



Supported sailing

# JUE-60KA

Telenor THOR 7

[www.jrc.am](http://www.jrc.am)

# Omotenashi to our customers

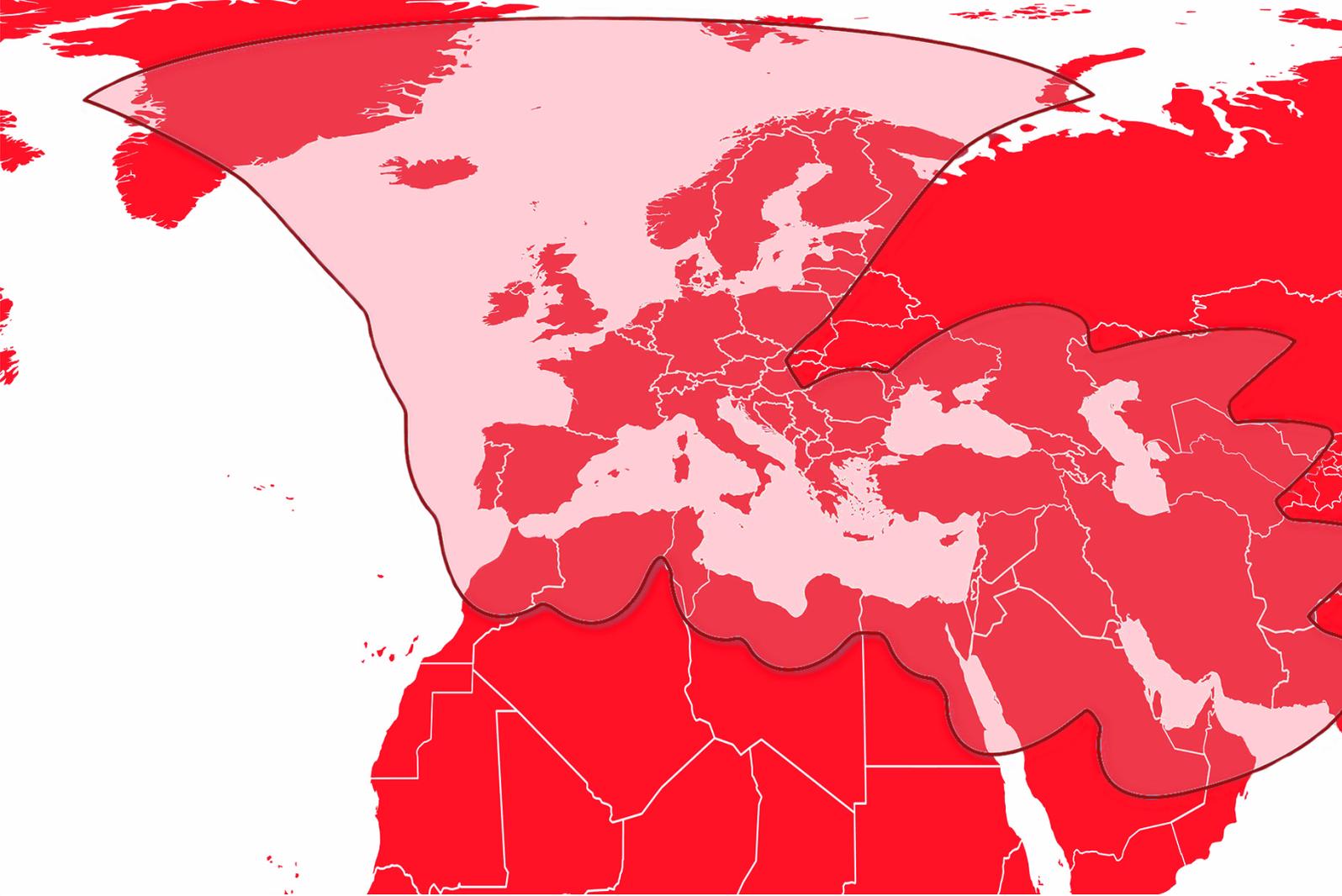
The Japanese concept of Omotenashi comes from the heart. JRC translates this unique Japanese mindset of service and hospitality in many ways, one of which is in how we develop products ensuring total value for users. The product needs to function as a solution, or serve a specific purpose for our customers. And this is exactly how we started development of our new JUE-60KA communications product: diverse and flexible, applicable and relevant to different markets on different types of vessels, working hard in the background offering greatly enhanced levels of communications speed, quality and service to users, without them even noticing. But still retaining our enviable reputation for manufacturing quality, product reliability and customer support.



Telenor Thor 7 approved

## A rich history

Established in 1915, JRC has built and maintained a hard-earned reputation in the marine business for reliable and innovative engineering backed up by an extensive global customer support network. Our products are valued in the market because they provide modern affordable services which work dependably. JRC's engineering standards are matched by the rigour of our Quality Assurance process, our brand and our reputation are critical to our continued success.



# KA-band VSAT THOR 7

The THOR 7 High Throughput Satellite (HTS) provides regional coverage with a favorable look angle over the main European shipping lanes and utilizes relatively small spot beams, which provide unprecedented high-power performance for maritime applications.

Supported by the iDirect next generation Velocity© platform, the iDirect platform offers automatic and seamless spot beam hand over – a necessity for a market that relies upon continuous connectivity. The THOR 7 HTS delivers downlink speeds anywhere between 512kbps and 20Mbps and uplink speeds between 128kbps and 3Mbps.

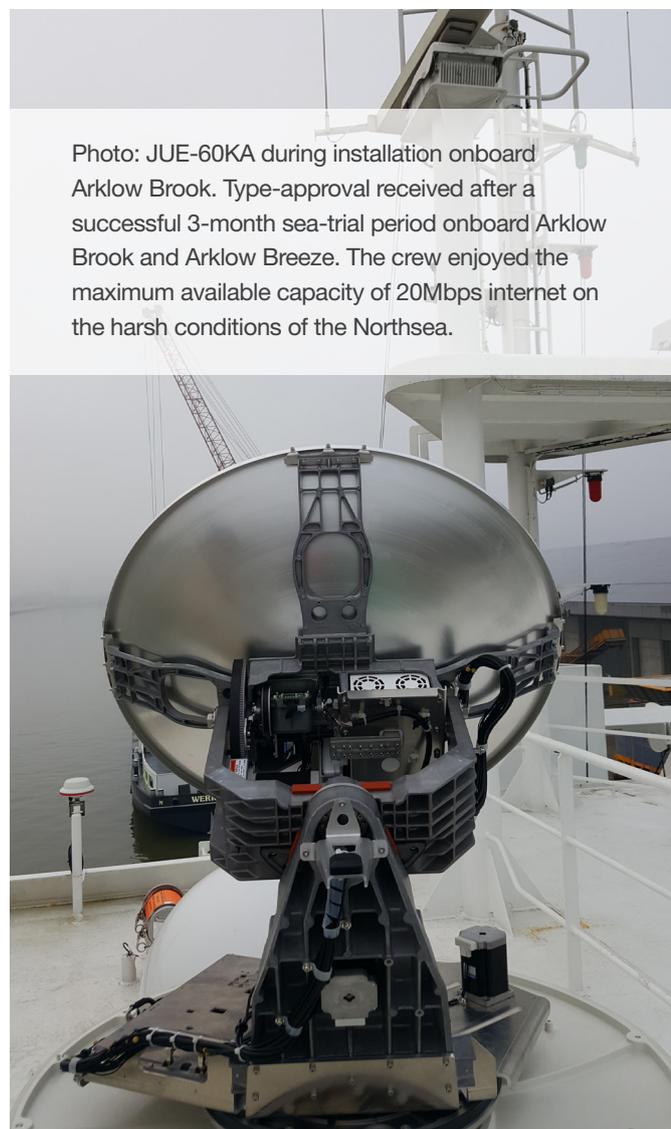


Photo: JUE-60KA during installation onboard Arklow Brook. Type-approval received after a successful 3-month sea-trial period onboard Arklow Brook and Arklow Breeze. The crew enjoyed the maximum available capacity of 20Mbps internet on the harsh conditions of the Northsea.



## Unique antenna design, Small, Lightweight, Durable

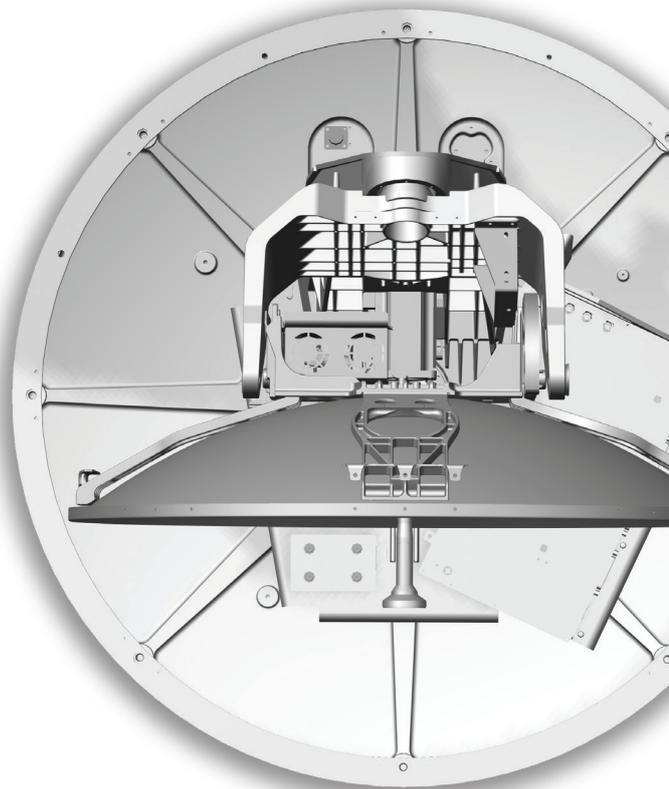
The design of a lightweight but ultra strong radome for the Ka-band environment has been a particular challenge. JRC engineers used a 3 layer sandwich Fibre Reinforced Plastic (FRP) with a special resin-honeycomb structure for the core of just a few millimeters. The honeycomb structure gives the radome high strength and is extremely lightweight. The radome is dipped in a bath of resin and shaped in an oven, so as to achieve a curved structure without excessive mechanical force or heating.

Installation is quick and easy. With such a lightweight antenna the vessel's downtime is minimal, no crane necessary for installation, and the onboard setup will be by web browser GUI.

## Keeping on track

Our experience and expertise gained through JRC's rich heritage of delivering successful Inmarsat products served us well in the design of our new, highly stable antenna. By keeping as much weight on and around the base plate, the antenna center of gravity remains low which greatly assists in stable communications under harsh operating conditions.

Monocoque structure: **Rigid**  
Low center of gravity: **Stable**  
Damper free design: **No vibration**



# Interfacing

JRC's below deck unit providing intuitive setup by web browser GUI and offering easy hardware interfacing. Installation arrangements are made by dual cabling for RX/TX. Depending on antenna distance with a maximum of 60 meter, JRC can provide various high-quality cables sets. JRC has provided one extra RJ-45 connector for EXT LAN connection to the vessels' VDR and/or Inmarsat C to enable JRC's unique Remote Maintenance System (RMS).



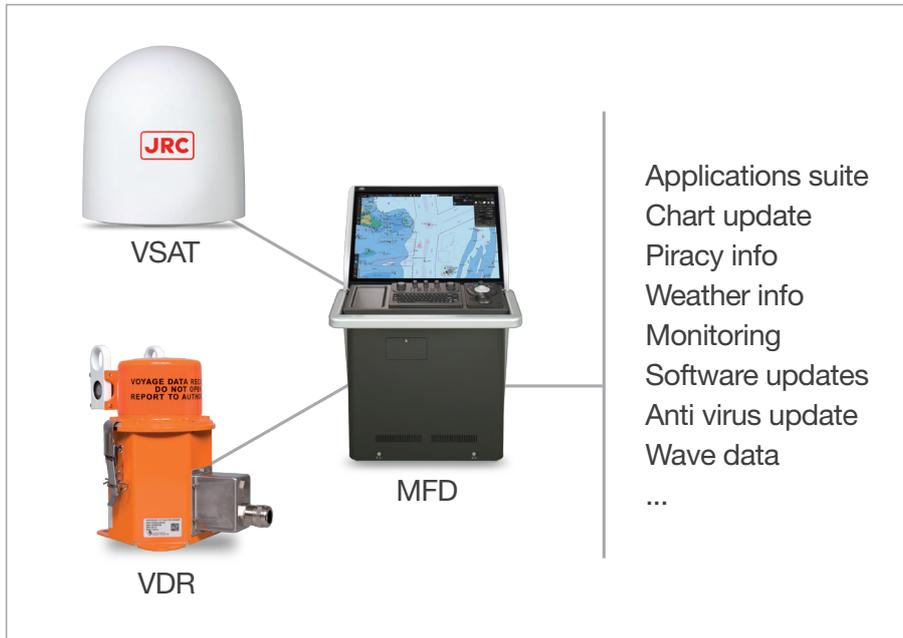
- Design compatible for 19-inch rack
- Available with rack & desk mount type
- Self-diagnostic function
- JRC Remote Maintenance System
- Simple view with LED indication
- Intuitive web browser interface

# Fit, and forget

JRC designed the terminal to be flexible. The JRC original design terminal uses web-based operation similar to our other antenna solutions, and is designed to be mounted in a 19-inch (communication) rack. As a standard feature, the JRC Thor 7 solution supports our proprietary Remote Maintenance System (RMS), one of the core elements of JRC's customer operations support philosophy.



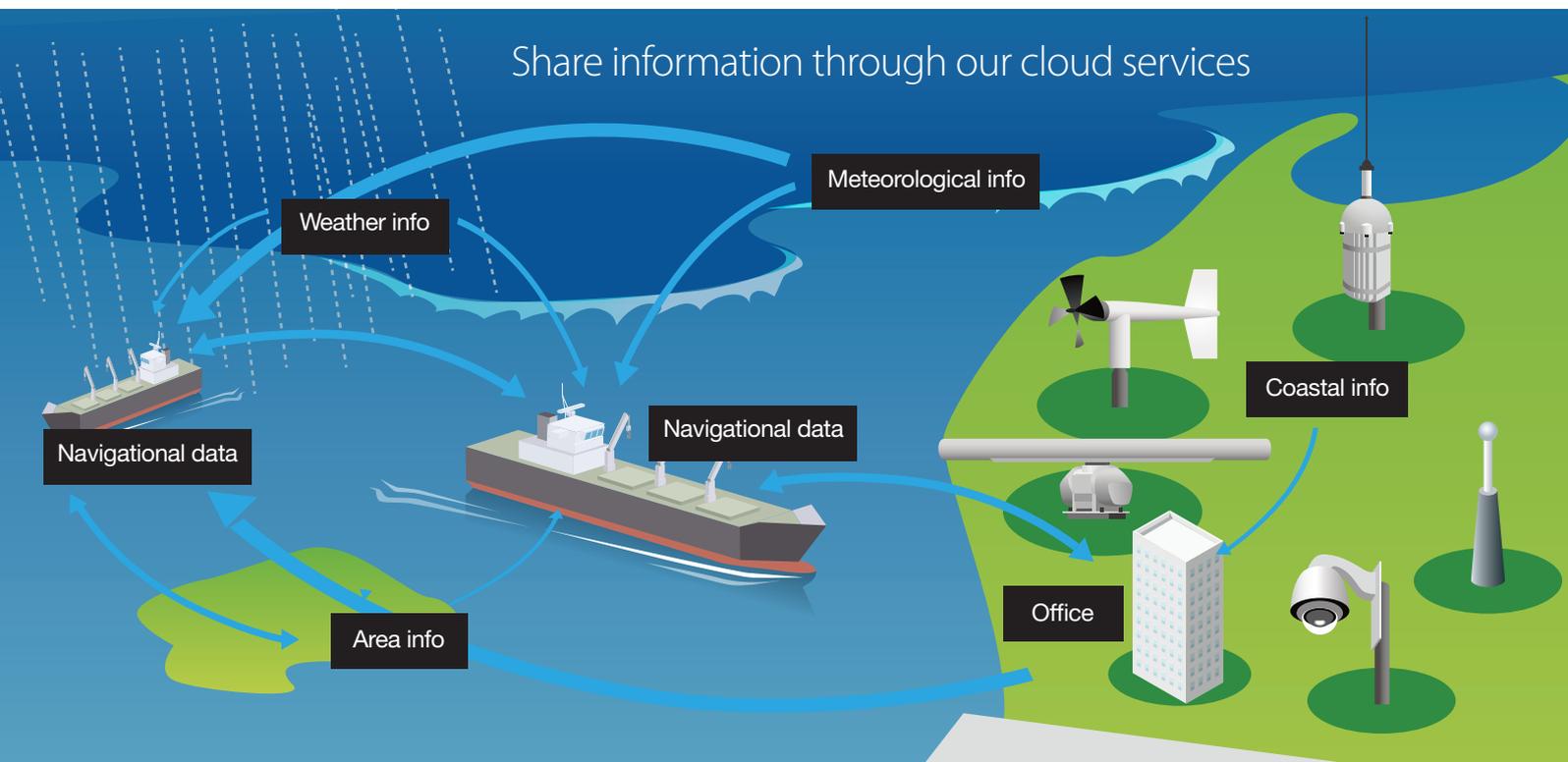
# Smart shipping applications



Dedicated high speed communications together with JRC newest generation onboard navigation equipment provides for seamless integration of support and applications, superfast and anywhere. Functions for captain and officers are directly accessible from our Multi Function Display (MFD).

## In the cloud

JRC is developing its first and very own 'shared space' for our users, aimed at economy, safety and welfare. When a reliable data communication system is installed, the crew benefits but the ship-owner is the real winner. Real time data makes it possible to plan routes more effectively, avoid bad weather and schedule arrival time more accurately, saving valuable fuel. It can also ensure that the onboard charts are kept up to date in real time.



# Tech Specs

Specs are subject to change

Antenna RoHS

NTG-428KA Weight 44 kg



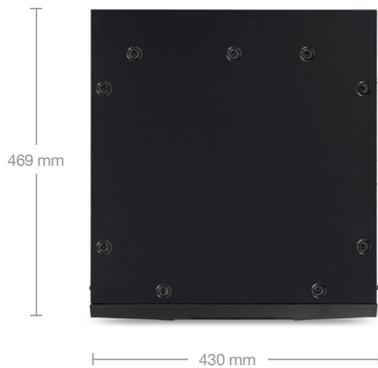
Downlink 512Kbps ~ 20Mbps  
Uplink 128Kbps ~ 3Mbps

### Frequency

Downlink freq RX 19.7 ~ 20.2GHz  
Uplink freq TX 29.5 ~ 30 GHz

Terminal RoHS

NTF-329KA Weight 8 kg



Ethernet IEEE802.3, 100Mbit/s  
1x LAN (modem)  
1x LAN (JRC)  
1x LAN (spare)  
GPS/gyro input (IEC61162-1/2)  
Suitable for 19-inch rack  
Temperature: -15° to 55°C  
Power 100V to 240V AC (300VA)

## In the box

Antenna  
Terminal

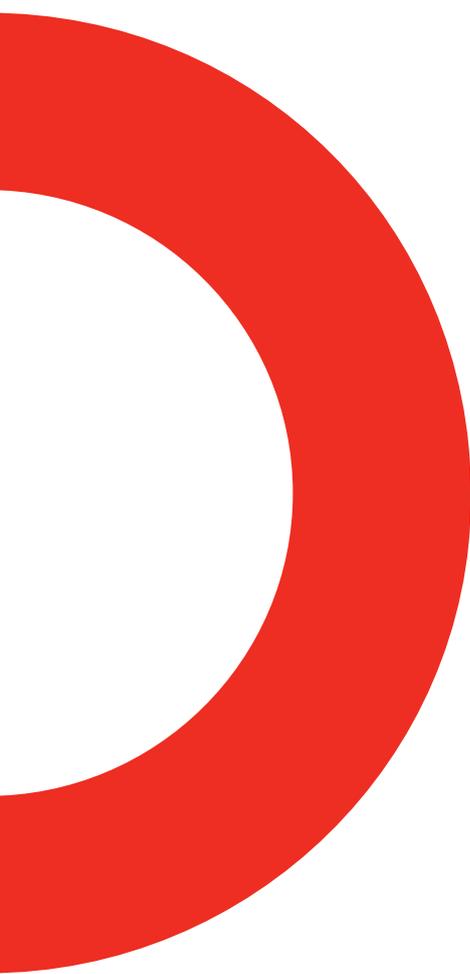
## Cables optional

Coax TX/RX  
5D TX up to 50m  
RX up to 35m

10D TX 50 to 60m  
RX 35 to 60m

## Optional

Radome heater (for ice class)



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