

JUE-250 FleetBroadband

JRC



— introducing pioneering solutions for the next-generation FleetBroadband communication service

Upgrade path™ from JRC Fleet 33
Reliable broadband data and voice
Dedicated compact solution
Cost-effective performance and flexibility
Takes your vessel into future standards

JRC *Japan Radio Co., Ltd.*

JUE-250 FleetBroadband – performance features

Unique features

- The JUE-250, a pioneering next-generation satellite communication terminal, delivers the most advanced maritime service available, fully contributing to the operational efficiency of vessel and crew.

email and webmail



real-time electronic chart
and weather updates



remote company intranet
and internet access



secure communications



large file transfer



crew communications



vessel/engine telemetry



sms and instant messaging



videoconferencing



store and forward video



Meet the challenges with FleetBroadband

FleetBroadband gives you faster, more cost-effective access to broadband services, offering seafarers an affordable voice and data option, while providing your vessel with a coverage area of millions of square miles. It is more powerful than any other solution on the market, allowing you to have the capability to reach peak performance and gain a competitive edge.

Simultaneous access

This next generation solution offers an unparalleled range of services to suit all types and tonnages of vessels. The service provides simultaneous voice and broadband data through a compact antenna, allowing you to run online operation systems, whilst still having access to email, intranet and voice calls – a significant improvement to both operational and social use.

Cost-effective service

With FleetBroadband, performance and flexibility do not come at a high price. Existing JRC Fleet 33 customers can utilise our dedicated upgrade path to make global voice and broadband data more accessible than ever before. You will achieve greater operational efficiencies and significantly reduce the cost of both business and crew communications.

Optimal connectivity

Enhanced connectivity, based on 3G standards, provides constant, simultaneous access to voice and high-speed data in a compact solution, designed specifically for the marine environment.

Standard IP for email, internet and intranet access via a secure VPN connection, at speeds up to 284 kbps and **streaming IP guaranteed data rates** up to 128 kbps.

JUE-250 FleetBroadband

– developed for maximum ease of use

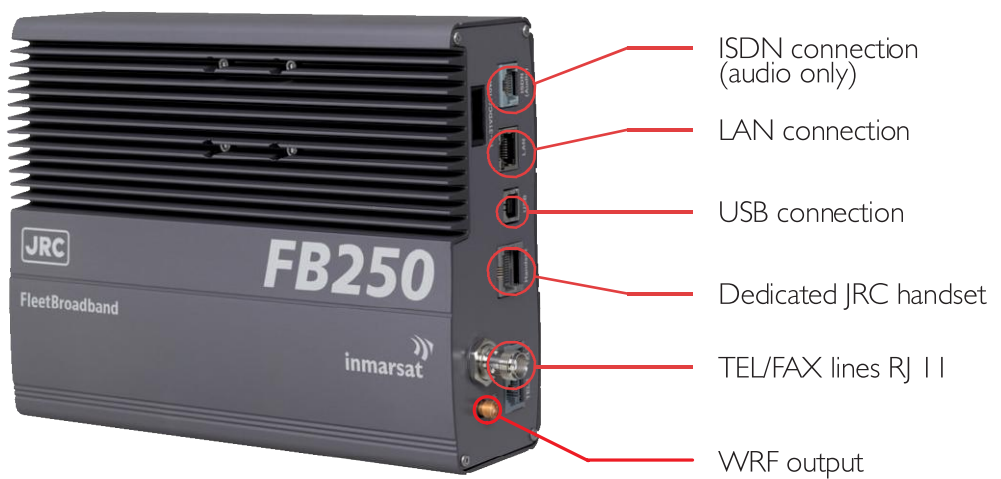
Upgrade path™ – exclusively by JRC

The existing JUE-33 Inmarsat Fleet 33 is fully compatible and specifically designed to meet the industry-changing FleetBroadband services. This makes it necessary to replace only the main unit rather than obtaining a completely new system. This unique, cost-effective feature will provide seamless ocean coverage from 76° North to 76° South – all via a single main unit upgrade.

Flexible interfacing

JRC's JUE-250 terminal has been developed for maximum flexibility. It features a reliable industry standard interfacing field that can be integrated with navigational equipment. No gyro or GPS input is required and by having JRC's proven no cable unwrap system integrated, operational efficiency is guaranteed.

This below deck unit enables users to have optimal connectivity no matter what the conditions or your position at sea.



JRC StarNetwork™

JRC has been providing sales and support of products since 1915. Today, JRC offers comprehensive assistance through its organisation, in partnership with a worldwide StarNetwork™ of over 270 fully trained and qualified partners and agents, assisting you 24 hours a day, 7 days a week and 365 days a year.



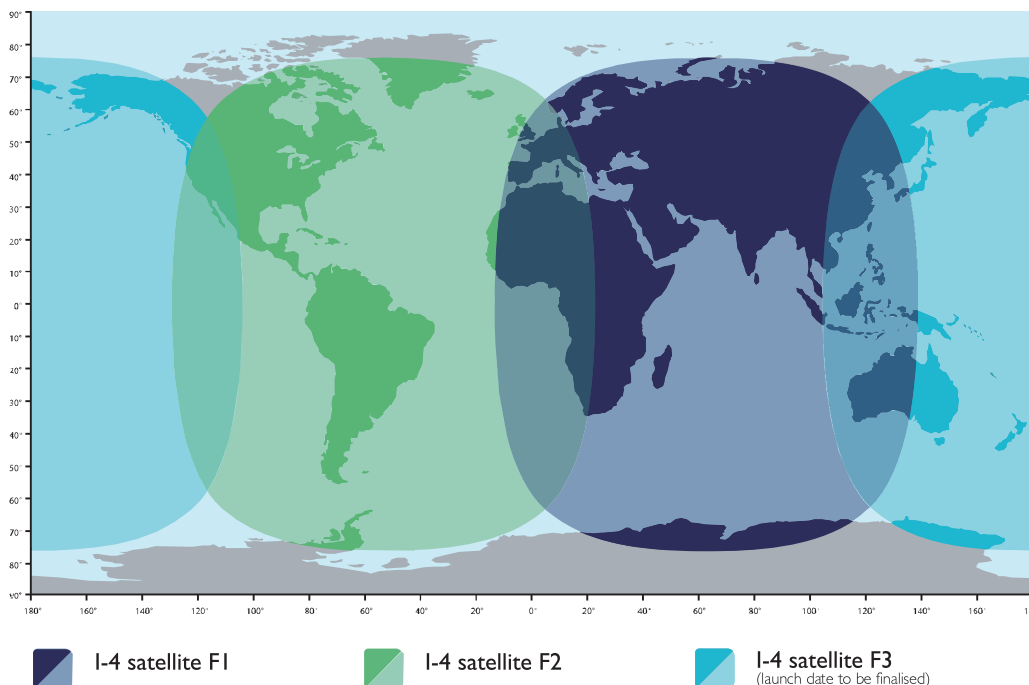
ct for keeping in touch with home

JUE-250 FleetBroadband – coverage and flexibility

Inmarsat and JRC, strong together

Inmarsat has been the leading communication provider of satellite services for nearly 30 years, playing an integral role in the lives of seafarers. The Inmarsat Fleet services and JRC terminals have become the standard for deep-sea ships. Now, Inmarsat enhances its maritime portfolio with the launch of FleetBroadband and together with JRC's next-generation solution we can deliver reliable communications and safety services, contributing to the operational efficiency of vessel and crew.

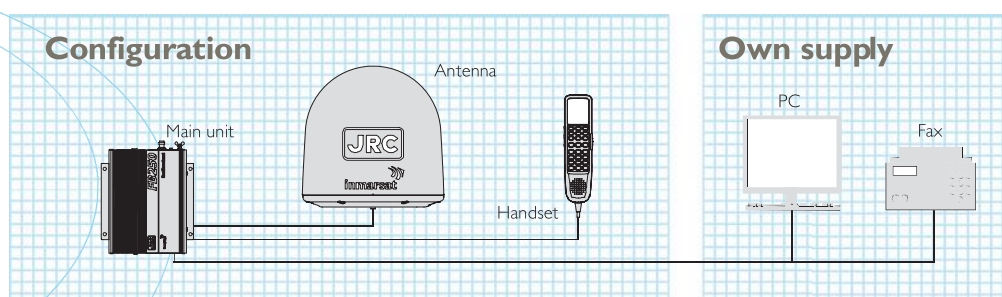
● FleetBroadband coverage



The map depicts Inmarsat's expectations of coverage, but does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions. The launch date of the F-3 satellite will be determined in due course. FleetBroadband coverage May 2007.

Total system flexibility

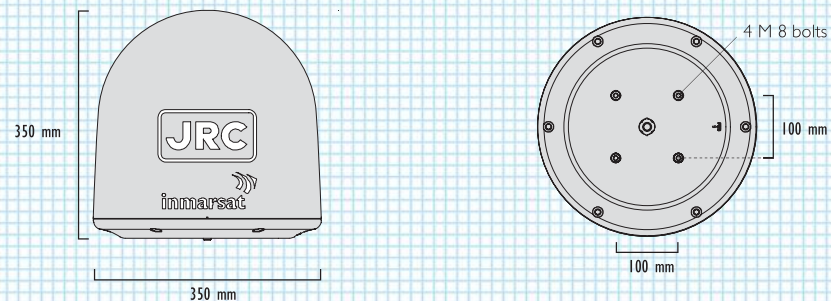
JRC's JUE-250 is a dedicated compact solution, which shares the same simple configuration as the JUE-33 Fleet 33, allowing for an easy setup. This concept also reduces the installation costs as only a single coax cable will be used between the antenna and the below deck unit. This next-generation service is for the new-build and retrofit markets and is available as a full system or an upgrade path™. It is also possible to connect your own supplied hardware, such as a computer and fax.



JUE-250 FleetBroadband – dimensions and mass

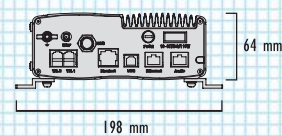
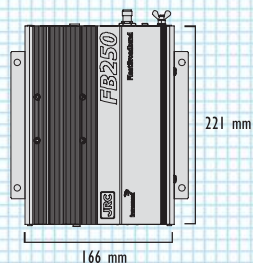
Dimension drawings - Antenna

GSC-451 MASS 7,4 kg

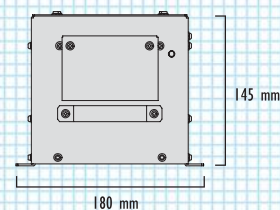
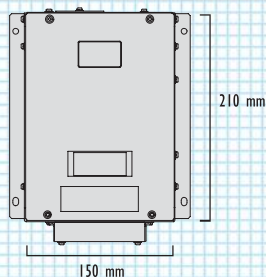


Dimension drawings - Main unit, Power supply unit

GSC-452 MASS 4 kg



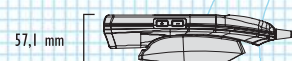
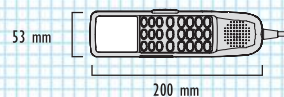
NBD-577C¹ MASS 5,4 kg



¹optional

Dimension drawings - Handset

NQW-248 MASS 0,5 kg



JUE-250 FleetBroadband

– specifications

Model		JUE-250
Inmarsat type approved		✓
Frequency		
	Transmit	1626.5MHz - 1660.5MHz
	Receive	1525.0MHz - 1559.0MHz
Communication		
	Voice	4kbps and digital 3.1kHz audio
	Fax	group 3 fax via 3.1kHz audio
	Data	standard IP : 284kbps / streaming IP : 128kbps
	SMS	standard 3G (up to 160 characters)
Antenna		
	Type	flat diameter 30cm (approx)
	Polarisation	right-hand circular
	Beam width	30° at 3dB down
	Pointing	electrical beam tracking with 3-axis stabilisation
	Enclosure	AES radome (diameter 0.35m)
Primary power		
	Voltage	DC 24V (-20% +30%)
	Consumption	[120VA] max
Environmental conditions		
	Ambient condition	temperature : antenna -25°C +55°C temperature: main unit -15°C +55°C
	Relative humidity	+40°C up to 95%
	Icing	up to 25mm
	Precipitation	up to 100mm / hour
	Wind	up to 100 knots in operation up to 120 knots in survival
	Vibration	at 2-13.2Hz amplitude $\pm 1\text{mm} \pm 10\%$ at 13.2-100Hz max acceleration 7m/s^2
Coverage		
	Azimuth	360°
	Elevation	5° to 90°
Ship's motion		
	Roll	$\pm 30^\circ / 8\text{ sec}$
	Pitch	$\pm 10^\circ / 6\text{ sec}$
	Yaw	$\pm 8^\circ / 50\text{ sec}$
	Surge	$\pm 0.2^\circ$
	Sway	$\pm 0.2^\circ$
	Heave	$\pm 0.5^\circ$
	Turning rate	6°/sec
	Headway	30 knots
Tuning		1.25kHz
E.I.R.P.		+15.1dBW +1 / -2dB
G/T		-15.5dB / K or more
Optional items		
Power supply unit		NBD-577C (AC 110 / 220V to DC 24V)

• Specifications may be subject to change without notice.

For further information, contact:



Since 1915

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