THE ONLY ALL-IN-ONE SATELLITE AND CELLULAR SOLUTION FOR VOICE, DATA & TRACKING

MILSPEC tough.

DZMx is built to MILSPEC and DO160G, and designed to withstand extremes of temperature, vibration and impact. Housed in a super strong extruded alloy case with minimal wiring, it’s fast and simple to install. Incredibly, Flightcell DZMx weighs only 1.4lbs (650g)!

Flightcell DZMx is the world’s smallest, lightest and smartest satcom system.

info@Flightcell.com
+64 3 545 8651
www.Flightcell.com

ALWAYS CONNECTED.
DZMx is the only system that offers dual network, uninterrupted GPS tracking via satellite and cellular networks, significantly reducing your costs.

- Fully unlocked system - you choose your tracking and airtime provider
- Uninterrupted tracking - even when on a call
- Tracking via satellite and cellular networks - uses lowest cost option when in range
- NEW: Cellular IP tracking - more GPS positions for even less cost
- Event driven tracking - user configurable
- Uses Truepath™ - provides more precise flight path mapping.

DZMx mapping partners: TracPlus, Guardian Mobility, Flight Explorer, Global Nav, Outerlink, SkyTrac, SkyNet

DZMx integrates:

IRIDIUM PHONE IN FLIGHTCELL CRADLE

Use Iridium handset for aircraft satcoms or standalone use away from the aircraft.

Versions for:
- Iridium Extreme
- Iridium 9555
- Iridium 9505/A

DZMx SPECIFICATIONS

- **Input Voltage**: 12 – 32VDC
- **Power Supply Current**: ~1A (~28VDC)
- **ICS to DZM Audio Input Levels**: 20mVrms to 1.15Vrms, adjustable
- **Microphone bias voltage**: 12V via 2.2kΩ
- **ICS to DZM Audio Output levels**: Up to 5Vrms, adjustable
- **Output impedance**: 150Ω
- **Backlighting Control**: AC/DC, 0–32V
- **Backlight colour**: Green 520nm. Designed for NVIS compliance.
- **GPS Antenna bias voltage**: 5V
- **GPS Antenna current**: Up to 100mA
- **Satellite SBD tracking**: Auto switch to cellular tracking

DZMx REMOTE HEAD

Enables full control of DZMx from up to two additional crew positions.

ETHERNET/USB HUB

Provides connection options for:
- Tablets, PCs, other on board systems
- WiFi/Ethernet router
- USB for firmware upgrades and data downloads.

DZMx is USB Host

**Interface**

- RS-232
- RS-485/422
- USB

**Dimensions**

- **ICS mount**: Designer's choice
- **GA mount**: 146mm x 21mm x 9.75mm

**Weight**

- 580-720g (1.21-1.59 lbs) depending on configuration

**Environmental**

- **Built to**: IP54 (Civ), IP65 (Mil)
- **Operating temperature**: -40°C to 70°C
WHAT’S INSIDE FLIGHTCELL DZMx?

**CONNECTORS**
- **MILITARY** D38999 x 1
- **CIVIL** D25 x 2

**OPTIONAL MODEMS**
- **CELLULAR** 4G/LTE/3G
- **IRIDIUM** 9523

**OPTIONAL EXPANSION CARDS**
- ARINC 429
- 7 ADDITIONAL discrete data inputs
- ADDITIONAL ETHERNET
- FUTURE EXPANSION

**MOUNTING OPTIONS**
- DZUS (5.5”)
- GA radio rack (6.25”)

**NIGHT VISION OPTIONS**
- NVIS B - Civil
- NVIS A/MIL3009 - Military

THE DZMx SYSTEM

**STANDARD**

**AUDIO**
- 2 x independent audio panel connections

**ANTENNAS**
- Iridium Satellite & GPS
- Cellular

**DATA CONNECTIONS**
- USB
- Ethernet
- Serial (RS232/422/485)
- ARINC 429

**TABLET/PC/ONBOARD SYSTEMS**

**OPTIONAL**

**IRIDIUM CRADLES**
- 9505/A
- 9555
- 9575

**CABIN PHONE (POTS)**

**REMOTE HEAD/S**
- 5 primary discrete inputs
- 7 additional discrete inputs
- 2 outputs
- 7 additional discrete data inputs

www.flightcell.com
## DESIGN FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>DZMx is the world's only all-in-one satellite and cellular voice, data, and tracking system.</td>
<td>All electronics are installed in one compact, panel mounted control head – nothing in the avionics bay, and minimal wiring means substantial savings on installation costs.</td>
</tr>
<tr>
<td>Environmentally sealed for long life and low maintenance.</td>
<td>Designed to withstand temperature extremes, humidity, water, sand and dust. - IP54 (Civ) • IP65 (Mil)</td>
</tr>
<tr>
<td>Easy to use, intuitive menu.</td>
<td>Easy to follow menu operation - Multi-line LCD display - Soft touch backlit keys - No training required.</td>
</tr>
<tr>
<td>Night vision goggle compliant.</td>
<td>Backlit keypad and LCD display are NVIS compliant as standard. - NVIS A (Mil) • NVIS B (Civil)</td>
</tr>
<tr>
<td>Accessible SIM cards.</td>
<td>Easy access to SIM card slots to change your satellite or cellular network providers.</td>
</tr>
<tr>
<td>Optional remote control head.</td>
<td>Allows full operational functionality for up to two additional work stations on the aircraft.</td>
</tr>
<tr>
<td>Crystal clear audio.</td>
<td>DZMx is a full digital audio system (input/output) for optimal sound quality and clarity when you need it most.</td>
</tr>
<tr>
<td>Audio optimisation.</td>
<td>Fully adjustable audio input and output levels to match all audio systems.</td>
</tr>
</tbody>
</table>

## GLOBAL VOICE

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>DZMx is the world's only all-in-one satellite and cellular phone system, providing crystal clear voice communications via Iridium satellite and cellular networks, so you're always connected.</td>
<td>Iridium Push-To-Talk. - Global satellite PTT communications between multiple aircraft and ground units.</td>
</tr>
<tr>
<td>Built-in contact list with three speed dial keys.</td>
<td>All your contacts are accessible from the built-in contact list. Easily manage contacts using DZMx web app.</td>
</tr>
<tr>
<td>Cabin phone options.</td>
<td>Optional cabin phone over POTS (2 wire) for private satellite and cellular calls. Provides cabin to cockpit intercom.</td>
</tr>
<tr>
<td>Aircraft audio connections.</td>
<td>DZMx provides two independent connections to the aircraft audio system.</td>
</tr>
<tr>
<td>Connectivity.</td>
<td>Multiple data connections: - Serial RS232/432/485 - Ethernet - USB - Optional ARINC429</td>
</tr>
</tbody>
</table>

## GLOBAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>DZMx connects your aircraft to the world via the Iridium satellite narrowband and cellular broadband networks.</td>
<td>Messaging. - Messaging via Iridium (SBD &amp; SMS) or cellular (SMS)</td>
</tr>
<tr>
<td>Specialised data applications.</td>
<td>Transmit mission-specific data for improved aircraft management and more accurate billing. - Fire fighting payload and drop-zone data. - Crop dusting flight records, loads and drop data. - Airline operations. - Custom application development available.</td>
</tr>
<tr>
<td>Multiple data inputs.</td>
<td>5 standard switched inputs (digital or analogue). Optional expansion card provides 7 more inputs. Two digital outputs.</td>
</tr>
<tr>
<td>Broadband.</td>
<td>Full email and internet via 4G/LTE cellular data (when available).</td>
</tr>
</tbody>
</table>

## GPS TRACKING

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>DZMx is the only system that offers dual network, uninterrupted Iridium satellite tracking via both satellite and cellular networks to significantly reduce your tracking costs. Now with cellular IP tracking!</td>
<td>IP Tracking. - New technology using a combination of cellular data &amp; IP (Internet Protocol) technology to offer low cost position points at 15-second intervals.</td>
</tr>
<tr>
<td>Truepath™ for more precise tracking.</td>
<td>DZMx bundles multiple GPS positions during each transmission providing more precise mapping of the aircraft track.</td>
</tr>
<tr>
<td>Unlocked - choose your mapping service.</td>
<td>DZMx’s unlocked data feed is supported by multiple tracking providers - you’re not locked into any airtime or tracking provider.</td>
</tr>
<tr>
<td>Lower tracking costs.</td>
<td>Using cellular networks can significantly reduce the cost of tracking. Expect to get more for less.</td>
</tr>
</tbody>
</table>

## FEATURES

### DESIGN FEATURES

- The world's smallest and lightest satcom. - Built to MILSPEC and DO160G certified (Sections 4-B,15-21,25) Super strong machined alloy faceplate and extruded alloy housing. - Multiple transceiver options, configurable modular design. - 1-2 internal transceivers offering expansion and dual mode redundancy in the event of network failures. - Multi-channel options, modular design. - Single or dual Iridium satellite channels (Int.) - Iridium plus cellular (Int.) - Iridium phone in a Flightcradle (Ext.)

### GLOBAL VOICE

- Satellite and 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. - Audio optimisation. - Fully adjustable audio input and output levels to match all audio systems. - Standard phone keypad layout. - DZMx is the only satcom system that uses the standard and familiar phone keypad layout. No training required.

### GLOBAL DATA

- Messaging. - Messaging via Iridium (SBD & SMS) or cellular (SMS) - Pre-configured messaging. - Quickly send pre-configured messages from your DZMx to: • any cell or satphone • your mapping system.

### GPS TRACKING

- IP Tracking. - New technology using a combination of cellular data & IP (Internet Protocol) technology to offer low cost position points at 15-second intervals. - Truepath™ for more precise tracking. - DZMx bundles multiple GPS positions during each transmission providing more precise mapping of the aircraft track. - Unlocked - choose your mapping service. - DZMx’s unlocked data feed is supported by multiple tracking providers - you’re not locked into any airtime or tracking provider. - Lower tracking costs. - Using cellular networks can significantly reduce the cost of tracking. Expect to get more for less.

### FEATURES

- Continuous tracking. - Simultaneous voice and tracking via a single channel. Send position reports even while on a phone call. - Event driven tracking. - User-configurable intelligent features to provide more flight data: • Distress reports • Engine start/stop • Take off/landing • Point of interest (OOOI) - ARM. - One key sends request to your tracking provider for Automated Rescue Monitoring. Get notified if tracking is unexpectedly interrupted (where supplied). - AFF compliant. - USFS and NAFC AFF compliant tracking. - Mark point of interest. - Convenient one key activation to manually mark your GPS position. Send optional pre-configured message with GPS position.