Compact all-in-one Internally Mounted Equipment with 10.4 inch display
Newly designed Externally Mounted Equipment with high performance RF filter
Single coax installation
Long Range Identification and Tracking (LRIT) as standard
JRC Remote Maintenance System (RMS) via LAN available
Optional Ship Security Alert System (SSAS)
USB mass storage device is available for messages exchange

—the JUE-87 is the latest all-new two-way Inmarsat C global data communication solution

JRC Japan Radio Co., Ltd.
JUE-87 – features

Features
The JUE-87 is a highly reliable mobile satellite data communication system, having the ability to handle commercial, operational and personal messages just as easily as distress and safety communications.

About the Inmarsat C system
JRC JUE-87 Inmarsat C is a digital satellite communication system whereby data 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.

All in one IME
The new Internally Mounted Equipment (IME) with display features a high brightness color LCD with an extra wide viewing angle.

Data terminal unit is integrated into the Inmarsat C IME allowing for a straightforward installation approach and is ready for our Remote Maintenance System (RMS).

USB
The USB 2.0 port located on the front panel allows you to connect a mass storage device to save and load messages.

The display
Our new IME with 10.4 inch display features a color display with a variety of coloring menus. Factory default color is Ocean Day. The LCD gives you a bright picture with excellent color consistency, even when you’re viewing the display from the side.
**JUE-87 – flexibility**

**New Externally Mounted Equipment**
A completely new design of Externally Mounted Equipment (EME), compliant to RoHS, offering a new level of accuracy with a high performance Radio Frequency (RF) filter built in. It has the same cable management philosophy resembling all other Inmarsat products, requiring only a single coax cable between EME and IME.

**Interfacing**
The JUE-87 offers all the interfacing you need with junction box 1 (JB1) integrated in the bracket. In case of flush mounting, the bracket and junction box can be easily separated from the IME.

**New accessories**
Along with our introduction of the new JUE-87, we introduce new accessories that compliment our unified design approach.

**New power supply**
JRC is introducing a new external power supply, half the size of the power supply found in the previous generation JUE-85 including a 65% weight reduction.
**Enhanced Group Calling (ECG)**

JRC total Inmarsat C solution incorporates the capability known as Enhanced Group Calling (EGC), which enables authorized information providers to broadcast international safety and commercial service messages to selected groups of ships. EGC is available as standard on the JUE-87 terminal.

**EGC SafetyNET**

An international safety service, which broadcasts maritime safety information, such as meteorological and hydrographic messages to all ships in certain geographical areas.

**EGC FleetNET**

An international commercial subscription service, allowing shipping companies and government bodies to broadcast messages to selected groups of vessels.

**Distress alert**

Your vessel’s ID, date/time and the present position, course and speed is acquired manually or automatically from the integrated GPS receiver, or the vessel’s navigational interface, allowing you to send a distress alert simply by pressing and holding the dedicated built-in distress button, either on the IME or a separate unit.

**LRIT as standard**

The JUE-87 Inmarsat C model comes standard with Long Range Identification and Tracking (LRIT), an IMO required global monitoring system of the ship’s movement. The purpose of LRIT is to increase maritime domain awareness and to improve maritime security.

**JCmail**

JCmail is a freeware PC application developed by JRC. It enables you to send and receive e-mails and receive EGC messages very easily on the JUE-87.

**SSAS 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 if necessary.
Self diagnosis

JRC JUE-87 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 display of IME. 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.

Remote Maintenance System (RMS)

JRC’s unique RMS allows remote monitoring of bridge equipment from ashore. Using JRC VDR and INMARSAT FB satellite communication equipment, JRC can establish a highly secured connection to the vessel and cost-effectively and accurately determine the operating status of the JRC equipment while at sea. JRC’s RMS just got better with the addition of the new JUE-87 which allows connected satellite communication equipment’s, such as JUE-251 & JUE-501, status to be polled from the shore.

JRC global service network (Star Network)

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.

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JUE-87 Inmarsat C – configuration

System diagram

What's standard?
- IME (+JB1)
- EME
- Printer (+paper)
- External Power supply
- Cables
- Installation materials
- Spare parts
- Manuals

What's optional?
- Remote distress button
- External buzzer
- Security button
- Junction box 2 (JB2)
- Data terminal Equipment
- Keyboard

- NQE-3225
- NCE-5547
- NQE-3224
- NQE-3223
- NDZ-227
- NDF-369
JUE-87
– dimensions

**EME**
Installation pole
Installation plate: 65A, 80A, 90A

**NAF-253GM** Mass 2.4kg

**IME**
Messaging unit: 3.4kg
Junction box 1: 3.3kg
Keyboard: 0.4kg

**NBF-318** Mass 7.1kg, includes:
- Messaging unit: 3.4kg
- Junction box 1: 3.3kg
- Keyboard: 0.4kg

**NKG-800** Mass 3.7kg

**External power supply**
Mass 2.6kg

**NBD-904** Mass 2.6kg

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**JRC**
Japan Radio Co., Ltd.
# JUE-87 – specifications

<table>
<thead>
<tr>
<th>Model</th>
<th></th>
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<tbody>
<tr>
<td>Inmarsat type approved</td>
<td>(Class 2)</td>
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- **RoHS**
- Display: 10.4 inch color LCD, 640x480 pixels, 450cd/m²

<table>
<thead>
<tr>
<th>Frequency</th>
<th>TX: 1626.5 to 1646.5MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>RX: 1537.0 to 1544.2MHz</td>
<td></td>
</tr>
</tbody>
</table>

- **Channel spacing**: 5kHz
- **EIRP**: 14±2dBW (at 5º angle)
- **G/T**: -23.0dB/K min
- **Modulation**: TX/RX: 1200 symbols/sec BPSK
- **Data rate**: TX/RX: 600bps

<table>
<thead>
<tr>
<th>Interface</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>External Buzzer: 3ports (JB1x1, JB2x2)</td>
<td></td>
</tr>
<tr>
<td>Remote distress button: 2ports (JB1x2)</td>
<td></td>
</tr>
<tr>
<td>Security button: 4ports (JB1x2, JB2x2)</td>
<td></td>
</tr>
</tbody>
</table>

- **GPS input (NMEA)**: 1port (JB1)
- **Alarm output (dry contact)**: 1port (JB1)
- **Alarm output (NMEA)**: 1port (JB1)
- **Lan port (RJ-45)**: 1port (IME)
- **DTE port (serial)**: 1port (IME)
- **Keyboard**: 1port (IME)
- **Printer**: 1port (IME)
- **Serial**: 1port (IME)

<table>
<thead>
<tr>
<th>Ambient condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating: EME -35 to +55ºC, IME -15 to +55ºC</td>
<td></td>
</tr>
<tr>
<td>Storage: EME/IME -40 to +70ºC</td>
<td></td>
</tr>
<tr>
<td>Relative humidity: 0 to 95% non-condensing</td>
<td></td>
</tr>
<tr>
<td>Icing: up to 25mm (EME)</td>
<td></td>
</tr>
<tr>
<td>Precipitation: up to 100mm/hour (EME)</td>
<td></td>
</tr>
<tr>
<td>Wind: up to 100knots (EME)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Internally Mounted Equipment (IME)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>NTF-318</td>
</tr>
<tr>
<td>Power</td>
<td>DC 24V (19.2 to 31.2V)</td>
</tr>
<tr>
<td>Consumption</td>
<td>Transmit: 100W, Standby: 15W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Externally Mounted Equipment (EME)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>NAF-Z53GM (Unified pole mounting bracket)</td>
</tr>
<tr>
<td>Antenna</td>
<td>Type: helical, Pattern: hemisphere, Polarization: right-hand circular</td>
</tr>
<tr>
<td>Printer</td>
<td>NKG-800</td>
</tr>
<tr>
<td>Line interface</td>
<td>Parallel</td>
</tr>
<tr>
<td>Power</td>
<td>DC 24V (+19.2 to 31.2V)</td>
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<tr>
<td>Consumption</td>
<td>Approx. 30W</td>
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</table>

<table>
<thead>
<tr>
<th>External power supply</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Model</td>
<td>NBD-904</td>
</tr>
<tr>
<td>Line Voltage</td>
<td>AC100 to 230V, DC24V</td>
</tr>
<tr>
<td>Line voltage selection</td>
<td>AC90 to 264V, DC19.2 to 31.2V</td>
</tr>
<tr>
<td>Output</td>
<td>DC24V 6.5A continuous</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>External buzzer</td>
<td>NCE-5547 (Max. 3units)</td>
</tr>
<tr>
<td>Remote distress button</td>
<td>NQE-3225 (Max. 2units)</td>
</tr>
<tr>
<td>Data terminal equipment</td>
<td>NDZ-227 (Max. 1unit)</td>
</tr>
<tr>
<td>Bracket for data terminal</td>
<td>MBP31721</td>
</tr>
<tr>
<td>Keyboard for data terminal</td>
<td>NDF-369</td>
</tr>
<tr>
<td>Security button</td>
<td>NQE-3224 (Max. 4units)</td>
</tr>
<tr>
<td>Junction box2</td>
<td>NQE-3223</td>
</tr>
<tr>
<td>Wall mount adapter for buzzer/button</td>
<td>722SC0095</td>
</tr>
<tr>
<td>Coaxial cable</td>
<td>CFQ-5922A(40m), CFQ-5922AS(50m)</td>
</tr>
</tbody>
</table>

*Specifications may be subject to change without notice.*

For further information, contact:

**Japan Radio Co., Ltd.**

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ISO9001, ISO14001 Certified

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