JUE-501
FleetBroadband

JRC

inmarsat

– with the new JRC JUE-501 FleetBroadband FB500 onboard communication has never been this fast

Proven above deck equipment (ADE) design

Ready for all Inmarsat FB services

Advanced integrated web interface

Single coax installation

Wide range of interfaces as standard

JRC *Japan Radio Co., Ltd.*

Features

The JUE-501, the latest-generation maritime communication solution from JRC, is compactly designed, easy to install and puts high-speed connectivity right at your fingertips.

Proven above deck equipment (ADE) design

Our company's long experience of antenna design has ensured that the ADE (above deck equipment) is robust and easy to install. No gyro or GPS input is required and it benefits from having no cable under the antenna, which means there is no need for 'cable unwrap' manoeuvres to free cable that has become twisted as the device moves to locate the satellite.

Using the same cable management philosophy as other current JRC Inmarsat products, a single coax cable is used between ADE and BDE (below deck equipment) allowing for easy installation.

These and more features make the electronics and mechanical design of the JRC JUE-500 as advanced on the inside as it is on the outside.

About FleetBroadband

Based on 3G standards, FleetBroadband provides constant, simultaneous access to voice and high-speed data, capable of supporting always-on broadband connectivity at speeds up to 432kbps and streaming IP data rate of up to 256kbps.

It allows users to send and receive SMS messages of up to 160 characters, a feature that is proven popular with crew who are familiar with texting from their GSM mobiles while on shore.

Ready for (latest) Inmarsat services:

✓ Non SOLAS voice distress[1]

✓ Multi voice function[1]

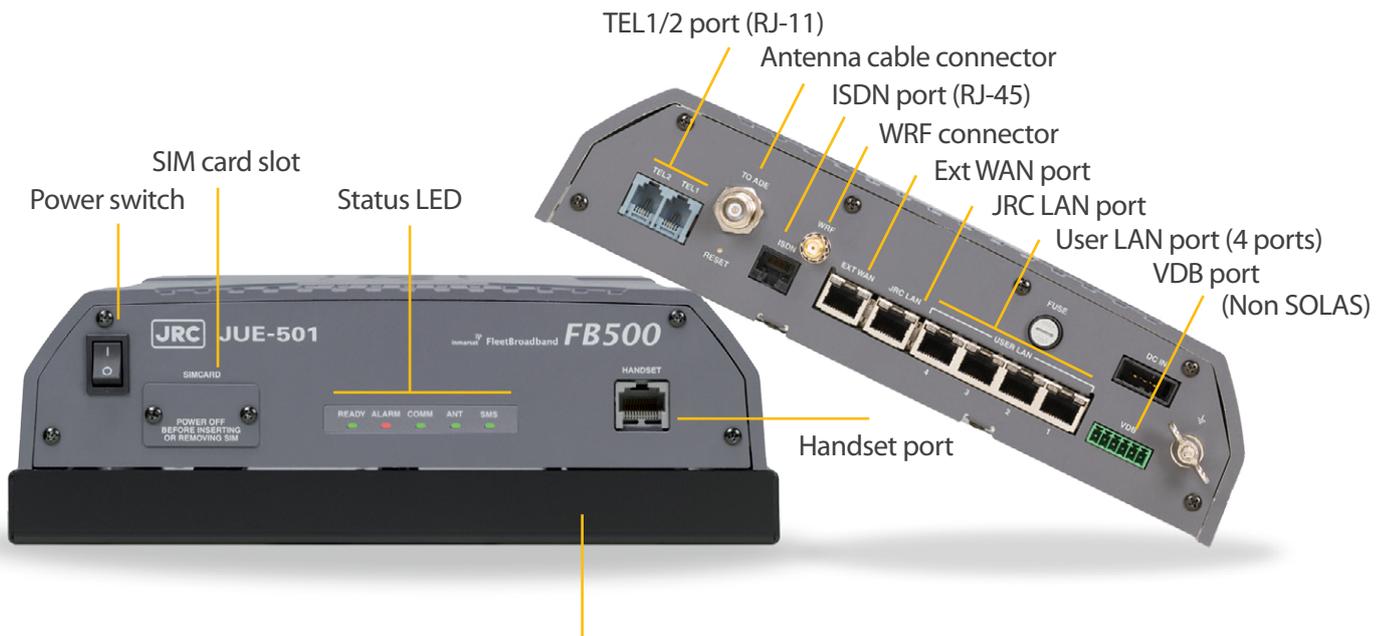✓ Ancillary terrestrial component

✓ Alphasat

✓ 505 emergency calling

*1：Expected support end 2013

JUE-501
– interfacing

Advanced interfacing

With JRC's new JUE-501 BDE comes a whole new set of reliable interfacing, such as a dedicated non SOLAS voice distress port and an integrated WAN selector between JRC's BDE and other communication devices, which switches the unit to a secondary network when the primary network is disconnected..

TEL1/2 port (RJ-11)
Antenna cable connector
ISDN port (RJ-45)
WRF connector
Ext WAN port
JRC LAN port
User LAN port (4 ports)
VDB port
(Non SOLAS)

SIM card slot
Power switch
Status LED

Handset port

Crew installation

With crew installation possible, you will save on installation charges and time in port - while keeping the same warranty conditions as before.

Optional junction board   New

In addition to the standard interface, JRC offers an optional junction board packed with a range of additional features. It has 4 telephone/fax lines (RJ-11), 4 external buzzers, 1 voice distress button , gyro and GPS input, remote power switch and multi-purpose dry contact ports.

Satellite blocking   New

The JUE-501 integrates a blockage setting which allows you to register up to 6 blocking areas such as the radar mast or funnel. When the line of sight to the satellite coincides with any of the pre registered blocking areas, the operator can easily recognize that there is a blockage and can take necessary action such as course change, to restore the connection..

## RMS   Remote Maintenance System (RMS)   New

The JUE-501 supports RMS access via ISDN as well as over a dedicated JRC IP connection, which allows for remote maintenance of supported equipment via the Inmarsat satellite link. Additionally, JRC's new Inmarsat C model, the JUE-87, can be used to poll the status of the JUE-501 from the shore, should the ships IP data connection be unavailable.

re performance and flexibility

JUE-501
– flexibility

Advanced web interface `New`

The JUE-501 Inmarsat FleetBroadband comes with an advanced web interface, built in as standard. This dedicated (Windows based) user interface brings together all operations. Think of it as the hub of your system - view everything and fully manage all operations with a few clicks.
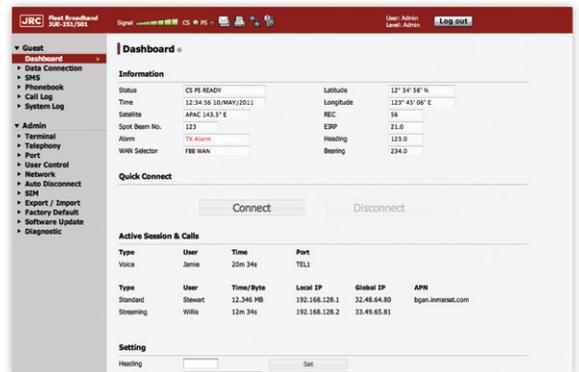
Below are just a few of the many features available:

1 by 1 NAT	Diagnostics	MAC filter	Remote activate	Usage restriction
Always active	DMZ host	Multi voice	Routing table	User control
Auto disconnect	Dynamic DHCP	PBX	SIM configure	VLAN
Blockage indication	Export	Phonebook	SMS	VPN (IPsec)
Call log	Import	Port forward	Static DHCP	WAN filter
Dashboard	IP masquerade	PPPoE	Supplementary	WAN profile
Data connection	LAN group	Proxy DNS	System log	WAN selector

Voice distress button `New`

The JUE-501 will support Inmarsat's voice distress service with an optional voice distress button, connected directly to BDE. A voice distress call has the priority and pre-emption over any calls on the Inmarsat satellite network, guaranteed to get through to an appropriate Maritime Rescue Coordination Center (MRCC). The service is not currently GMDSS compliant .

What's standard?

- ADE
- BDE
- Handset
- PSU cable
- Manuals
- Inspection result
- CD-ROM
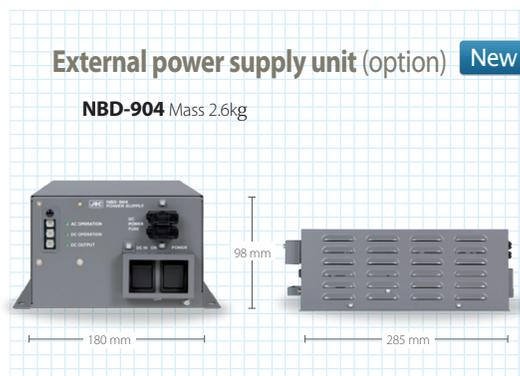- Installation parts
- Spare fuse for BDE

What's optional?

• Coaxial cable	CFQ-3922A5 *1
• Relay cable	7ZCSC0212 *2
• Junction board	CQD-2243
• External power supply unit	NBD-904
• External buzzer	NCE-6824A (max 4)
• Voice distress button	NQE-3301 (max 2)
• Wall mount adapter for VDB	7ZZSC0095 (not required for flush mount)
• Facsimile	7EZSC0060 (brother FAX-2820)
• Power transformer for facsimile	DD-118525 (100V), DD-118584 (115V)
• EMC filter for facsimile	RSHN-2003 (for 230V direct coupling)
• Telephone	NQW-132B (max 6)
• Telephone junction box	NQE-3058C (max 10)
• Handset extension cable	7ZCSC0291 (5 m)
• GYRO I/F box	NQA-2066A

*1: JUE-501's standard cable is 50m (CFQ-3922A5) and JRC prepared in 15, 20, 25, 30, 35, 40, 45m (CFQ-3922Ax), 70 and 100m (CFQ-3923Ax).
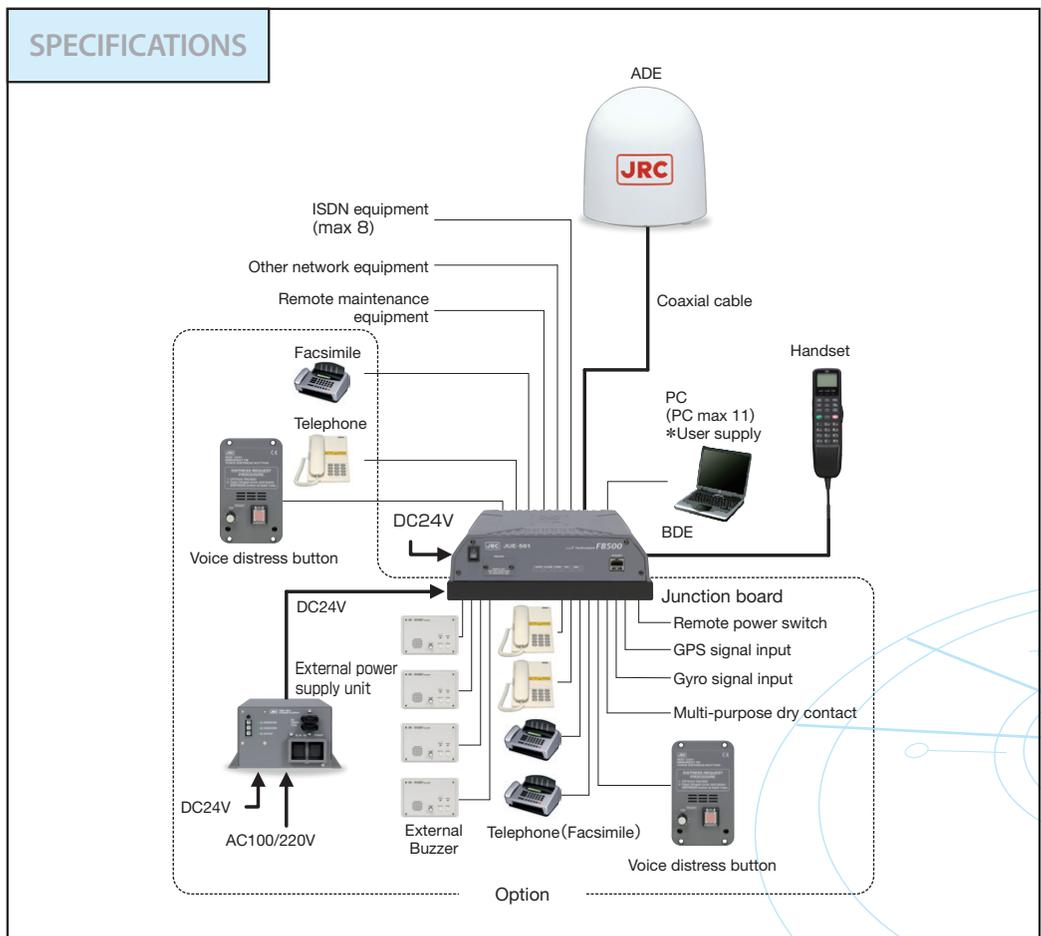*2: Between CFQ-3922A/3923A and BDE.

ADE New

GSC-511 Mass 20kg

683 mm

Connector

Φ290 mm

Φ630 mm

M10 (4 places)

BDE New

GSC-512 Mass 4.5 kg

275 mm

65 mm

262 mm

JUE-501 FB500

Handset

GSC-512 Mass 0.5 kg

Length 1m

103 mm

53 mm

200 mm

External power supply unit (option) New

NBD-904 Mass 2.6kg

98 mm

180 mm

285 mm

SPECIFICATIONS

ADE

ISDN equipment (max 8)

Other network equipment

Remote maintenance equipment

Facsimile

Telephone

Voice distress button

DC24V

Coaxial cable

Handset

PC (PC max 11) *User supply

BDE

DC24V

External power supply unit

DC24V

AC100/220V

External Buzzer

Telephone（Facsimile）

Junction board

Remote power switch

GPS signal input

Gyro signal input

Multi-purpose dry contact

Voice distress button

Option

JRC **Japan Radio Co., Ltd.**

JUE-501
– specifications

Model	JUE-501
Inmarsat type approved	○ (Class 8)
RoHS	✓
Frequency New	Transmit 1626.5-1660.5 MHz, 1668.0-1675.0 MHz receive 1518.0-1559.0 MHz
Voice/facsimile	4 kbps voice, G3 facsimile
Data	Streaming IP: 8, 16, 32, 64, 128, 256 kbps, standard IP: 432 kbps, SMS: 3G (up to 160 characters)
Antenna type	54 cm flat diameter, 3 axis control system, GFRP enclosure
Beam width	22° in 3dB direction
Power	21.6-31.2V DC (optional External power supply unit 100-230V AC)
Consumption	Less than 180W
Power output PoE New	Up to 15.4W per port (total 32W max)
ADE environmental	Infrared: 500W/m^2, ultraviolet: 54W/m^2, icing 25mm, precipitation: 100mm/hr, wind: 100kn
Ship's motion	Roll: ±30°/8 sec, pitch: ±10°/6 sec, yaw: ±8°/50 sec, surge: ±0.2g, sway: ±0.2g, heave: ±0.5g, rate of turn (ROT): ±6°/sec, headway: 30kn
E.I.R.P.	+22dBW +1/-2dB (class 8)
G/T	-7.0dB (class 8)
Handset	1 port (BDE)
RJ11 telephone/facsimile	2 ports (BDE), 4 ports (optional Junction board)
LAN	6 ports (BDE) 1 port: JRC LAN, 1 port: EXT WAN, 4 ports: free use and support PoE
ISDN	1 port for 3.1k audio only (BDE)
External GPS input	IEC61162-1 (optional Junction board)
GPS output	Via LAN
External gyro input$*1$	1 port (optional Junction board)
WRF output	1 port (BDE)
External buzzer	2 ports (optional Junction board)
Voice distress button New	1 port (BDE), 1 port (optional Junction board) for non SOLAS distress
ADE connector	1 port - TNC female (BDE)
External input/output	Alarm output via JRC LAN (BDE), remote power switch control, incoming call output, incoming call acknowledge input (optional Junction board)
SIM card slot	1 slot with protective cover (BDE)
Ambient conditions	Operating temperature: -25 to 55°C (ADE) -15 to 55°C (BDE, Handset) Storage temperature: -40 to 80°C IP protection rate: IP56 (ADE), IP22 (BDE), IPX0 (Handset) Relative humidity: 0 to 95% non-condensing

＊1：Gyro interface required when gyro signal is SYNC or STEP

• Specifications may be subject to change without notice.

For further information, contact: