# JUE-85 Inmarsat C



- JRC introduces a dedicated two-way Inmarsat C global data communication solution

Compact antenna design Single coax installation Low cost of ownership Optional Ship Security Alert System (SSAS) LRIT integrated as standard

# JUE-85 Inmarsat C – performance features

#### **Unique features**

• The JUE-85 is a highly reliable mobile satellite message communication system, having the ability to handle commercial, operational and personal messages just as easily as distress and safety communications.

#### All-in-one solution

The JRC JUE-85 Inmarsat system comprises a small antenna with built-in GPS, terminal (transmitter and receiver) with distress button, messaging unit and power supply unit. Unlike a typical Inmarsat C system, JRC also includes a printer as standard, offering a total solution to the shipping industry.



terminal

**JUE-85** 

### About the Inmarsat C system

JRC JUE-85 Inmarsat C is a digital satellite communication system whereby anything that can be encoded into digital format, whether text, numeric data from instruments or other information in digital format can be sent and received over the system. A simple user interface allows sending and receiving messages.

## Store and forward messages

The Inmarsat C system is known as a store-and-forward messaging system. When sending a ship-to-shore message, it is edited on the terminal and then transmitted in a series of data packets to an Inmarsat C land earth station (LES). The LES acts as an interface (or gateway) between the satellite and the telecommunications network on land. The LES stores the data packets, assembles them into a single message and forwards it (hence the term store-and-forwarding) over the telecommunication network to its addressed destination.

## Data reporting and polling

JUE-85 Inmarsat C is programmed to automatically respond to a polling request from shore-based customers, as they may need to acquire information from vessels. The polling command 'instructs' a terminal or group of terminals to send a variety of onboard data immediately.

# Inmarsat C – a reliable mobile sate

# JUE-85 Inmarsat C – developed for maximum ease of use

### Self diagnosis

JRC's mobile Inmarsat C terminal incorporates various self-diagnostic programmes to facilitate maintenance and troubleshooting, reporting any possible problems it might suffer. The results are displayed on the data terminal. These functions will allow for easy maintenance and more reliability. In addition, automatic testing for performance verification and commissioning via the satellite channel is also available.

## **JCmail**

JCmail, a freeware application developed by JRC, enables you to transmit and receive email messages very easily on the JUE-85 satellite terminal. In addition, this programme allows you to receive EGC messages.

#### Security alert add-on kit

The Ship Security Alerting System (SSAS) is a system that contributes to the IMO's efforts to strengthen maritime security and suppress acts of terrorism and piracy against shipping. In case of attempted piracy or terrorism, the vessel's SSAS function can be activated, and appropriate law-enforcement or military forces can be alerted.

JC mail

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## JRC StarNetwork<sup>™</sup>

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<sup>™</sup> 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.



# ellite communications system

# JUE-85 Inmarsat C - system flexibility

#### **Distress** alert

Your vessels ID, date/time and the present position, course and speed is acquired manually or automatically from an integrated GNSS receiver, such as GPS, or the vessel's navigational interface, allowing you to send a distress alert simply by pressing and holding the dedicated built-in distress button.



## Enhanced Group Calling (EGC)

JRC total Inmarsat C solution incorporates a special capability known as Enhanced Group Calling (EGC), which enables authorised information providers to broadcast international safety and commercial service messages to selected groups of ships. EGC is available as standard on the JUE-85 terminal.

#### Two EGC services are available:

The EGC SafetyNET – is the international safety service, which broadcasts maritime safety information, such as meteorological and hydrographic messages to all ships in certain geographical areas.

EGC FleetNET – is the international commercial service, it is a subscription service, and allows shipping companies or governments to broadcast messages to selected groups of vessels.

#### Switching power

If the vessel's main power supply (AC source) fails, the JUE-85 will automatically switch to the emergency DC source. This is one of the necessary requirements to meet the Global Maritime Distress Safety System (GMDSS) regulations.

#### Flexible installation

The JUE-85 Inmarsat C system has the same cable management philosophy resembling all other Inmarsat products that JRC is offering, allowing for an easy installation as only a single coax cable is used between antenna and terminal. Both are very compact and can be easily installed on any size and type of vessel.

## What's standard in the box?

#### Which cables?

- Antenna to terminal Messaging unit to terminal Messaging unit to printer (display and keyboard) Power supply to terminal
  - 1.5 m 2 m Power supply to printer 2 m Power supply to messaging unit 2 m

30 m

1.5 m

- 4. Printer (+ roll paper) 5. Power supply
- 6. Pole mounting bracket
- 7. Cables

1. Antenna

2. Terminal

3. Messaging unit

- 8. Spare parts
- 9. Manual (English)



# JUE-85 Inmarsat C – dimensions and weights



JRC Japan Radio Co., Ltd.

# JUE-85 Inmarsat C – specifications

Model		JUE-85		
Inmarsat type approved		$\checkmark$		
Class of Inmarsat C MES		Class 2		
Terminal and antenna				
	Model – terminal	NTF-781GM		
	Model – antenna	NAF-741GM (including pole mounting bracket)		
	Frequency	TX 1626.5MHz - 1646.5MHz		
		RX 1530.0MHz - 1545.0MHz		
		GPS 1575.2 MHz ±1MHz		
	Channel spacing	5KHz		
	G/T	-23.7dB/K minimum		
	E.I.R.P.	within 14 ±2dBW (at 5° angle)		
	Modulation	TX and RX: 1200 symbols/sec BPSK		
	Data rate	TX and RX: 600bps		
	Antenna	type: helical, pattern: hemisphere, polarisation: right hand circular		
	Power supply voltage	AC 100/115/220 V ±10% and DC 24V (+19.2V to +31.2V)		
	Power consumption	transmission 100W, standby time 15W		
	Ambient condition	antenna: -35°C +55°C		
		terminal: -15°C +55°C		
	Storage temperature	-40°C +80°C		
	Relative humidity	+40°C up to 95%		
	lcing	up to 25mm (antenna)		
	Precipitation	100mm/hour (antenna)		
	Wind	up to 100 knots		
	Vibration	as specified by Inmarsat		
Messaging unit				
	Model	NDZ-227		
	Memory backup	24 hours or more		
	Power supply voltage	DC 24V		
	Power consumption	0.9A		
Printer				
	Model	NKG-800		
	Line interface	parallel		
	Power supply	DC 24V (+19.2V to +31.2V)		
	Power consumption	approx. 35W		
Power supply				
	Model	NBD-843A		
	Line voltage	AC 100/200 V. DC 24V		
	Line voltage selection	AC 90 to AC 126.5V. AC 180 to AC 253V		
		DC 19.2 to 31.2V		
	Output power	DC 24V 6 9A max		
Optional ite	ms			
Bemote distress button		NOE-887C (for IMO vessels 1 unit is required)		
Buzzer box		NCF-6255A		
Installation base		NCU-327A		
Remote data	a terminal	ND7-227		
Keyboard for remote data terminal		NDE-369		
SSAS buttor		NOF-3154		
Junction bo	x extension	NQA-4281		

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All specifications are subject to change without notification