JUE-85
Inmarsat C for GMDSS

JRC

GMDSS

JRC Inmarsat-C

NDZ-227 DATA TERMINAL

JRC

JUE-85 INMARSAT-C

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

High reliability system
Compact design
Single coax installation
Optional Ship Security Alert System (SSAS)
LRIT integrated as standard

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

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 is comprised of a small Enternally Mounted Equipment(EME), an Internally Mounted Equipment(IME) with distress button, together with a Data Terminal Equipment(DTE) and an AC/DC Power Supply Unit. As a GMDSS equipment, JRC also includes a printer as standard, offering a total solution to the shipping industry.

- Printer
- Externally Mounted Equipment(EME)
- Data Terminal Equipment(DTE)
- AC/DC Power Supply Unit
- Internally Mounted Equipment(IME)
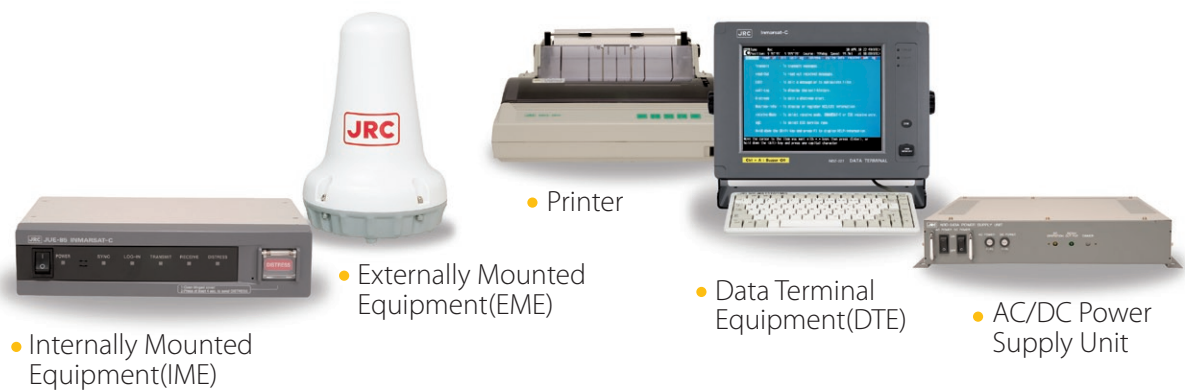
About the Inmarsat C system

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 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 Data Terminal Equipment(DTE) 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 station or group of stations to send a variety of onboard data immediately.

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

Self diagnosis

JRC's mobile Inmarsat C Mobile Earth Station(MES) incorporates various self-diagnostic programs to facilitate maintenance and troubleshooting, reporting any possible problems it might suffer. The results are displayed on the Data Terminal Equipment(DTE). These functions 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 Mobile Earth Station(MES). In addition, this program allows you to receive EGC messages.
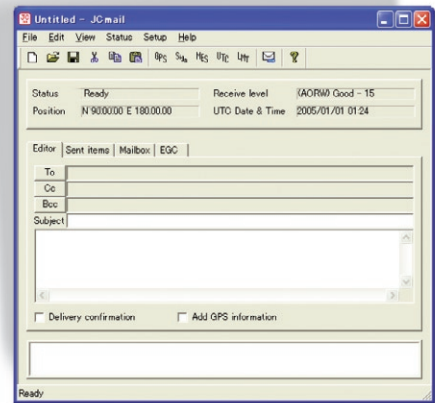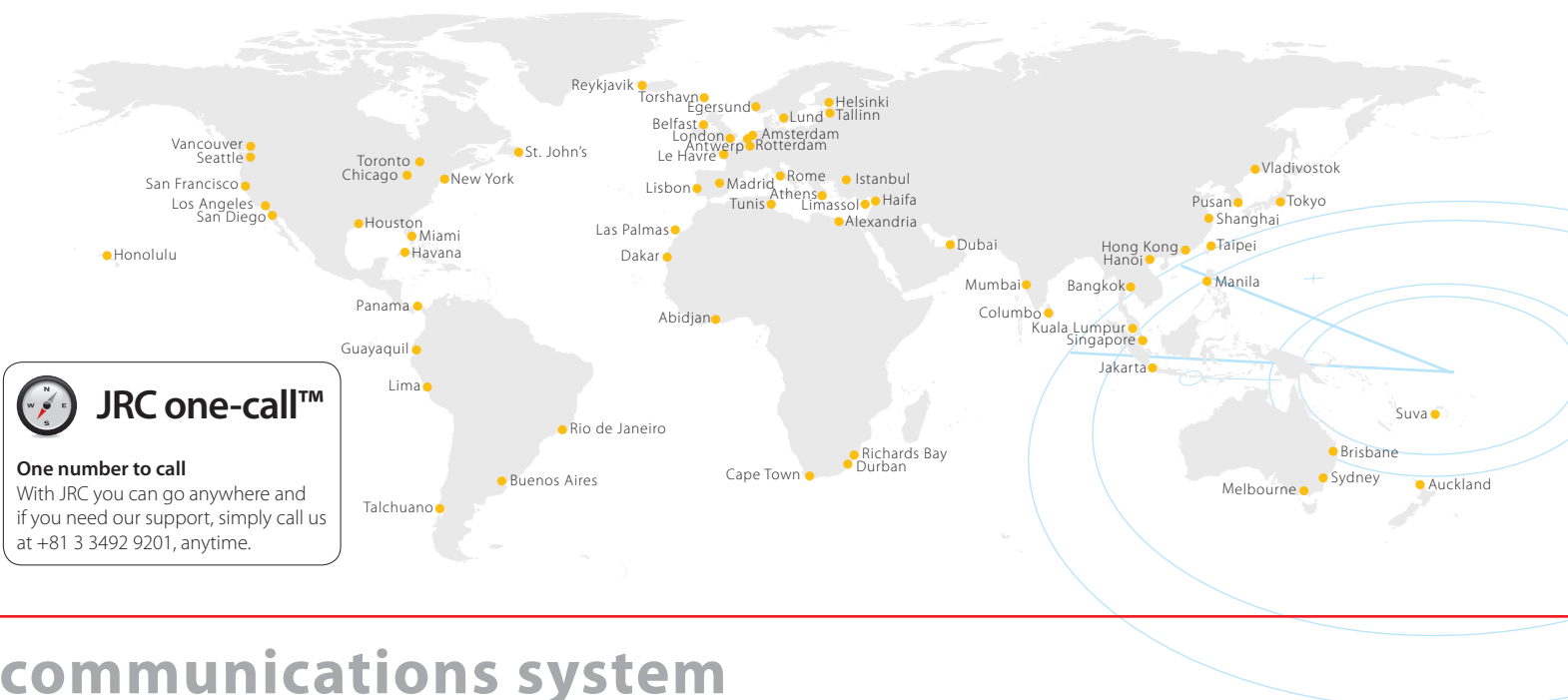
Security alert add-on kit

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.

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.

JRC one-call™

One number to call
With JRC you can go anywhere and if you need our support, simply call us at +81 3 3492 9201, anytime.

communications system

JUE-85 Inmarsat C
– system flexibility

Distress alert

Your vessels ID, position, course ,speed, date and time is acquired either manually or from a GNSS receiver, such as GPS, 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 Mobile Earth Station(MES).

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 Externally Mounted Equipment(EME) and Internally Mounted Equipment(IME). Both are very compact and can be easily installed on any size and type of vessel.

What's standard in the box?

1. Externally Mounted Equipment(EME)
2. Internally Mounted Equipment(IME)
3. Data Terminal Equipment(DTE)
   (display and keyboard)*
4. Printer (+ roll paper)
5. AC/DC Switching Power Supply Unit
6. Pole mounting bracket
7. Cables
8. Spare parts
9. Manual
10. Operation guide

Which cables?

EME to IME	30 m
DTE to IME	1.5 m
DTE to printer	1.5 m
Power supply to IME	2 m
Power supply to printer	2 m
Power supply to DTE	2 m

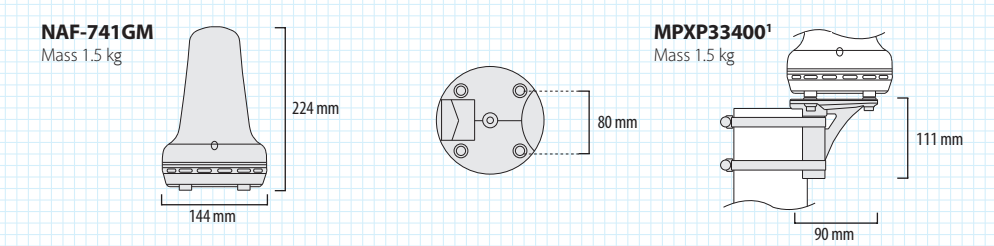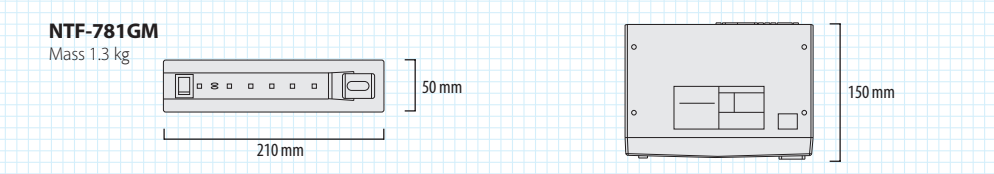*excluding bracket

JUE-85 Inmarsat C
– dimensions and mass

Dimension drawings - Externally Mounted Equipment, Pole mounting bracket

NAF-741GM
Mass 1.5 kg

224 mm

80 mm

144 mm

MPXP33400[1]
Mass 1.5 kg

111 mm

90 mm

[1]pole mounting bracket is included as standard

Dimension drawings - Internally Mounted Equipment

NTF-781GM
Mass 1.3 kg

50 mm

210 mm

150 mm

Dimension drawings - Data Terminal Equipment, Keyboard, Printer

NDZ-227
Mass 2.0 kg

286mm

358.4 mm

*Bracket is option

NDF-369
Mass 0.4 kg

132 mm

282 mm

NKG-800
Mass 3.7 kg

153 mm

380 mm

376 mm
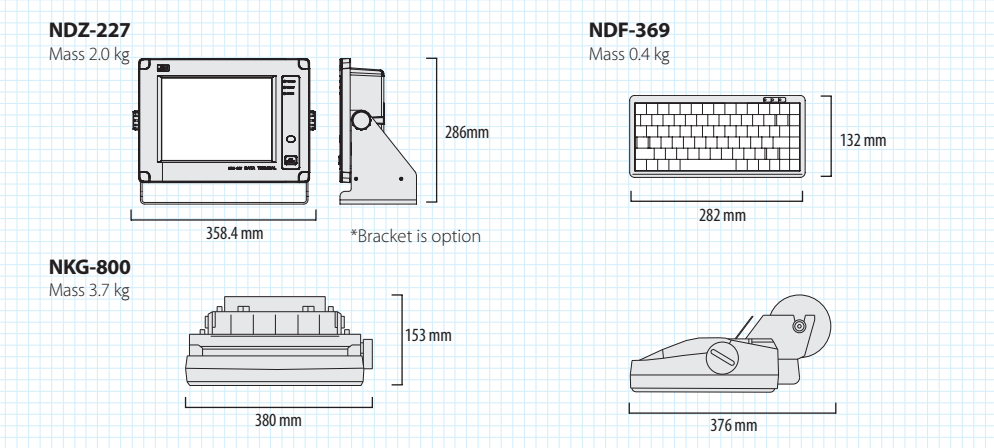
Dimension drawings - AC/DC Power Supply

NBD-843A
Mass 8 kg

79 mm

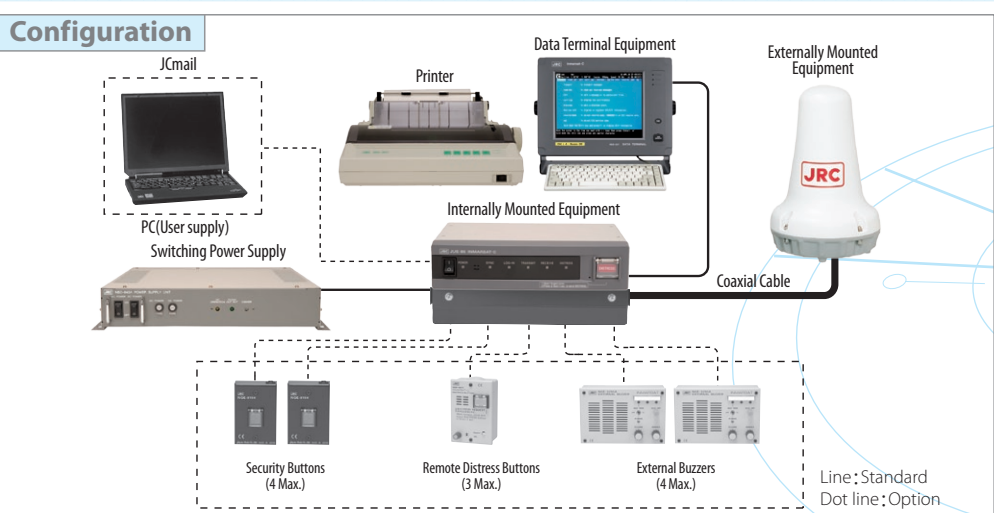425 mm

400 mm

Configuration

JCmail

Printer

Data Terminal Equipment

Externally Mounted Equipment

PC(User supply)

Switching Power Supply

Internally Mounted Equipment

Coaxial Cable

JRC

Security Buttons
(4 Max.)

Remote Distress Buttons
(3 Max.)

External Buzzers
(4 Max.)

Line：Standard
Dot line：Option

JRC **Japan Radio Co., Ltd.**
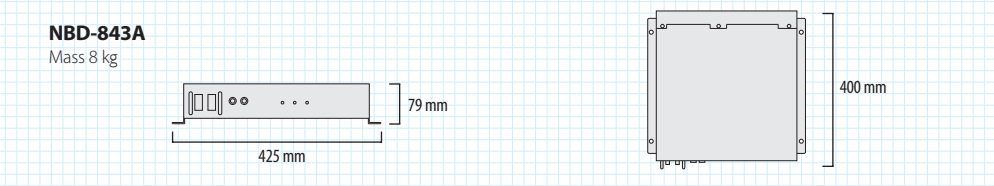
JUE-85 Inmarsat C
– specifications

Name	Inmarsat C Mobile Earth Station		
Model	**JUE-85**		
Inmarsat type approved	√		
Class of Inmarsat C MES	Class 2		
Internally Mounted Equipment(IME) and Externally Mounted Equipment(EME)			
	Model – IME	NTF-781GM	
	Model – EME	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 5º 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	DC 24V(+19.2V to +31.2V)	
	Power consumption	transmission 100W, standby time 15W	
	Ambient condition	EME: −35°C +55°C	
		IME: −15°C +55°C	
	Storage temperature	−40°C +80°C	
	Relative humidity	+40ºC up to 95%	
	Icing	up to 25mm (EME)	
	Precipitation	100mm/hour (EME)	
	Wind	up to 100 knots	
	Vibration	as specified by Inmarsat	
Data Terminal Equipment(DTE)			
	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 126.5/180 to 253V	
		DC 19.2 to 31.2V	
	Output	DC 24V, 6.9A max	
Optional items			
Remote distress button	NQE-887C (for IMO vessels 1 unit is required)		
Buzzer box	NCE-6255A		
Remote data terminal	NDZ-227		
DTE Mounting Bracket	MPBP31721		
Keyboard for remote data terminal	NDF-369		
Security button	NQE-3154		
Junction box extension	NQA-4281		

● Specifications may be subject to change without notice.

For further information, contact:

JRC *Since 1915* **Japan Radio Co., Ltd.**

URL http://www.jrc.co.jp/eng/

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