

THE WORLD'S SMALLEST, LIGHTEST & SMARTEST SATCOM SYSTEM*

DZMx



***IT'S ALSO THE TOUGHEST!**

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, DZMx weighs only 1.4lbs (650g)!

DZMx IS THE ONLY ALL-IN-ONE IRIDIUM & CELLULAR SOLUTION FOR VOICE, DATA & GPS TRACKING.

 **Remote Satellite Systems**
INTERNATIONAL

Flightcell[®]

ALWAYS CONNECTED.

DUAL NETWORK AIRCRAFT TRACKING



GLOBAL SATELLITE COVERAGE



Satellite SBD tracking
Satellite voice/SMS tracking

Auto switch to cellular

Cellular tracking/voice/data
Satellite voice option

Auto switch to satellite

CELLULAR COVERAGE

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

- Fully unlocked data feed - you choose your tracking and airtime provider
- Uninterrupted tracking, even when on a call
- Tracking via satellite and cellular networks - DZMx uses lower cost option when in range
- Event driven-tracking (user configurable)
- Uses Truepath™ for more precise flight path mapping.



Tracking Providers:

TracPlus	Guardian Mobility	Flight Explorer	Global Nav	Outerlink	SkyNet	SkyTrac
Spidertracks	Troo	Blue Sky	Heligràfics	Tesacom	Satcom Direct	



DZMx integrates:

IRIDIUM PHONE IN FLIGHTCELL CRADLE

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

Versions for:

- Iridium 9575 Extreme
- Iridium 9555
- Iridium 9505/A

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 SPECIFICATIONS

ELECTRICAL Input Voltage: 12 – 32VDC Power Supply Current: ~1A @ 28VDC ICS to DZM Audio: Input Levels: 20mVrms to 1.15Vrms, adjustable 775mVRMS nominal Input impedance: 600Ω Microphone bias voltage: 12V via 2.2kΩ DZM to ICS Audio: Output levels: Up to 5Vrms, adjustable 775mVRMS nominal 150Ω Output impedance: 150Ω Backlighting Control: AC/DC, 0 – 32V 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: 1 x D25 male plus 1 x D25 female or 1 x D38999 male (military versions) Antenna connectors: Transceivers TNC GPS: BNC DIMENSIONS Available in DZUS or GA mount. <table border="1"> <tr> <td></td> <td>DZUS mount</td> <td>GA mount</td> </tr> <tr> <td>Faceplate width:</td> <td>146mm 5.75"</td> <td>158mm 6.22"</td> </tr> <tr> <td>Body width:</td> <td>126mm 4.96"</td> <td>126mm 4.96"</td> </tr> <tr> <td>Faceplate height:</td> <td>57mm 2.24"</td> <td>60mm 2.36"</td> </tr> <tr> <td>Body height:</td> <td>54mm 2.13"</td> <td>54mm 2.13"</td> </tr> <tr> <td>Depth (front to rear faces):</td> <td>110mm 4.33"</td> <td>110mm 4.33"</td> </tr> </table>		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 <table border="1"> <tr> <th>Interface</th> <th>Description</th> </tr> <tr> <td>RS232</td> <td>3-wire serial port</td> </tr> <tr> <td>RS-485/422</td> <td>4-wire serial port</td> </tr> <tr> <td>USB-Micro AB Connector</td> <td>OTG (On-The-Go) USB port</td> </tr> <tr> <td>USB-via D25 or D38999</td> <td>DZMx is USB Host</td> </tr> <tr> <td>10/100 ethernet</td> <td>Ethernet port</td> </tr> <tr> <td>General purpose inputs</td> <td>5 (3 x digital, 2 x analogue)</td> </tr> <tr> <td>General purpose outputs</td> <td>2 outputs</td> </tr> </table> CERTIFICATION DO-160G sections 4-9, 15-21, 25. ENVIRONMENTAL Built to IP54 (Civ), IP65 (Mil) Operating temperature: -40°C to 70°C	Interface	Description	RS232	3-wire serial port	RS-485/422	4-wire serial port	USB-Micro AB Connector	OTG (On-The-Go) USB port	USB-via D25 or D38999	DZMx is USB Host	10/100 ethernet	Ethernet port	General purpose inputs	5 (3 x digital, 2 x analogue)	General purpose outputs	2 outputs	DASH NUMBERS DZP_04-000 DZMx Civil no Transceiver DZP_04-100 DZMx Civil with Satellite DZP_04-300 DZMx Civil with Satellite & 3G Cell DZP_04-020 DZMx Military, NVIS A, no transceiver DZP_04-120 DZMx Military, NVIS A, with Satellite DZP_04-320 DZMx Military, NVIS A, with Sat & 3G Cell
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WHAT'S INSIDE FLIGHTCELL DZMx?

CONNECTORS



MILITARY D38999 x 1



CIVIL D25 x 2

OPTIONAL MODEMS

CELLULAR
4G/LTE/3G

IRIDIUM
9523

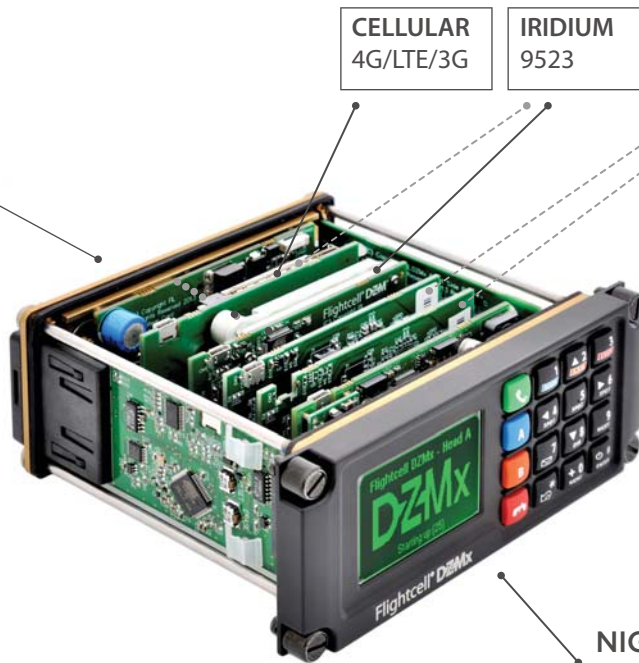
OPTIONAL EXPANSION CARDS

ARINC 429

7 ADDITIONAL
Switched 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

OPTIONAL

AUDIO

2 x independent audio
panel connections

DATA INPUTS/OUTPUTS

- 5 primary discrete inputs
- 2 outputs
- 7 additional discrete inputs

IRIDIUM CRADLES

- 9505/A
- 9555
- 9575



ANTENNAS

- Iridium Satellite
- GPS/Glonass
- Cellular



DATA CONNECTIONS





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

CABIN PHONE (POTS)

REMOTE HEAD/S



TABLET/PC/ONBOARD SYSTEMS

<h3>DESIGN FEATURES</h3>		The world's smallest satcom system.	The world's lightest satcom system.	The world's toughest satcom system.	Multiple transceiver options, configurable modular design.
<p>DZMx is the world's only all-in-one satellite and cellular voice, data and tracking system. 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.</p>		<p>DZMx measures only:</p> <ul style="list-style-type: none"> • 4.95" (125mm) wide • 2.18" (55mm) high • 4.72" (120mm) deep. 	<p>We know every ounce matters, so we've built a system that is 60% lighter than any other satcom system - only 1.4lbs (650g)!</p>	<p>Built to MILSPEC and DO160G certified (Sections 4-8,15-21,25) Super strong machined alloy faceplate and extruded alloy housing.</p>	<p>1-2 internal transceivers, and optional expansion:</p> <ul style="list-style-type: none"> • ARINC429 • Data inputs • Second ethernet port
<p>Multi-channel options, modular design.</p> <ul style="list-style-type: none"> • Single or dual Iridium satellite channels (int.) • Iridium plus 3G/4G LTE cellular (int.) • Iridium phone in a Flightcell cradle (ext.) 	<p>Environmentally sealed for long life and low maintenance. Designed to withstand temperature extremes, humidity, water, sand and dust.</p> <ul style="list-style-type: none"> • IP54 (Civ) • IP65 (Mil) 	<p>Familiar phone layout.</p> <ul style="list-style-type: none"> • Easy to follow menu operation • Multi-line LCD display • Soft touch backlit keys 	<p>Night vision goggle compliant. Backlit keypad and LCD display are NVIS compliant as standard.</p> <ul style="list-style-type: none"> • NVIS A (Mil) • NVIS B (Civil) 	<p>Accessible SIM cards. Easy access to SIM card slots to change your satellite or cellular network providers.</p>	<p>Optional remote control head. Allows full operational functionality for up to two additional work stations on the aircraft.</p>
<p>Easy configuration. Use the DZM's menus or embedded web app. Configure phone, data, and tracking settings. Easy firmware upgrades via USB data stick.</p>	<h3>GLOBAL VOICE</h3> <p>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.</p>		<p>Satellite and cellular voice calls. Full global coverage via Iridium satellite and low cost cellular option when in range.</p>	<p>Crystal clear audio. DZMx is a full digital audio system (input/output) for optimal sound quality and clarity when you need it most.</p>	<p>Audio optimisation. Fully adjustable audio input and output levels to match all audio systems.</p>
<p>Standard phone keypad layout. DZMx is the only satcom system that uses the standard and familiar phone keypad layout. No training required.</p>	<p>Built-in contact list with three speed dial keys. All your contacts are accessible from the built-in contact list. Easily manage contacts using DZM web app.</p>	<p>Cabin phone options. Optional cabin phone over POTS (2 wire) for private satellite and cellular calls. Provides cabin to cockpit intercom</p>	<p>Aircraft audio connections. DZMx provides two independent connections to the aircraft audio system</p>	<p>Connectivity. Multiple data connections:</p> <ul style="list-style-type: none"> • Serial RS232/432/485 • Ethernet • USB • Optional ARINC429 	
<h3>GLOBAL DATA</h3> <p>DZMx connects your aircraft to the world via the Iridium satellite narrowband and 3G/4G/LTE broadband networks.</p>		<p>Messaging. Messaging via Iridium (SBD & SMS) or cellular (SMS)</p>	<p>Pre-configured messaging. Quickly send pre-configured messages from your DZMx to:</p> <ul style="list-style-type: none"> • any cell or satphone • your mapping system. 	 <p>DZMx (civil) rear view showing multiple connection options.</p>	
<p>Specialised data applications. Transmit mission-specific data for improved aircraft management and more accurate billing.</p> <ul style="list-style-type: none"> • Fire fighting payload and drop-zone data. • Crop dusting flight records, loads and drop data • Airline operations • Custom application development available. 		<p>Multiple data inputs. 5 standard switched inputs (digital or analogue). Optional expansion card allows 7 more inputs. Two digital outputs.</p>	<p>Broadband. Full email and internet via 3G/4G/LTE cellular (when available).</p>	 <p>DZMx (civil) side view.</p>	
<h3>GPS TRACKING</h3> <p>DZMx is the only system that offers dual network, uninterrupted GPS tracking via both satellite and cellular networks to significantly reduce your tracking costs.</p>		<p>Trupath™ for more precise tracking. DZMx bundles multiple GPS positions during each transmission providing more precise mapping of the aircraft track.</p>	<p>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.</p>	<p>Lower tracking costs. Uninterrupted GPS tracking via Iridium and 3G/4G/LTE cellular can significantly reduce your tracking costs.</p>	<p>Continuous tracking. Simultaneous voice and tracking via a single channel. Send position reports even while on a phone call</p>
<p>Event driven tracking. User-configurable intelligent features to provide more flight data:</p> <ul style="list-style-type: none"> • Distress reports • Engine start/stop • Take off/landing • Point of interest /OOOI 	<p>ARM. One key sends request to your tracking provider for Automated Rescue Monitoring. Get notified if tracking is unexpectedly interrupted (where supplied).</p>	<p>AFF compliant. US Department of the Interior Forest Service AFF compliant tracking.</p> 	<p>Mark point of interest. Convenient one key activation to manually mark your GPS position. Send optional pre-configured message with GPS position.</p>	