

#### INMARSAT GLOBAL GOVERNMENT **COMMUNICATIONS MADE CERTAIN**

# BROADBAND CONECTIVITY





# BROADBAND



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Inmarsat's maritime satellite connectivity is relied upon by governments around the world for operational communications and safety services at sea. With thousands of vessels choosing Inmarsat for global, secure simultaneous broadband data and voice solutions, we connect ship to shore regardless of position or conditions at sea.

FleetBroadband is our flagship seamless voice and broadband data service that provides cost-effective operational and crew communications, realtime weather updates, port

information, email and internet access and video conferencing.

Inmarsat's Assured Access lease arrangement gives a predefined group of mobile users or SIMs priority access and a guaranteed connectivity to the FleetBroadband service and Inmarsat-4 network resources for a known price and on an uncontended access plan.

In addition, Assured Access provides a highly reliable secure communications link to support a range of applications at sea.



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**Global Xpress is Inmarsat's new generation network of** global, high capacity satellites operating in the Ka-band and serving as a perfect compliment to the existing range of Inmarsat services provided in the L-band. Maritime crews must be ship. Thanks to Inmarsat, crews Users access Global Xpress using prepared to go anywhere, at a stay connected regardless of a variety of existing and planned conditions. government and commercial moment's notice. To conduct their missions, military forces maritime SATCOM terminals, Built from the ground up as a at sea, Coast Guard operations, including WGS terminals that worldwide satellite service, can take advantage of the special operations vessels and Global Xpress provides the best other maritime units depend service immediately. This gives coverage in the industry. This upon consistent satellite government customers the allows government customers performance that is unaffected flexibility of having a broad to quickly and cost-effectively by geographic changes. selection of terminals. augment the WGS system From its very beginning in 1979, whenever and wherever needed, Ka-band is especially well-Inmarsat has sought to improve through Inmarsat's leased or suited for optimal coverage subscription service. and consistent performance communications at sea. That's

vessels.

These ships often head into adverse weather environments, which means they require a dependable failover system should a powerful storm prove disruptive, or even if a signal gets blocked by a part of the

why the company is strongly positioned to support today's

Using Global Xpress' highcapacity, steerable spot beams, vessels on the move pass beamto-beam completely seamlessly, establishing continuous connections during missioncritical maritime operations. Additionally, only a minimal amount of time is required for satellite-to-satellite handoff.

along heavily travelled sea routes. Inmarsat's Global Xpress Ka-band service is backed up by FleetBroadband L-band over the Inmarsat-4 (I-4) satellite constellation, further guaranteeing global portability and consistent performance with high throughput and the industry's leading all-weather availability.

The redundancy introduced into Inmarsat's ground infrastructure ensures robust terrestrial links to support government communications. Global Xpress network infrastructure is built to the highest security standards, meeting the U.S. Mission Assurance Category (MAC) level III and correlating National Institute of Standards and Technology (NIST) accreditation standards, with secure gateways and encrypted satellite commanding. Our value-added partners make available further enhancements up to MAC level 1. Inmarsat employs a dedicated cyber security team; lands and routes traffic only through allied countries; and encrypts data and signaling to the highest standards.



# GIOBAL Spress Terminals

# COBHAM SALLOR 60GX CATEGORY1 - MARITIME - AUTO TRACKING

SAILOR 60 GX is a very small, lightweight and advanced maritime GX antenna, making it possible for smaller vessels to benefit from the Global Xpress maritime broadband Service

The unique composite/aluminium design of the SAILOR 60 GX keeps weight down while the wellproven SAILOR VSAT technology streamlines the deployment process and maximises operational uptime. Although it is a super light antenna, it has the ruggedness and reliability required of a professional maritime stabilised antenna system. Additionally, the low weight and compact form factor make it possible for smaller vessels to benefit from VSAT connectivity, when before it may not have been an option due to space available or difficulties and costs associated with the installation of larger, heavier antennas.

#### SUPER LIGHT, SUPER RUGGED

SAILOR 60 GX is built to withstand the toughest sea conditions and still deliver high bandwidth connectivity on the Global Xpress service. It is the fastest tracking antenna available in this size, with superior dynamic performance in all axes; roll, pitch and yaw. This high performance means that vessels more affected by rough seas can make the most of Global Xpress, as SAILOR 60 GX can maintain a link even in extreme conditions.

#### **A SIMPLE REVOLUTION IN VSAT** DEPLOYMENT

SAILOR 60 GX is delivered ready to install, with the included SAILOR GX Modem Unit (GMU) and SAILOR Antenna Control Unit (ACU) ensuring quality and reliability throughout the system. Installation is easy, thanks to a wealth of features and design details unique to the SAILOR VSAT technology platform. For instance, it features a single cable between antenna and below deck equipment for RF, power and data, while Automatic Azimuth Calibration and Automatic Cable Calibration enable unique One touch Commissioning. It also features Dynamic Motor Brakes inside the antenna, removing the

requirement for mechanical brake straps whilst ensuring the antenna is kept balanced in no-power situations, at sea or during transport.

#### **STREAMLINING REMOTE ACCESS AND DIAGNOSTICS**

TERMINAL EFFICIENCY	Group 1M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	65 cm / 25.6″
<b>BLOCK UPCONVERTER (BUC)</b>	5 Watt
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	110V-220V AC
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	1 x 100Base-T Ethernet
WEIGHT	ADU: 37 kg; BDU (ACU + GMU): 9 kg

Just like all other SAILOR VSAT systems, the SAILOR 60 GX is incredibly easy to manage; ensuring the best possible support is available anywhere in the world. Easy remote access and diagnostic features include monthly statistics logging, SNMP and built-in e-mail clients that automatically email historical logging of system performance.



### COBHAM **SAII NR 1NGY** CATEGORY1 - MARITIME - AUTO TRACKING

The SAILOR 100 GX is an advanced 3-axis stabilized Ka-band antenna system designed for the Inmarsat Global Xpress satellite network.

The SAILOR 100 GX is built to the same high quality and high performance that has made SAILOR a leading name in professional maritime communication equipment over decades. The SAILOR 100 GX is a direct development from the immensely successful SAILOR 900 VSAT antenna system, which has created a new industry standard through innovative design for ease-of-use, quick deployment and reliable operation.

#### A TOP PERFORMING GX SYSTEM

SAILOR 100 GX features advanced Tracking Receiver technology that enables it to verify the right satellite in less than a second. This unique feature, tried and tested in the benchmark SAILOR FleetBroadband systems, ensures quick satellite acquisition at start-up and reacquisition of the satellite, in case of temporary blockage, after bad weather or poor signal strength.

#### QUICK AND EASY TO DEPLOY

As with all SAILOR VSAT antenna systems, SAILOR 100 GX is light and compact. It uses a single cable

between antenna and below deck equipment for RF, power and data, while advanced features such as Automatic Azimuth Calibration (home flag) and Automatic Cable Calibration significantly reduce installation time further. The unique Global Xpress One Touch Commissioning feature completes the package, making SAILOR 100 GX incredibly easy to deploy.

#### **REMOTE ACCESS AND** DIAGNOSTICS

In order to offer the best support to system integrators, SAILOR 100 GX offers a number of features for remote access and remote diagnostics, including monthly statistics logging,

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#### **COMPATIBILITY AND TESTING**

SAILOR 100 GX ships with the original SAILOR GX Modem Unit (GMU), which works directly with SAILOR 500/250 FleetBroadband to form the cornerstone of the Inmarsat Fleet Xpress service. The system is designed and tested to the highest maritime shock and vibration requirements, IEC EN 60721 to ensure reliable service and the longest possible life at sea.

TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	103 cm / 40.6"
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	20 – 32 VDC (115/230 VAC)
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	1 x 100Base-T Ethernet
WEIGHT	Antenna: 126 Kgs. / 276 lbs. MXP: 4.5 kgs. / 10 lbs

aps and Syslog functionality. mote maintenance features ported by Cobham SATCOM's de network of On-board Centres.



# **FURUNO FV-110GX** Category1- Maritime - Auto tracking

The Furuno FV-110GX is an advanced 3-axis stabilized Ka-band antenna system designed for the Inmarsat Global Xpress satellite network.

The Furuno FV-110GX is built to the same high quality and high performance that has made Furuno a leading name in professional maritime communication equipment over decades.

#### A TOP PERFORMING GX System

Furuno FV-110GX features advanced Tracking Receiver technology that enables it to verify the right satellite in less than a second. This unique feature, ensures quick satellite acquisition at start-up and reacquisition of the satellite, in case of temporary blockage, after bad weather or poor signal strength.

#### QUICK AND EASY TO DEPLOY

The Furuno FV-110GX is light and compact. It uses a single cable between antenna and below deck equipment for RF, power and data, while advanced features such as Automatic Azimuth Calibration (home flag) and Automatic Cable Calibration significantly reduce installation time further. The unique Global Xpress One Touch Commissioning feature completes the package, making the Furuno FV-110GX incredibly easy to deploy.

#### REMOTE ACCESS AND DIAGNOSTICS

In order to offer the best support to system integrators, Furuno FV-110GX offers a number of features for remote access and remote diagnostics, including monthly statistics logging, SNMP traps and Syslog functionality.

#### COMPATIBILITY AND TESTING

The system is designed and tested to the highest maritime shock and vibration requirements, IEC EN 60721 to ensure reliable service and the longest possible life at sea.

TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	103 cm / 40.6"
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	100-240V (no DC input)
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	1 x 100Base-T Ethernet
WEIGHT	Antenna: 126 Kgs. / 276 lbs. MXP: 4.5 kgs. / 10 lbs



### **SEATEL 4012GX UPGRADE KIT** Category 1 - Maritime - Auto Tracking

The Cobham SATCOM Seatel 4012 kuband antenna system can be easily upgraded in the field to utilise Global Xpress

The Seatel 4012 is a widely used 3-Axis marine stabilised Ku-band antenna system which can be easily upgraded in the field in a few short steps to utilise Global Xpress.

The Seatel 4012GX is a highly integrated Ka-band system powered by integrated marine antenna (IMA) software. The specially engineered radome design of the 4012GX allows the system to achieve peak gains with both Ku and Ka-band networks.

Sea Tel 4012GX has an integrated control unit (ICU) that offers a single box integrated electronic control to maintain highly accurate and efficient antenna pointing.

The 4012GX is fully optimized to meet the demanding maritime communication needs of the 21st century. The system is easy to install and designed to meet some of the toughest shock and vibration specifications, such as IEC 60721.

The Sea Tel 4012GX has extended web based secured user interface, builtin remote management capabilities and offers integration into network management systems through its Media Xchange Point (MXP).

TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	41.7" (106 cm)
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Auto Acquire and tracking
POWER SOURCE	100V-240V AC
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	4 x 100Base-T Ethernet
WEIGHT	152 kg



# INTELLIAN GX60 Category1- Maritime - Autotracking

The GX60 is a compact maritime terminal which is both easy to install and use, making it possible for smaller vessels to benefit from the Global Xpress maritime broadband service

#### MARITIME CONNECTIVITY MADE SIMPLE

Intellian and Inmarsat have partnered to deliver a high speed connectivity solution as easy to adopt as Fleet Broadband. Easy, standardized equipment, single global network, intuitive user interface.

#### ALL IN ONE BELOW DECK TERMINAL

Features a built in GX modem for simplified installation and reduced overall space requirements. Wi-Fi enabled for wireless management via Intellian's Aptus PC or Mobile remote management application. Built in 8 Port Ethernet Switch provides VLAN capability, all in a single, 19" rack type 1U case. Integrated AC Power Supply (no additional components needed) and front panel touch display with easy navigation buttons.

#### INDUSTRY-LEADING Standards compliance

The GX Series meets CE and FCC regulatory compliances as well as EN60945, EN60950, R&TTE and FCC Part 15. They are also designed to meet MIL-STD 167.

#### FROM IN PORT TO ONLINE IN 4 Hours

Quick-Deploy packaging, pre-slung lifting straps, Intellian's Aptus Graphical User Interface and a single, integrated Below Deck Terminal (BDT) enable fast and easy installation of the GX Series. Captains and Fleet managers can count on quick, pain-free installation to get vessels connected and back out to sea swiftly.

#### ONE TOUCH COMMISSIONING

Goes from power-up to network connectivity in 30 seconds. No calls to the Network Operations Center (NOC) required. No post installation configuration (option file) needed. System is pre-configured for easy, rapid deployment.

#### FB250 AND 500 Compatibility

All Intellian systems feature an Intellian LAN function, enabling all onboard devices to be easily networked out of the box with no additional hardware. For the ultimate in service reliability, or for out of band management solutions, the GX Series easily integrates with Intellian's FB250 or 500 terminals.





TERMINAL EFFICIENCY	Group 1M
TYPE APPROVAL	Yes
MODEM TYPE	Direct CX751 GX Core Module; Rack-mounted Below Deck Terminal
APERTURE	65cm (25.59'')
<b>BLOCK UPCONVERTER (BUC)</b>	5 Watt
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	AC 100 - 240V, 50/60Hz, 4A
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	8 x 100Base-T Ethernet, WI-FI
WEIGHT	83.3 Kg (184 lbs).



# INTELLIAN **GX100 CATEGORY1 - MARITIME - AUTO POINT**

The GX100 is a maritime stabilized terminal which is both easy to install and use, making it easy to access the Global Xpress maritime broadband service

#### MARITIME CONNECTIVITY MADE SIMPLE

Intellian and Inmarsat have partnered to deliver a high speed connectivity solution as easy to adopt as Fleet Broadband. Easy, standardized equipment., single global network, intuitive user interface.

#### **ALL IN ONE BELOW DECK** TERMINAL

Features a built in GX modem for simplified installation and reduced overall space requirements. Wi-Fi enabled for wireless management via Intellian's Aptus PC or Mobile remote management application. Built in 8 Port Ethernet Switch provides VLAN capability, all in a single, 19" rack type 1U case. Integrated AC Power Supply (no additional components needed) and front panel touch display with easy navigation buttons.

#### INDUSTRY-LEADING **STANDARDS COMPLIANCE**

The GX Series meets CE and FCC regulatory compliances as well as EN60945, EN60950, R&TTE and FCC Part 15. They are also designed to meet MIL-STD 167.

#### ONE TOUCH COMMISSIONING

Goes from power-up to network connectivity in 30 seconds. No calls to the Network Operations Center required. No post installation configuration needed. System is pre-configured for easy, rapid deployment.

#### FB250 - 500 COMPATIBILITY

All Intellian systems feature an Intellian LAN function, enabling all onboard devices to be easily networked out of the box with no additional hardware. For the ultimate in service reliability, or for out of band management solutions, the GX Series easily integrates with Intellian's FB250 or 500 terminals.





TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	1m (39.37'')
<b>BLOCK UPCONVERTER (BUC)</b>	5 Watt
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	AC 100 - 240V, 50/60Hz, 4A
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	8 x 100Base-T Ethernet, WI-FI
WEIGHT	128 Kg (282 lbs).

# INTELLIAN V100-PM-GXUPGRADEKIT CATEGORY1 - MARITIME - AUTO TRACKING

The robust, affordable, plug and play V100 PM GX conversion kit can easily and quickly convert the 1m Ku-band V100 to a GX100 Ka-band GX system, without the need for specialist service engineers, in just 10 minutes.

The upgrade kit increases your return on investment with its plug and play conversion kit to enable a smooth upgrade path from Ku-band to the GX service without replacing the reflector or the radome. The precision moulded carbon fiber reflector and frequency tuned radome are each optimised to deliver superior RF performance in both Ku and Ka-band. The smart design of the convertible RF package means the system can be upgraded from Ku-band to ready

to use on GX in 10 minutes, without requiring a specialized service engineer.

#### SIMPLE CONVERSION FROM KU-BAND TO GX

The V100 (PM) GX can be easily and quickly converted from a Ku-band system to a Ka-band GX system with an integrated RF module consisting of the BUC and LNB. The BUC and LNB assembly is attached to the rear side of the reflector in a simple process, with no need to balance the system after the conversion. The Kuband feed can be easily and swiftly replaced with the Ka-band feed which is included in the GX Conversion kit

#### INTELLIAN V100-PM-GX **KA-BAND RF ASSEMBLY CONVERSION KIT**

This pre-engineered RF kit provides a simple way for Intellian V100 (PM) GX marine VSAT owners and operators to switch from standard Ku-Band frequencies to high-speed Inmarsat Global Xpress Ka-band services. As an all-inclusive RF upgrade package, this kit contains all required antenna mounted equipment including a high performance feed, Ka BUC and (2) Ka LNBs.





TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	103cm / 41"
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	Power Requirement 100-240V AC, 50-60 Hz, 1A
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	8 x 100Base-T Ethernet, WI-FI
WEIGHT	Antenna: 128kg / 282lbs. ACU: 3.5kg / 7.7lbs



#### **GX CONVERSION KIT INCLUDES**

- Ka-band feed assembly
- Ka-band BUC & LNB assembly
- Below Deck Unit (BDE) integrated with Core Module
- All components are shipped securely in a Pelican case

#### KU AND KA-BAND OPTIMIZED REFLECTOR

The V100 (PM) GX is designed and engineered to operate on Ku and Ka-bands while maximizing the RF performance on both bands. The highgain, highly efficient reflector of the V100 (PM) GX is capable of receiving on either Ku or Ka-bands, eliminating the need to replace the reflector when switching between bands.

#### FREQUENCY TUNED RADOME

To ensure efficient operations for both Ku-band VSAT and Ka-band the radome performance is maximized with an optimized radome design that

enhances both the Ka-band and Kuband system performance.

#### **GYRO-FREE SATELLITE SEARCH** CAPABILITY

Intellian's new generation Gyro-free satellite search function enables the V100 (PM) GX to acquire and lock onto the satellite without requiring a separate input from the ship's gyrocompass. In addition, the V100 (PM) GX supports low elevation angle (-20°) capability to guarantee reliable connection at extremely high latitude.

#### **4 STEP CONVERSION**



- 1. Remove the Ku-band feed by removing 4 bolts.
- 2. Remove the Ku-band BUC/LNB assembly by taking 4 bolts out and attach the Ka-band BUC/LNB assembly by inserting 4 bolts.
- 3. Attach the Ka-band feed by inserting 4 bolts.
- 4. Use the common connector both for Ku-band BUC/LNB assembly and Ka-band BUC/LNB assembly.







# **INTELLIAN GX100PM**CATEGORY1- MARITIME - AUTO TRACKING

Purpose built to the exacting standards of the Military and Government user, while maintaining the benefits of a Commercial off the Shelf (COTS) product line including superior usability.

#### DESIGNED FOR MILITARY APPLICATIONS

The military market requires a solution which provides excellent performance in a rugged, purposebuilt design at a COTS price point. The GX100PM is specially designed for use in military applications meeting the required standards including FCC, ETSI, MIL-STD-167 and MIL-STD 461.

#### OPTIMIZED REFLECTOR FOR KU or ka-band

The GX100PM is designed and engineered to operate on both Ku and Ka-band. The reflector of the GX100PM is capable of handling either Ku or Ka-band without the need to replace the reflector. The 1m reflector for the GX100PM satisfies EIRP and G/T performance of both Ku and Ka-band. The GX100PM supports a low elevation angle (-20°) capability to guarantee reliable connection at extremely high latitudes.

The smart design of the convertible RF package means the system can be upgraded from Ku-band to ready to use on GX in 10 minutes, without requiring a specialized service engineer.

#### **BALANCE-FREE INSTALLATION**

The GX100PM is equipped with an integrated RF module consisting of the BUC and LNB. This BUC and LNB mounting assembly is attached to the rear side of the reflector in order to support easy conversion and balancefree installation.

#### ALL THE BENEFITS OF THE Commercial GX products, But with military features

The GX100PM builds upon the successful GX100/v100 platform and offers a lighter weight Above Decks Unit despite employing a MIL-STD-167-1A compliant dual damping structure to endure tough sea conditions.

TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	1m (39.37")
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	100V to 240V AC (300VA)
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	8 x 100Base-T Ethernet, Wi-Fi
WEIGHT	113kg (249lbs)

The GX100PM's seamless endto-end solution offers hasslefree installation, operation, and maintenance. The GX100PM provides a newly developed, graphic-based antenna remote control program with an additional Software Development Kit (SDK), allowing the NOC or service center to integrate antenna monitoring and control into its existing network management systems in an easier, user friendly and convenient manner.





# JUE-60GX

#### CATEGORY 1 - MARITIME - AUTO TRACKING

The JRC JUE-60GX is a diverse and flexible stabilised maritime antenna and brings Global Xpress to many different types of vessels

#### COMPATIBILITY

The JUE-60GX can be paired with the L-band resilience of JRC's FleetBroadband family products - JUE-251 or JUE-501 and a Network Service Device to take your operational efficiency to the next level, providing unsurpassed reliability, even with heavy precipitation and antenna blockage.

#### SMALL, LIGHTWEIGHT, **DURABLE ANTENNA**

The JUE-60GX is ultra strong, yet extremely lightweight and installation is quick and easy. With such a lightweight antenna the vessel's downtime is minimal, with no crane necessary for installation, and the onboard setup will be just as simple as it is today for FleetBroadband.

#### **KEEPING ON TRACK**

By keeping as much weight on and around the base plate, the antenna's centre of gravity remains low which greatly assists in stable communications under harsh operating conditions.

#### CORE MODULE

The JRC JUE-60GX Global Xpress solution core module is placed in the below deck terminal. For optimal connectivity, two separate coax cables with a maximum length of 60 meters are used for transmitting and receiving signals.

#### FIT, AND FORGET

The JUE-60GX is designed to be flexible and uses web-based user interfaces similar to the JRC FleetBroadband solution. It is designed to be mounted in a 19-inch rack and supports the JRC proprietary Remote Maintenance System (RMS) as standard - forming one of the core elements of JRC's customer operations support philosophy.

TERMINAL EFFICIENCY	Group 1M
TYPE APPROVAL	Yes
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	65cm
<b>BLOCK UPCONVERTER (BUC)</b>	5W
RF BAND	Commercial Ka (Rx 19.2-20.2GHz, Tx 29-30GHz)
TERMINAL POINTING	Automatic - with or without Gyro/GPS Compass input
POWER SOURCE	100V to 240V AC (300VA)
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	2 x 100Base-T Ethernet
WEIGHT	Antenna: 46kg. Below Deck Terminal: 6.5kg

applications.

#### GX AND JRC, IN THE CLOUD

JRC is developing its first and very own 'shared space' for their users, aimed at economy, safety and welfare. Global Xpress will be a central part of the jMarine Cloud™ service to enable advanced



Note: use of this Antenan terminal for foreign military operation is subject to JRC confirmation



# EN SOLUTIONS COBRA-100-M3-K25-X50

#### CATEGORY 5 - MARITIME - AUTO TRACKING

Designed specifically for the Government market, the Cobra maritime satellite terminal enables Global Xpress subscription services and Milsatcom services on the same platform

Initially designed for the Australian Defence Force to operate on WGS satellites and subsequently tailored for civilian use in emergency services applications, the Cobra affordably combines robust design and MIL-STD quality.

#### **ULTIMATE FLEXIBILITY**

The Cobra helps pair Global Xpress with other government networks on a single platform. The terminal can electronically switch between GX, X-band and Military Ka-band operation.

#### FAST RE-ACQUIRE TIME

Fast re-acquisition after obstruction due to use of an innovative gyro-lock mode that predicts satellite direction during signal loss and readies the unit for immedite operation after the satellite reappears into view.

#### CONTINUOUS COVERAGE OVER All Ranges of Motion

The terminal has a three-axis gimbal mount system, eliminating keyhole effect and sync losses when the satellite is close to overhead and where other systems need to rotate violently to maintain direction

The Cobra's high torque direct drive motors provides the highest performing tracking system of any GX maritime terminal and makes it an excellent choice for high sea state operations.

#### REDUCED MAINTENANCE AND POWER CONSUMPTION

The Cobra uses high life, sealed brushless motors and a balanced inertial system mass to reduce internal movement of the antenna and reduce power consumption

#### MIL-STD COMPLIANT

Tested in accordance to MIL-STD-810G CN1, MIL-STD-167-1A and IEC 60945:2002.

TERMINAL EFFICIENCY	Group 2M
TYPE APPROVAL	Certified
MODEM TYPE	iDirect CX751 GX Core Module; Rack-mounted Below Deck Unit
APERTURE	1m
BLOCK UPCONVERTER (BUC)	25W
RF BAND	Wideband Ka-band (Rx 19.2-21.2GHz, Tx 29-31GHz) X-band (Rx7.25 - 7.75GHz, Tx 7.9 - 8.4GHz)
TERMINAL POINTING	Auto tracking - embedded Inertial Navigation Unit (INU) and Gyros
POWER SOURCE	90-264 V AC
MANAGEMENT USER INTERFACE	PC web-based interface
EQUIPMENT INTERFACE	8 x 100Base-T Ethernet, WI-FI
WEIGHT	<190kg













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