



# Jotron B85/B60 Ku/Ka

Stabilized VSAT antennas for  
broadband at sea



[www.jotron.com](http://www.jotron.com)



# ▶ Jotron B85/B60 Ku/Ka

## - New Generation stabilized VSAT antennas

### Key features: Life cycle cost savers

Maintenance:	Condition monitoring for preventive maintenance. No regular costly maintenance.
Fast and easy installation:	Single cable ADE-BDE. Auto set-up. Remote Line-Up via Backdoor.
Remote support:	Advanced support and diagnosis tools for cost-efficient remote support.
Spare parts:	Common spare parts for all New Generation VSAT products.
Training /support:	Knowing one New Generation VSAT product, you will know all New Generation VSAT products.



#### Jotron B85

Jotron B85 is an 85 cm maritime VSAT communication antenna system. Jotron B85 can be configured for either Ku-band or Ka-band operation.

Our advanced remote support tool, JRAS, enables remote diagnostic, maintenance and problem solving in almost all cases and removes the need for regular onboard maintenance.

With the highly efficient antenna and the integrated Transceiver Module connected directly to the antenna feed, Jotron B85 has a remarkable performance. Due to this the B85 has a RF performance which is marginally lower than typical 1 m stabilized antennas and occupies half the radome space.

The Jotron B85 is designed to withstand the most demanding sea conditions and ship environments, including temperature, shock and vibration. This ensures high service availability on all types of vessels.

#### Jotron B60

The Jotron B60 is a down scaled version of the Jotron B85. The downscaling is performed by still having all spare parts common for Jotron B60 and Jotron B85. B60 is around 30 kg lighter and requires much less space for installation. Jotron B60 Ku is mainly recommended for regional applications with stronger satellites.

#### Remote service and maintenance

JRAS enables condition based maintenance by performance logging, analysis and diagnosis. A spectrum analyzer is built-in for RF quality check and satellite recognition. JRAS enables automating routine maintenance activities like firmware upgrades and retrieval of condition monitoring data.

#### Installation made easy

No need to open the radome for connecting the single cable to the Below Deck Unit. Auto calibration of levels makes line-up simple. Can operate without external sensors e.g. ship's compass.

#### Full RF band Flexibility

Antennas can be configured from factory for either Ku-band or Ka-band operation. A band conversion kit is available for on-board band conversion.

#### Service onboard made easy

JRAS is also accessible in the radome via WLAN and standard browser. Easy replacement of wearing parts inside radome.

#### Products Commonality

New Generation Jotron antennas will have common wearing parts except for band specific components.

The common SW and JRAS automatically reconfigures for frequency band and antenna size.

## TECHNICAL SPECIFICATIONS Jotron B85 Ku/Ka

<b>Radome &amp; Antenna (ADE)</b>	
Dish effective diameter:	85 cm / 33.5"
Radome (D x H):	119 x 119 cm / 46.8" x 46.8"
Weight:	89 kg
<b>Stabilized Pedestal Assembly</b>	
Elevation range:	-15° - 115°
Azimuth range:	Unlimited
Stabilization accuracy Ku:	0.2°rms @max ship's motion
Stabilization accuracy Ka:	0.15°rms @max ship's motion
<b>Maximum Ship Motion</b>	
Roll + Pitch:	± 32° @ 6 sec period
Yaw:	± 8° @ 6 sec period
Turning rate:	Up to 16°/sec and 5°/sec <sup>2</sup>
<b>Reflector &amp; Feed Assembly</b>	
Tx frequency:	B85Ku: 13.75 - 14.5 GHz B85Ka: 29.5 - 30.0 GHz
Tx Gain:	B85Ku: 40.1 dB @ 14.5 GHz B85Ka: 46.7 dB @ 30.0 GHz
EIRP incl. Radome, typ.:	B85Ku: 48.6 dBW B85Ka: 50.8/53.0 dBW (3W/5W PA)
Rx frequency:	B85Ku: 10.7 - 12.75 GHz B85Ka: 19.20 - 20.2 GHz
Rx Gain:	B85Ku: 38.5 dB @ 12.5 GHz B85Ka: 43.0 dB @ 19.7 GHz
System G/T typical; el=30°:	B85Ku: 16.8 dB/K (in radome) B85Ka: 18.8 dB/K (in radome)
Polarization Rx/Tx:	B85Ku: Linear; Cross-pol; Co-pol B85Ka: LHCP/RHCP; RHCP/LHCP
Modem IF compatibility:	B85Ku: 950-1700 / 2150 MHz B85Ka: 950 - 1950 MHz





# ▶ Jotron B85/B60 Ku/Ka

TECHNICAL SPECIFICATIONS Jotron B60 Ku/Ka	
<b>Radome &amp; Antenna (ADE)</b>	
Dish effective diameter:	60 cm / 23.6"
Radome (D x H):	88cm x 91cm / 35" x 36"
Weight (Standard radome):	B60Ku: 62 kg with 7W BUC B60Ka: 59 kg with 3W BUC
<b>Stabilized Pedestal Assembly</b>	
Elevation range:	-15° - 115°
Azimuth range:	Unlimited
Stabilization accuracy Ku:	0.30° rms @max ship's motion
Stabilization accuracy Ka:	0.20° rms @max ship's motion
<b>Maximum Ship Motion</b>	
Roll + Pitch:	± 32° @ 6 sec period
Yaw:	± 8° @ 6 sec period
Turning rate:	Up to 16°/sec and 5°/sec <sup>2</sup>
<b>Reflector &amp; Feed Assembly</b>	
Tx frequency Ku:	13.75 - 14.5 GHz
Tx frequency Ka:	29.5 - 30.0 GHz
Tx Gain:	B60Ku: 37.1 dB @ 14.5 GHz B60Ka: 43.7 dB @ 30.0 GHz
Max. EIRP incl. Radome, typ.:	B60Ku: 45.6 dBW B60Ka: 47.8/50.0 dBW (3W/5W PA)
Rx frequency Ku:	10.7 - 12.75 GHz
Rx frequency Ka:	19.20 - 20.2 GHz
Rx Gain:	B60Ku: 35.5 dB @ 12.5 GHz B60Ka: 40.0 dB @ 19.7 GHz
System G/T typical; el=30°:	B60Ku: 13.6 dB/K (in radome) B60Ka: 15.7 dB/K (in radome)
Polarization Rx/Tx:	B60Ku: Linear; Cross-pol; Co-pol B60Ka: LHCP/RHCP; RHCP/LHCP
Modem IF compatibility:	B60Ku: 950-1700/ 2150 MHz B60Ka: 950-1950 MHz



Agent/Distributor:

Jotron AS reserves the right to change the design and/or specifications at any time without prior notice. Reservations are also taken towards any general errors that may occur.

v.A

[www.jotron.com](http://www.jotron.com)

## CONTACT INFORMATION

Jotron AS  
P.O.Box 54  
3281 Tjodalving  
Norway  
Tel: +47 33 13 97 00  
Fax: +47 33 12 67 80  
sales@jotron.com

Jotron UK Ltd.  
Crosland Park  
Cramlington  
NE23 1LA  
United Kingdom  
Tel: +44 (0) 1670 712000  
Fax: +44 (0) 1670 590265  
sales@jotron.com

Jotron Asia Pte. Ltd.  
19 Loyang Way  
Changi Logistics Centre  
Rear Office Block 04-26  
Singapore 508724  
Tel: +65 65426350  
Fax: +65 65429415  
sales@jotron.com

Jotron USA, Inc.  
10645 Richmond Avenue, Suite 170  
Houston, TX 77042  
USA  
Tel: +1 713 268 1061  
Fax: +1 713 268 1062  
sales@jotron.com