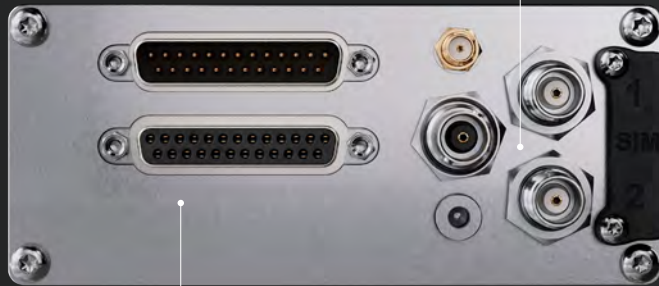
Key Features

Rugged Design

Built tough to MILSPEC and
DO160G certified.

Built In Wireless Options

Antennas

- Iridium Satellite and GPS
- Cellular

Civil D25 x2

Military D38999 x1

Multiple Data Inputs

Incredibly versatile, providing multiple interface and
protocol options for connecting your devices.

Technical Specifications

ELECTRICAL

Input voltage	12-32VDC	
Power supply current	~1A @ 28VDC	
ICS to DZM audio input levels	20mVrms to 1.15Vrms, adjustable	
	775Vrms nominal	
Input impedance	600Ω	
Microphone bias voltage	12V via 2.2kΩ	
DZM to ICS audio output levels	Up to 5Vrms, adjustable	
	775mVrms nominal	
Output impedance	150Ω	
Backlighting control	0-32VDC	User calibrated high/low set-points
Backlight colour	Green 520nm	Designed for NVIS compliance
GPS antenna bias voltage	5V	
Antenna current	Up to 100mA	
Sensitivity	-162dBm (with Flightcell Antenna)	
Time to first fix	26s	

MATERIALS

Aluminium 6061

CONNECTORS

Mounting fasteners	DZUS or M5	
Main connector	1x D25 male plus 1x D25 female, or	1x D38999 male (military versions)
Antenna connectors	1st and 2nd transceiver – TNC	
	3rd transceiver (if installed) – SMA	

DIMENSIONS

	DZUS mount		GA mount	
Faceplate width	146mm	5.75"	158mm	6.22"
Body width	126mm	4.96"	126mm	4.96"
Faceplate height	57mm	2.24"	60mm	2.36"
Body height	54mm	2.13"	54mm	2.13"
Depth (front to rear faces)	110mm	4.33"	110mm	4.33"

WEIGHT

580 – 720g	1.21 – 1.59 lbs	Depending on configuration

DATA INTERFACES

Interface	Decription
RS232	3-wire serial port
RS-485/422	4-wire serial port
USB-via D25 or D38999	DZMx is USB host
10/100 ethernet	Ethernet port
General purpose inputs	5 (optional expansion to 12)
General purpose outputs	2 outputs

DO-160G CERTIFICATION

Env. Cat [(A1)(B1)(F1)]XAB[UG]HXXXXXZZAX[AC]XXXXXXXXXXXX

ENVIRONMENTAL

	Built to IP54 (civilian versions)	IP55 (military versions)
Operating temperature	-40°C to 55°C	-40°F to 131°F

Note: Product specifications are correct as at January 2022. Specifications are subject to change without notice.

Flightcell DZMx

Industry Solutions

AERIAL FIRE

Flightcell's firefighting solution ensures there is constant communication between the aircrew and ground operations using satellite and cellular broadband networks.

The Flightcell DZMx has a built in ATU, collating data from multiple sensors to meet and exceed reporting requirements for fire tank and bucket operations.

- Satellite and cellular voice, data, and tracking
- Integrated ATU exceeds tank and bucket reporting requirements
- Supports other ATU and sensors AKV, AFDAU
- NAFC and AFF compliant
- In cockpit Wi-Fi and Bluetooth

- Unlocked device, choose your preferred airtime and tracking provider
- DZMx Connect App allows you to use smartphone to configure DZMx, manage contacts, make calls and send/receive texts

AIR MEDICAL

Flightcell's air medical solution ensures there is constant communication between the aircrew and your Emergency Department (ED) using satellite and cellular broadband networks.

The Flightcell DZMx provides constant contact between air medical crew and the emergency department for improved patient care.

- Transmit 12-Lead ECG data to the emergency department
- Retrieve patient records in-flight
- Real-time location information reported
- Access weather and landing zone information
- Dual voice capability
- FDMS compliance for FAA rule 135.607

- Optional DZMx Remote Head can be used from multiple locations within the aircraft.
- Optional Virtual Private Network (VPN)
- DZMx Connect App allows you to use smartphone to configure DZMx, manage contacts, make calls and send/receive texts

Industry Solutions

Flightcell's search and rescue solution ensures there is constant communication between the aircrew and land and sea search and rescue services using satellite and cellular broadband networks.

Voice and data are transmitted over satellite when in remote locations, and cellular when in network range. Handover between cellular and satellite is seamless for tracking which provides significant cost saving when compared to satellite-only transmission.

- Real-time location information reported
- Talk to lost parties and casualties with cell phone coverage
- Access weather and landing zone information
- Dual voice capability
- Second keypad exclusively for medical crew
- Group Push-to-Talk (PTT) comms option

- Optional satphone cradle and portable handset for remote use
- Optional DZMx Remote Heads provide for operation of DZMx by mission or medical crew
- DZMx Connect App allows you to use smartphone to configure DZMx, manage contacts, make calls and send/receive texts

The Flightcell DZMx law enforcement solution provides confidential communication between the air and the ground using the cellular network. Integration with on-board systems is possible and images can be transmitted via high-speed data.

Voice and data are transmitted over a cellular network when in range, or over satellite in remote locations. Handover between cellular and satellite is seamless for tracking which provides significant cost saving when compared to satellite only transmission.

- Voice over cellular network
- Broadband cellular data for connected devices
- Confidential one-on-one comms
- Group Push-To-Talk (PTT) comms
- Night vision: NVIS-A and NVIS-B (STD)
- Real-time tracking

- MILSPEC and D0160G compliant
- Provides data connection for other on-board system
- Interface with mission controls via API
- DZMx Connect App allows you to use smartphone to configure DZMx, manage contacts, make calls and send/receive texts

Flightcell DZMx

Industry Solutions

MILITARY

For robust and reliable command and control communications the Flightcell DZMx delivers where and when it's needed. Built to MILSPEC and DO160G, the unit is fully sealed and rated to IP55.

The familiar keypad and menu are extremely easy to use, while the tactile keys are suitable for use with gloves. The display is fully dimmable and is compatible with NVIS-A and NVIS-B.

- Reliable, direct voice to and from any location

- High quality voice

- Reliable data connection

- Optional Iridium Push-To-Talk group communications

- One-touch 'Under Fire' and 'Emergency' alerts

- Night Vision NVIS-B (NVIS-A option)

- Interface with mission controls via API

- DZMx Connect App allows you to use smartphone to configure DZMx, manage contacts, make calls and send/receive texts

Our Customers

Flightcell is proud to supply mission critical satellite and cellular communication and aircraft
tracking systems to several high profile global aircraft manufacturers and operators,
some including:

Optional Extras

SATPHONE CRADLE

An Iridium phone in the rugged designed Flightcell Satphone Cradle can be used with the DZMx as the aircraft satcom, as well as used off the aircraft when on the ground.

DZMx REMOTE HEAD

Enables full operational control of the Flightcell DZMx from up to two additional aircraft positions, significantly useful for the air medical and search and rescue industries.

ANTENNAS

Flightcell supplies a range of Iridium, GPS and cellular antennas to suit any DZMx configuration.

About Flightcell

Europe *Flightcell*

North America

Central and South America

Middle East

North Asia

Australia

New Zealand *Flightcell*

About Flightcell

Setting quality standards since 2000, Flightcell is a leader in the global aviation communications systems and hardware industry, leveraging strong strategic relationships with aircraft manufacturers, industry partners and government.

Flightcell's trusted products are highly configurable for operational requirements, with a focus on providing solutions to rotorcraft and turbo prop fixed wing aircraft that specialise in aerial firefighting, air medical, search and rescue, law enforcement and military.

Contact

Phone: +64 3 545 8651 (New Zealand)
          +46 735 262101 (Europe)
Email: info@flightcell.com

www.flightcell.com

Flightcell DZMx

Flightcell

Always Connected

View Flightcell DZMx

www.flightcell.com

Flightcell DZMx