

# CATALOGUE

# **INMARSAT GLOBAL GOVERNMENT COMMUNICATIONS MADE CERTAIN**

# inmarsat





AS THE PIONEER AND WORLD LEADER IN MOBILE SATELLITE COMMUNICATIONS, INMARSAT HAS BEEN THE LEADING GLOBAL PROVIDER OF SATELLITE COMMUNICATIONS AND MANAGED CONNECTIVITY SERVICES FOR LAND-BASED ORGANISATIONS AND OPERATIONS FOR FORTY YEARS.



PARADIGM HORNET100	
DATAPATH QCT-90GX	
L3 HARRIS DARKWING	
COBHAM EXPLORER 6075GX	
PARADIGM SWARM	
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PARADIGM INTERFACE MODULE	
KEYTERMINOLOGY	

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# PARADIGM HORNET 100

# CATEGORY1 - FLY AWAY - MANUAL POINT

A lightweight and rugged **Global Xpress flyaway solution** offering high performance without compromising on portability. The HORNET100 can be packed into a single IATA compliant case and deploys quickly and accurately without tools.

### COMPACT AND RUGGED

The HORNET100 is a compactsized mobile Global Xpress certified solution and comes supplied with the integrated PIM (Paradigm Interface Module) for rapid setup and simple terminal configuration and management.

### FAST DEPLOY AND STOW

The modular segmented carbonfibre antenna provides maximum efficiency and optimum radiation characteristics for improved data throughput and availability. All

other components are housed in the rugged and compact PIM terminal base which has integrated adjustable legs providing a low centre of gravity to maintain stability.

### SIMPLE SETUP AND POINTING

Pointing the terminal is a very simple operation using the PIM's integrated pointing aid which combines visual crosshairs and audio feedback. The PIM also includes an onboard web interface with a step-by-step pointing wizard and additional

visual indicators of signal strength and other useful terminal information.

The HORNET100 is ideally suited for mobile use across diverse sectors including Emergency Response, Military, Government and NGO's.

TERMINAL EFFICIENCY GROUP	Group 2
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Integrated ODU
APERTURE	100cm, Segmented Carbon Fibre
<b>BLOCK UPCONVERTER (BUC)</b>	5W Transceiver
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
MOUNTTYPE	Transportable, Integrated Tripod, Manual Point
TERMINAL POINTING	Assisted Manual Point (Paradigm Interface Module)
POWER SOURCE	AC 90-264V
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	3 x 100Base-T Ethernet
PACKAGING	Single Case
WEIGHT	19.1 kg
ENVIRONMENTAL (OPERATIONAL)	-32° to +55°C
WIND LOADING	35mph (Operational); 60mph (Survival – anchored)

### WHO USES THE HORNET100?



# DATAPATH NCT-90GX **CATEGORY1 - MAN PORTABLE - MANUAL POINT**

Portable communications when you need it, where you need. Unlock the true mobility of G2X Land using an ultra-portable Terminal.

First responders and military units require durable, ultra-portable terminals for quick connectivity in remote locations. DataPath's man-portable QCT-90GX is now compatible with Inmarsat's G2X Land Ka-band network. This terminal provides reliable, high-performance satellite communications capabilities when your mission calls for quick connectivity on the go.

The QCT-90GX is based on the successful modular concept and

Gregorian dual offset antenna design of the CommuniCase Technology (CCT) product family. For ultimate performance and durability, the system was engineered to be lightweight, easy to use, highly transportable, and quick to setup and stow. The small man-pack terminal was designed to achieve the highest possible throughput in the smallest possible package.

The QCT-90GX signifies DataPath's commitment to designing highly innovative technology to facilitate remote communications for government users.

### ENGINEERED FOR SIMPLICITY

The user-centric QCT-90GX is compact with fully integrated components and cables, eliminating the burden of loose parts. The unit is a single piece with a folding antenna and detachable legs, making deploy and stow as simple as click, fold and go. Additionally, the intuitive GUI is easy to follow during the manual pointing procedure. Less than two hours of training is required to operate the terminal.

# **MODULAR FLEXIBILITY**

The flexible modular design allows for multi-band capabilities with the

TERMINAL EFFICIENCY GROUP	Group 1
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module (Integrated ODU)
APERTURE	90cm x 59cm Gregorian dual offset antenna
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Assisted Manual Point
POWER SOURCE	85-265 VAC (45-66Hz)
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	3 x 100BaseT Ethernet
PACKAGING	IATA Compliant backpack/transit case (95 x 51x48cm)
WEIGHT	<32kg (in transit case)
ENVIRONMENTAL	-32° to +55° C
WIND LOADING	Max 22.3mph; 44.7mph with integrated wind stays

addition of transceiver units, which can easily be switched by the field operator. Transceiver options include G2X Land commercial Ka-band, Mil-Ka, Ku-band and X-band. The GX system integrates a GX Core Module; other modem options are iDirect, L-band variants and others that meet the specified size and power requirements.

# CERTIFICATIONS

CE Certification according to 1999/5/ EC R&TTE and MIL-STD-810 G



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# LO HARRES HARRES

# CATEGORY 1 - MAN PORTABLE - ASSISTED MANUAL POINT

L3Harris DarkWing is a small form factor, lightweight, flat-panel Very Small Aperture Terminal (VSAT) providing high-speed data communications for Internet, VPN connectivity and video transmission.

This ruggedized solution is designed to fit in a backpack or laptop-sized case for ease of transport and missions requiring inconspicuous travel. Time from setup to operational use is less than five minutes, a significant reduction achieved through integration of the modem, RF components and antenna into a single assembly. DarkWing acquires satellites through a simplified manual pointing process featuring the L3Harris ViewSat-e GUI. The Flat-Panel VSAT employs its built-in GPS and compass to quickly provide operators a pointing solution and visual indicators for pointing adjustments via a user-friendly front-panel display.

TERMINAL EFFICIENCY	Group 1
MODEM TYPE	iDirect 950mp core module
APERTURE	28.3cm x 42.44cm (equivalent performance to a 30cm parabolic antenna)
<b>BLOCK UPCONVERTER (BUC)</b>	10W
RF BAND	Wideband Ka (Rx 19.7-20.7 and Tx 29.5 - 30.5); WGS, Approval Pending
MOUNT TYPE	Transportable; Assisted Manual Point; adjustable legs
TERMINAL POINTING	Assisted Manual Point
POWER SOURCE	AC: 90-264 VAC; 47-44 OHz (with external AC adapter) DC: 10-36 VDC (with external DC adapter) Battery: Internal, 15 min run time (auto switchover with loss of AC power)
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	2 x Gigabit Ethernet; WIFI: 802.11a/b/g/n (20Mbit/sec device to modem throughput)
PACKAGING	Backpack or laptop-sized case
WEIGHT	11.34 kg (25 lb) w/o case; 21.77 kg (48 lb) w case
ENVIRONMENTAL	Operational: -32°C to +50°C IP66 Storage: -40°C to +60°C
WIND LOADING	-



Designed to fit in a laptop-sized travel bag



# COBHAM **EXPLORER 6075LX** CATEGORY 1 - FLY AWAY - AUTO POINT

This Cobham EXPLORER stabilized auto-acquire fly-away system is lightweight, rugged and portable. The terminal includes a fully integrated iDirect Core Module, and is configured specifically for operation on the Inmarsat Global Xpress Ka-band network.

Its user friendly design allows operators with little satellite experience to access the Global Xpress services within minutes.

### ONLINE WITH THE PUSH OF A BUTTON

EXPLORER 6075LX features an auto-aquire system that ensures connectivity to LX services with the push of a button. It's that simple. No pointing is needed with EXPLORER 6075LX - it automatically finds the satellite in the matter of minutes, providing quick access and connectivity, even in remote locations.

### DYNAMIC POINTING CORRECTION

EXPLORER 6075LX is the first ever Fly-Away to feature Cobham's unique Dynamic Pointing Correction technology, which provides you with uninterrupted connectivity. In the field, Dynamic Pointing Correction ensures that the antenna stays locked on to the satellite, even in strong wind or if moved. Proven on land with the EXPLORER 8000 Series, our Dynamic Pointing Correction sets the EXPLORER 6075LX apart from other Fly-Away antennas.

EXPLORER 6075LX is developed completely in-house by Cobham SATCOM. It features genuine and robust EXPLORER design, which is already established and proven with Cobham SATCOM's highly regarded **EXPLORER L-Band and VSAT terminals.** 

TERMINAL EFFICIENCY	Group 1
MODEM TYPE	iDirect CX751
APERTURE	75cm, 4 piece segmented carbon fiber
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
MOUNT TYPE	Transportable, Tripod, Manual Point
TERMINAL POINTING	Autopoint with Dynamic Pointing Correction
POWER SOURCE	24 - 48 VDC
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	3 x 100Base-T Ethernet; WLAN Access Point and LAN interface
PACKAGING	Dual IATA compliant cases (22.5 kg + 19 kg)
WEIGHT	23 kg
ENVIRONMENTAL	-33° to +55°C
WIND LOADING	Survival 160 km/h / 100 mph

# **RELIABLE EXPLORER**



# PARADIGM SWARM

# **CATEGORY1 - MAN PORTABLE - MANUAL POINT**

The SWARM is an extremely compact, rugged, lightweight and discreet system. Complete with an integrated low-profile mount, the SWARM is ultra portable and extremely quick to deploy and stow.

# SETUP IN SECONDS

The complete terminal can be unpacked and assembled in 90 seconds and operational in 240 seconds - without the need for tools or any specialist training.

# **BGAN-LIKE SIMPLICITY**

Pointing is easy and intuitive using the built-in audio feedback and visual crosshairs of the PIM (Paradigm Interface Module) This straightforward operation has been developed by Paradigm to enable rapid deployment by nonskilled users.

# ULTRA-PORTABLE

The absence of heavy and cumbersome auto-acquire motors means the SWARM

is extremely compact and lightweight; the complete terminal packs into one case or backpack, which can be carried as airline hand luggage.

# **RUGGED AND DISCREET**

As a single integrated system, the SWARM is robust and able to withstand harsh environmental conditions.

It has comparable performance to a 65cm parabolic antenna and can be assembled and operated in half the height making it more

# wind.

DEPLOYMENT

Packaging options include Mil or black backpacks and rugged or soft cases. A tripod mount is available to replace the lowprofile mount if required.

# **CUSTOMISATION OPTIONS**

The SWARM is available in a variety of colours to suit operational requirements. The panel will support wideband Ka-Band and multiband options are available on request.

# WHO USES THE SWARM?

TERMINAL EFFICIENCY GROUP	Group 1
MODEM TYPE	iDirect CX751 GX Core Module; Integrated ODU
APERTURE	45cm flat panel (equivalent performance to a 65cm parabolic) 950 and Mil-Ka options
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
MOUNT TYPE	Transportable, low profile mount, Tool-Free Point
TERMINAL POINTING	Simplified and assisted Tool-Free Manual Point (Paradigm Interface Module)
POWER SOURCE	AC 90-264V
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based
EQUIPMENT INTERFACE	3 x 100Base-T Ethernet
PACKAGING	Single case standard. Rugged or soft options
WEIGHT	<14.5kg (W/O case)
ENVIRONMENTAL (OPERATIONAL)	-32° to +55°C
WIND LOADING	40mph (operational); 100mph (survival)

unobtrusive and less affected by

# VERSATILE PACKAGING AND

NGO's and Emergency Responders who need highly portable, easy to operate, proven satcom solutions with key 'first-in' capabilities. Likewise, Government and Military users who need to move fast and communicate even faster.



# **PARADIGN Connection** Category1-transportable - Manual Point

The CONNECT100T terminal is a medium-sized transportable G2X Land Certified solution designed to provide optimum performance on the G2X Land network. It is the best value G2X Land flyaway terminal available through a combination of hardware and airtime pricing.

The CONNECT100T provides portability and straightforward setup for short term use in demanding environments. The antenna with the Paradigm Interface Module (PIM), the Paradigm Tri-Mount and transit cases can be installed and deployed in virtually any global location that has a clear view to the satellite.

This quick deploy terminal assembles easily and will have you on the air and connected in 10 to 20 minutes - making phone calls, receiving data and transmitting your video.

The PIM provides easy pointing with its built-in visual crosshairs and audio feedback. The PIM visual cross-hairs are supplemented with a GUI interface that provides a step-bystep guide with additional visual indicators of signal strength and other useful terminal information.

Broadcasters, First Responders and Emergency Services, amongst others, will all benefit from the straightforward setup and large bandwidth which G2X Land and the CONNECT100T can provide.

The entire system is supplied in three transit cases for safe shipment and ease of deployment.

TERMINAL EFFICIENCY GROUP	Group 2
MODEM TYPE	iDirect CX751 GX Core Module; Integrated ODU
APERTURE	98cm (Single piece), Powder Coated Steel
BLOCK UPCONVERTER (BUC)	5W Transceiver
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
MOUNT TYPE	Transportable; lightweight deployable tripod
TERMINAL POINTING	Assisted Manual Point (Paradigm Interface Module)
POWER SOURCE	AC 90-264V
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	3 x 100Base-T Ethernet
PACKAGING	Three cases
WEIGHT	Case 1 (28 kg), Case 2 (29.5 kg), Case 3 (30 kg)
ENVIRONMENTAL (OPERATIONAL)	-32° to +55°C
WIND LOADING	40mph (operational); 80mph (survival)



# PARAIII **CONNECT SERIES CATEGORY1 - FIXED - MANUAL POINT**

Combining both optimal performance and functionality, the CONNECT fixed antennas are designed for extended usage in demanding environments and to provide the best possible performance on the Global Xpress network.

All options are offered as standard terminals, with relevant accessories. Installation manuals and a quick start guide are supplied and for ease of setup, a

tool kit with compass is provided.

Supplied with either a Kingpost, Wall Mount, Non-Penetrating Roof Mount or Paradigm ISO Container Mount, the antenna system can be installed and deployed in virtually any global location that has a clear view to the satellite.

Terminal M&C and modem operations are performed by the Indoor Paradigm Interface Module (PIM), which can

optionally be supplied as a Rack Mount unit. For scenarios where the modem is required to operate outside, Paradigm offers an Outdoor PIM option. To increase flexibility and adaptability, Paradigm offers alternative interface options to the standard 10/100BaseT, including fibre and wireless solutions. Cable options to suit specific installation environments can also be offered.

CONNECT 70	CONNECT 100	CONNE
Group 1	Group 2	Gro
	iDirect CX751 GX Core Module; IDU	
69cm, Powder Coated Steel	98cm, Powder Coated Steel	180cm, Glass fibre Sl
	5W Transceiver	
Со	mmercial Ka (Rx 19.2-20.2GHz, Tx 29-300	GHz)
Fixed; Opt	tions: Kingpost, Non Penetrating Mount,	ISO Corner
Ν	Aanual Point (Spectrum Analyser require	d)
	AC 90-264V	
	PC web-based interface	
	3 x 100Base-T Ethernet	
	Freight packaging	
12kg (packaged)	22kg (packaged)	109kg (not inclu
	-25 to 55 Deg Celsius	
50mph (operational); 125mph (survival)	40mph (operational); 80mph (survival)	50mph (operational
	Group 1 69cm, Powder Coated Steel Con Fixed; Opt M 12kg (packaged)	Group 1Group 2iDirect CX751 GX Core Module; IDU69cm, Powder Coated Steel98cm, Powder Coated Steel5W TransceiverCommercial Ka (Rx 19.2-20.2GHz, Tx 29-300)Fixed; Options: Kingpost, Non Penetrating Mount,Manual Point (Spectrum Analyser requireAC 90-264VPC web-based interface3 x 100Base-T EthernetFreight packaging12kg (packaged)22kg (packaged)-25 to 55 Deg Celsius





# CONNECT 100

The CONNECT100 provides the best possible performance on the Global Xpress network and meets the GX sweet spot for price and performance.



The CONNECT180 is ideal for applications demanding very high availability and very high bandwidth. It offers the lowest cost airtime on the Global Xpress network.

**NECT 180** 

roup 4

e reinforced polyester SMC

CONNECT70 The CONNECT70 is suitable for discreet installation and where

space is limited.

luding post/mount)

al); 125mph (survival)









# **L3 HARRIS PANTHER II** Category 5 - Man Portable - Manual Point

Whether the need is combat support, intelligence, executive travel, special missions or homeland security, the Panther™ VSAT from L-3 GCS provides high-speed data communications for Internet, VPN connectivity and video transmission. This highly rugged VSAT manpack is lightweight, highly portable and offers simplistic pointing, fine-tune adjustments and control capabilities via visual indicators on the front panel and an embedded, web-based GUI. This allows for easy, accurate, and quick

acquisition without bulky motors, drive systems or complex test equipment.

The Panther<sup>™</sup> VSAT is available in three frequency bands; X, Ku and Ka. A complete single band system is designed to be packed/carried in a 'rucksack' or airline checkable case. Optional ancillary RF kits are available to allow the user to quickly change from band to band without the need for an additional terminal.

TERMINAL EFFICIENCY GROUP	1, 2
MODEM TYPE	iDirect 950mp core module
APERTURE	Interchangeable petals, 60 and 96 cm
BLOCK UPCONVERTER (BUC)	4W
RF BAND	Military Ka Only (Rx 20.2-21.2 GHz Tx 30-31 GHz); WGS, Approved Wideband Ka (Rx 19.2-21.2GHz, Tx 29-31 GHz); WGS, Approval Pending
MOUNT TYPE	Transportable, Manual Point
TERMINAL POINTING	Auto or Manual Pointing / Assisted Manual Point (L3 ViewSat)
POWER SOURCE	AC 90-264V; DC 18-48V; Battery Options Available
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	2 x 100BaseT Ethernet
PACKAGING	Single IATA compliant case (29.5kg)
WEIGHT	19.5kg
ENVIRONMENTAL	-32 to 50 Deg Celsius
WIND LOADING	Operational: 25mph (unanchored), 40mph (anchored)



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# DATAPATH CCT120-GX CATEGORY 5 - TRANPORTABLE - AUTO POINT

# FROM CASE TO CONNECTED IN MINUTES

The quick-deploy systems offer automated satellite acquisition with motorized antenna pointing and optimisation with minimal configuration necessary in the field. With no tools required and oneperson operation, the CCT system will be out of its case and connected in 5-10 minutes.

### COMMON MODULAR Architecture

Interchangeable modules allow you to access non-LX services, LX Lease services to customise the terminal for mission, portability, speed and budget and subscription managed services. Maximize your investment and adapt to your full spectrum of future needs by changing key characteristics of your CCT system for different frequency bands, power levels and modem types. With plug-and-play usability, the built-in monitor and control software will automatically recognize the newly connected module and reconfigure the necessary settings without user intervention.

### DURABLE MILITARY GRADE System

The CCT12O-GX is constructed of rugged materials to withstand any condition and is tightly sealed to keep out sand, dust and water. The antenna systems are rigorously tested to surpass the toughest environments and standards and are compliant to military standards (MIL-STD-810F) and have ARSTRAT (WGS) Certification. The CCT12O-GX is CE Certified according to 1999/5/ EC RTTE and 2006/42/EC Machinery Directives.

# HIGHLY-RELIABLE TRANSMISSION

Two-wire serial bus for Controller Area Networking provides hightransmission reliability, a high degree of real-time capability and the ability to function in a difficult electrical environment.

# SATCOM SECURITY

Three levels of password-protected access allow for various user types and skills, from operator-only access to full access for configuration of files and technical monitoring.

# CUSTOM PACKAGING

Different packaging solutions are available including courier case, IATA case, backpack and a softcase options.



TERMINAL EFFICIENCY	Group 2
MODEM TYPE	iDirect CX751 GX Core Module (Integrated ODU)
APERTURE	1.2m x 0.84m Gregorian dual offset antenna
BLOCK UPCONVERTER (BUC)	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz) Military Ka-band (Rx 20.2-21.2 GHz, Tx 30-31 GHz) RF kit available for GX Lease Milsatcom use
TERMINAL POINTING	Auto Acquire
POWER SOURCE	85-265 VAC (45-66Hz)
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	3 x 100BaseT Ethernet
PACKAGING	IATA Compliant backpack/transit case (95 x 51 x 48cm)
WEIGHT	53.7kg (in transit case)
ENVIRONMENTAL	-32° to +55° C
WIND LOADING	45mph



and

# TAMPA MICROWAVE NANPACK

# **CATEGORY 5 - MAN PORTABLE - MANUAL POINT**

Specifically designed from the ground up for the dismounted soldier or first responder. Built to be airdropped, jumped or carried and then operated in the world's most austere environments for extended periods

# EASY TO USE

The auto-assist display provides "BGAN like"setup in less than 10 minutes by minimally trained personnel.

# HIGHLY PORTABLE

The design and packaging of the TMKa850MP-65 Facilitates one man setup and operation the backpack fits in airline overhead compartments and the hard case is airline checkable.

## RELIABLE

No fans or filters make this a very reliable design that eliminates cooling fans and filter maintenance.

# VERSATILE

Quick change between Ka, X and Kuband feeds with no tools. An optional dual BB 2590 battery and charger are available

# MILITARY STANDARDS

Purpose built and tested for tactical environments to MIL-STD 810G. Mutlienclave networking devices with embedded Cisco routing

Mutli-enclave networking devices with embedded Cisco routing can be provided as an optional extra alongside this terminal if required

TERMINAL EFFICIENCY GROUP	Coming Soon
MODEM TYPE	iDirect 950mp core module
APERTURE	65cm, Segmented Carbon Fiber
<b>BLOCK UPCONVERTER (BUC)</b>	5W XCVR
RF BAND	Wideband Ka (Rx 19.7-20.7 and Tx 29.5 - 30.5); WGS, Approval Pending
MOUNT TYPE	Transportable Manual Point
TERMINAL POINTING	Assisted Manual Point (TM Acquisition Wizard)
POWER SOURCE	AC 85-265V; DC 12-36V; Battery Options Available
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	2 x 100BaseT Ethernet
PACKAGING	Single Case (Soft and Hard case options)
WEIGHT	12.5k (w/o case)
ENVIRONMENTAL	-20 to 55 Deg Celsius
WIND LOADING	35mph (Operational); 60mph (Survival)





# GIGASAT ULV MICROVSAT

### **CATEGORY1 - MAN PORTABLE - MANUAL POINT** POWER The ULV MicroVSAT is designed

to meet todays most stringent Size, Weight and Power (SWaP) and enhanced Performance requirements.

### SIZE, WEIGHT AND SPEED OF DEPLOYMENT

The ULV is a Tri-Band (X, Ku & Ka) UltraLite VSAT that can be carried-on any Airline carrier; at 45 Linear Inches (114cm) and weighing less than 25lbs (11kgs).

The ULV's leading-edge ergonomic, carbon fibre composite design means that the terminal can be rapidly deployed in less than 5 minutes, with no tools, in all environments (MIL-STD-810G certified).

The ULV can operate with our integrated battery power system on BB-2260, BA5590, BB5590 or equivalent. The terminal can operate with a continuous runtime of 10 to 12 hours with the iDirect Keyline Feature enabled.

# PERFORMANCE

The ULV utilizes an Offset Gregorian Antenna, which provides superb efficiencies and performance. The ULV is lighter and smaller that a traditional centre-fed parabolic terminal. The antenna is equivalent to a 0.65m; typical parabolic centrefed terminal.

A unique feature of this antenna is

its high EIRP Spectral Density limits which distinguishes this design from a centre-fed parabolic design by providing higher data rates than centre-fed VSAT systems.

The antenna efficiency and patterns allow maximum EIRP towards the satellite for higher bit rate capability with no back-off associated with less efficient systems.

The terminal is designed to be modem agnostic and can house a number of modem options including, but not limited to:

- iDirect e150mp
- iDirect 950mp (Velocity
- capable)
- Comtech DMD1050
- Romantis UHP-1000-CM

interfaces.

satellite.

- Hughes Hx variant
- Teledyne Paradise Q-Lite
- It is possible to bypass or omit an internal modem and connect an external modem using the L-band
- The terminal incorporates a simple pointing system using a highly intuitive Graphical User Interface to assist the user in pointing and peaking the antenna onto the chosen
- The embedded control board controls all functions of the terminal and allows external control and monitoring via Ethernet.



TERMINAL EFFICIENCY GROUP	Group 1
MODEM TYPE	iDirect CX751 GX Core Module; Integrated ODU (PIM) 950mp integration pending
APERTURE	Offset Gregorian with Segmented Reflector. Equiv to 65cm circular
BLOCK UPCONVERTER (BUC)	5W
RF BAND	PIM+GX LNB/BUC kit: Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz) 950 variant: Wideband Ka (Rx 19.2-21.2GHz, Tx 29-31 GHz); for GX Lease and Milsatcom Use
TERMINAL POINTING	Assisted Manual Point (Paradigm Interface Module until fully integrated)
POWER SOURCE	+18 to 36V DC. External battery (Option). Optional mains adapter (90 to 264V AC)
MANAGEMENT USER INTERFACE	Integrated external interface (IDU); PC web-based interface
EQUIPMENT INTERFACE	PIM: 3 x 100Base-T Ethernet; 950mp: 1x 100Base-T Ethernet
PACKAGING	Single Case (Soft and Hard case options)
WEIGHT	<25lbs (11kgs) excluding carry case (baseline config)
ENVIRONMENTAL	-20° to 55°C
WIND LOADING	30mph, gusting to 45mph, with anchors



# GETSAT MILLISATHONY

# **CATEGORY 5 - TRACKING - COTM** Fully ruggedised terminal that panel antenna te

Fully ruggedised terminal that is optimized for all applications, and is ideal for demanding environments, such as in helicopters, boats, and vehicles

Milli SAT H GX is type approved by Inmarsat for use with its Global Xpress Ka-band service. These micronised portable terminals leverage Get SAT's highly efficient flat panel antenna technologies and enable fully-autonomous operation to transmit and receive high bandwidth data rates.

Get SAT and Inmarsat have partnered to deliver the market's smallest and lightest communication-on-the-move terminals.

TERMINAL EFFICIENCY GROUP	Group 1
MODEM TYPE	iDirect CX751 GX Core Module (Integrated ODU)
APERTURE	25 x 27 cm (9.8 x 10.6")
<b>BLOCK UPCONVERTER (BUC)</b>	25W
RF BAND	Wideband Ka (Rx 19.7-20.7 and Tx 29.5 - 30.5); WGS, Approval Pending
TERMINAL POINTING	Tracking COTM, -8° to +90° elev, continuos 360° azimuth, <20 sec initial acq, <100ms re-acq
POWER SOURCE	16 - 48 VDC
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	LAN - Integrated managed switch
PACKAGING	Freight packaging
SYSTEM WEIGHT	Terminal: 14 kg (30 lb)
ENVIRONMENTAL (OPERATIONAL)	-40° to 60°C
WIND LOADING	Enclosed in radome







# GETSAT MILLISAT WGX CATEGORY1-TRACKING-COTM

Fully ruggedised terminal that is optimized for all applications, and is ideal for demanding environments, such as in helicopters, boats, and vehicles

MILLI SAT W GX is type approved by Inmarsat for use with its Global Xpress Ka-band service. These micronised portable terminals leverage Get SAT's highly efficient flat panel antenna technologies and enable fully-autonomous operation to transmit and receive high bandwidth data rates. Get SAT and Inmarsat have partnered to deliver the market's smallest and lightest communication-on-themove terminals.

MILLI SAT W GX, comprises a fully integrated (including BUC and Modem), fully ruggedised terminal that is optimized for all applications, and is ideal for demanding environments, such as in helicopters, boats, and vehicles.

TERMINAL EFFICIENCY GROUP	Group 1
MODEM TYPE	iDirect CX751 GX Core Module (Integrated ODU)
APERTURE	50 x 13.5cm (19.7 x 5.3")
BLOCK UPCONVERTER (BUC)	25W
RF BAND	Wideband Ka (Rx 19.7-20.7 and Tx 29.5 - 30.5); WGS, Approval Pending
TERMINAL POINTING	Tracking COTM, -8° to +90° elev, continuos 360° azimuth, <20 sec initial acq, <100ms re-acq
POWER SOURCE	16 - 48 VDC
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	LAN - Integrated managed switch
PACKAGING	Freight packaging
WEIGHT	17.3kg (38.14lb)
ENVIRONMENTAL	-40° to 60°C
WIND LOADING	Enclosed in radome





# **PARADIGN Hornet65** Category1 - Flyaway - Manual Point

The Hornet65 is a compactsized mobile Global Xpress Certified solution and comes supplied with the Paradigm Interface Module (PIM) for straightforward setup and pointing.

Combining performance and functionality, the Hornet65 provides access to the Global Xpress network in a lightweight and highly portable package.

With a precision machined Az/ El mount, a cutting-edge carbon fibre 4-piece reflector and an aluminium tripod, the Hornet65 is extremely lightweight and rugged. The complete terminal is quickly and easily deployed and stowed without the need for tools, enabling fast operation in demanding environments. The dual-offset antenna provides maximum efficiency and optimum radiation characteristics for improved data throughput and availability and the adjustable legs on the tripod provide a low profile and a wide operational footprint.

Very simple yet extremely accurate pointing is achieved using the Outdoor PIM's integrated pointing aid with its built-in visual cross-hairs and audio feedback. This can be supplemented by the web interface pointing page that provides a step-by-step guide with additional visual indicators of signal strength and other useful terminal information.

It is ideally suited for mobile use across diverse sectors including Emergency Response, Military and Media.

As standard, the terminal, PIM, tripod and all cabling are supplied in a custom-built pelicase. A soft backpack option is also available to meet extreme mobility demands for expeditionary and research missions.

TERMINAL EFFICIENCY GROUP	Group 1
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Integrated ODU
APERTURE	65cm, Segmented Carbon Fibre
<b>BLOCK UPCONVERTER (BUC)</b>	5W Transceiver
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
MOUNT TYPE	Transportable; Tripod, Manual Point
TERMINAL POINTING	Assisted Manual Point (Paradigm Interface Module)
POWER SOURCE	AC 90-264V
MANAGEMENT USER INTERFACE	Integrated external interface; PC web-based interface
EQUIPMENT INTERFACE	3 x 100Base-T Ethernet
PACKAGING	Single case standard (19.2kg unloaded, 32kg loaded); Two case solution for IATA compliance (14kg per case unloaded, each case <32kg loaded) available at additional cost
WEIGHT	19.2kg (w/o case)
ENVIRONMENTAL (OPERATIONAL)	-32° to +55°C
WIND LOADING	30mph (operational); 80mph (survival)



# PIN PARADIGM INTERFACE MODULE

# SIMPLE TO USE INTERFACE

Paradigm's PIM is an intelligent terminal control interface at the heart of the majority of Global Xpress land terminals.

It has been designed by Paradigm as a qualified and certified enabler for the introduction of new terminals and 'air interfaces' on the GX constellation. The PIM also simplifies the user experience, delivers the necessary service automation for operational set-up and provides a central unit for the integration and operation of satellite terminal hardware. The PIM controller provides an intuitive interface for the assimilated modem, baseband switching, assisted pointing and setup functions of a terminal and comes with a built-in visual crosshair and audio pointing device.

It is compact, weatherproof, rugged and low powered, providing an easily transported, reliable and flexible unit. The PIM provides a multitude of services to the end user - from smart auto-selecting AC or DC power interfacing (no external power brick required) to Power over Ethernet options for connected devices and VLAN data service setup and complete terminal management. As well as making pointing quick and simple for any user, PIMpowered terminals have a common operational experience which, in turn, reduces training requirements.

# THE PIM950

The PIM950 assimilates the iDirect 950mp modem to deliver additional network flexibility and intelligent operation for the user. It represents a single hardware solution which can enable CAT 1, CAT 4 and CAT 5 capability.

PIM950 terminals can operate on GX commercial Ka and Mil-Ka satellites. A PIM950 enabled terminal can operate into the Global Xpress infrastructure anywhere in the world, whilst also having the capability to access the user's own national MILSATCOM systems.

Paradigm's SWARM950 and the HORNET950 terminals already incorporate the PIM950 to provide Type Approved solutions. By adopting the PIM950, other terminals can also be enabled to provide the aforementioned capability.

# **MILITARY GRADE**

PIM950-enabled terminals can also offer military grade security over both commercial and military satellite frequencies with the ability to operate in TRANSEC mode with FIPS 140-2 encryption as required. The PIM950 unit is field-proven and industrialised to MIL-STD to meet the most rigorous military and government demands for mobile, tactical terminals providing security and always-on capabilities.





# KEYTERMINOLOGY

# TERMINAL EFFICIENCY GROUPS

Less than 1m diameter

1m up to but not including 1.8m diameter

1.8m and above

### **Aperture Size**

# **G2X LAND TERMINAL CATEGORIES**

G2X Land service terminals containing a GX iDirect Velocity Core Module operating in commercial Ka for Maritime, Aero & Land applications

A terminal that cannot be used on the G2X Land service, but can utilise GX Lease services as well as accessing MILSATCOM and/or COMSATCOM services

G2X Land compatible terminal which can also support GX Lease, MILSATCOM or COMSATCOM services through a software interface or via swapping of hardware elements





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