

Global Voice + Data + Flight Tracking

Flightcell® DZM



The world's most advanced all-in-one communications & tracking hub.

- Satellite phone
- Cellphone/Audio/MP3
- GPS flight following



www.flightcell.com

Flightcell® DZM is the world's most advanced solution for global communications – providing point-to-point voice, data and flight tracking in a compact lightweight hub.

DZM is a multi-link voice and data communications hub that enhances and expands communications:

→ **Integrated voice communications**

- Virtually any off-the-shelf, portable satellite phone, cellphone or handheld radio can be connected into the aircraft or vehicle intercom.
- Connected devices can be used at all ICS positions, providing crew and passengers with global point-to-point communications.

→ **Flight-following**

- Transmitting aircraft positions on demand or according to operator-configured rules via your portable satellite phone or cell phone to any base monitoring station, intranet or internet location.

→ **Operational information**

Transmits custom data - POB, job number, fuel etc.

Flightcell DZM is designed for permanent installation in any aircraft or vehicle with an intercom system.

Flightcell DZM has significant advantages over other installed satellite phone and flight following systems:

• **Lightweight and compact:**

Weighing only 500 grams (1 pound) This is anywhere from 1/3 to 1/8 the weight of other installed satellite phone systems.

• **Easy to install:**

The DZM provides voice, data and tracking in a single module installed in the aircraft control or communications panel - not in the rear of the aircraft. This means less wiring, less labour and lower installation costs.

• **Certified:**

Flightcell DZM conforms and is tested to FAA DO160E. A Supplementary Type Certificate (STC) has been issued for specific airframes.

• **Very affordable:**

Lower purchase and installation cost than any other satcom and tracking product on the market .

• **Versatile:**

DZM works with a wide range of satphones, cellphones and radios, providing flexibility that is not available with other satcom systems.



Voice communications

Simultaneously connect all crew members to any two of the following portable communications devices through the ICS:

- Iridium 9505/9505A handset, Thuraya handset, Inmarsat M terminal, or Globalstar handset (additional Globalstar equipment is required)
- Cellphone or other handheld transceiver
- Auxiliary audio source, such as MP3, iPod, CD player, laptop computer.

Data communications

- Transmit SMS messages from PDA or laptop
- Receive SMS messages on DZM display or on PDA or laptop
- Transmit aircraft operational data from compatible monitoring systems.

Phone calling options:

- Dial on satphone or cell phone from Flightcell DZM keypad
- Address book provides for nine speed-dial numbers
- ISO function enables phone conversations to be isolated .

Global Tracking and Flight Following

Flightcell DZM uses the satellite phone or cellphone to transmit GPS positional data:

- Enables any authorized person to track aircraft or vehicles anywhere in the world without range limitations
- Aircraft position transmitted according to operator configured rules:
 - time interval / course change / above specified speed.
- Hot key immediately transmits current position.
- Distress mode activates rapid interval emergency position reporting.
- Enables remote acquisition of current position from the ground, when required.
- Transmission settings for immediate notification of position with distress message.

LCD Display for easy menu navigation

The night vision goggle (NVG) compliant LCD display shows the extensive setup menu that allows Flightcell DZM functions to be easily configured to meet user requirements. The display shows:

- Menu settings
- Satellite and cell phone settings (and signal strength status)
- Current position
- Number dialled.

Benefits

Flightcell DZM offers the ultimate in multi-functional usage of satellite phone, cellphone and other portable communications equipment, significantly increasing versatility and reducing costs compared to other installed voice or data transmission options.

Integrated satellite, cell and radio communications:



- Expand aircraft or vehicle communication options
- Provide global point-to-point communication on and off the aircraft or vehicle
- Overcome terrain, range and interference problems that limit radio communications
- Enable portable communications devices to be used hands-free in any noisy aircraft or vehicle
- Global GPS flight following via portable phone link.



Iridium 9505/9505A Phone Mount

Flightcell's Iridium Phone Mount provides:

- Phone dialling via DZM's keypad with phone mounted remotely, out of the way.
- Secure mounting of phone in aircraft- the tough alloy frame meets USAF airworthiness requirements.
- Convenience and portability - handset can be quickly removed from aircraft when required. Voice, data, antenna and power connectors are all integrated into the mount.
- Automatic power on/off with aircraft power.

DZM Specifications	Power supply voltage: 24-30 V DC	Auxiliary audio input: 6mVrms to 5Vrms Adjustable gain	Max Velocity: 500m/s	 
	Power supply current: Up to 250mA	Left input impedance: 1kΩ	Max Acceleration: 4G	
	ICS transmit audio: Input: 6mVrms to 5Vrms Adjustable gain Input impedance: 2k7	Right input impedance: 1kΩ	Max Altitude: 18000m	
	ICS receive audio: Output: 53mVrms to 5Vrms into 150Ω	Sat phone data connection: RS-232 levels. Settings adjustable for different phone types.	Ext Antenna:	
	Sat phone input: 23mVrms to 1.75Vrms Adjustable gain	Cell phone data connection: RS-232 levels. Settings adjustable for different phone types.	• Connector: TNC	
	Sat phone output: Typical electret mic levels Adjustable gain	PC data connection: RS-232 levels	• Bias Voltage: 3V	
	Cell phone input: 23mVrms to 1.75Vrms Adjustable gain	Backlighting control: 0-28V DC or 0-5V AC	• Antenna Current: 6-70mA	
	Cell phone output: Typical electret mic levels Adjustable gain	Fixed control: Off, Low, Med, High	• Typical gain: 21dB	
		Backlight colour: Green 540nm. Designed for NVIS B compliance.	Dimensions:	
		GPS:	Width: 5.75" (146 mm) Height: 2.25" (57 mm)	
	TTFS (Time to first fix): Typ 44s	Depth: 5.1" (130 mm) Weight: 17.6oz (500g)		
		Mounting fasteners: DZUS		
		Main connector: D38999/20WD35PN		
		GPS connector: TNC		
		Compliance: FAA (RTCA-D0160E), STC		



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