

Kebni Gimbal X150MIL

150 cm X-band | Military Maritime Stabilized VSAT System

Designed for Navy Vessels

The Kebni Gimbal XI50MIL is a high performance stabilized VSAT antenna proven according to US Military standards for vessels participating in sea warfare and defence. The antenna is easy to install, light and small - yet reliable and providing superior radio performance to support mission critical applications used on a modern battle ship.

Gimbal design

The Kebni Gimbal is a stabilized VSAT antenna built on a unique and proven gimbals technology. The design enables shorter geometric path and less rotation torque for each axis, extending the life of the mechanical parts of the antenna as the system is exposed to less stress than a centre-pole system. The cross-level axis also solves problems related to the zenith paradox occurring in a wide belt around the equator at high reflector elevations.

Superior Reflector Solution

The antenna design is of Prime Focus type and the reflector is made of carbon fibre, standard for Kebni Maritime antennas. The RF equipment is therefore light and easy to manoeuvre for the stabilizing platform, which facilitates fast and precise movements. The antenna complies with the requirements of Eutelsat and provides several technical advantages, such as;

- · High gain
- Low side lobes
- High cross-pol discrimination
- Up to 50W with internal BUC
- EIRP (with 50W BUC) 58 dBW
- Resistant to disturbance from other radio sources

Fast and Robust System

The antenna system is fast due to the gimbal design with AC servo motors on each axis and the gradient satellite tracking method on all 3 axes. The antenna locks on the satellite within 8 seconds, starting from its parking position. Robustness is built into the system, partly because of the solid rig construction, but also because the gimbal design enables less weight to move and a minimum of movement for each axis – all of the time.



KEY FEATURES

- ✓ 3 axes No zenith problems at equator
- ✓ Real Military standard
- ✓ Fast acquisition
- ✓ High MTBF
- ✓ Modem agnostic
- ✓ SNMP O&M

Remote Operation and Performance

Kebni Gimbal antennas are generally designed for remote Operation and Maintenance. The functionality includes:

- Real time supervision with access to performance statistics
- · Remote management using SNMP
- · Remote access control using SSH

Compliance to Standards

Kebni Gimbal X130MIL is tested and approved based on military standard specifications concerning vibration, shock, and EMC according to MIL STD 810G and MIL STD 461F.





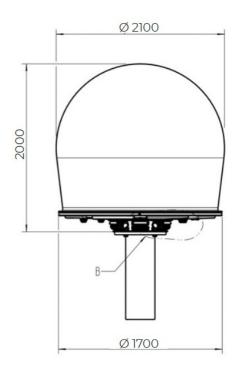
Kebni Gimbal X150MIL

Technical specifications

Height 2.0 m Diameter 2.1 m Stabilisation Type 3-axes gimbals. AC servo low inertia belt drive. Antenna Type Prime Focus Reflector Diameter 1.5 m (59") Redome Size H: 2.0 m (79") D: 2.1 m (83") Weight including Radome 250 kg (551 lbs) Frequency Rx: 725 - 7.75 GHz Tx: 790 - 8.40 GHz Antenna Gain Rx: 39.5 dBi / Tx: 40.5 dBi Reflector Material Carbon Fibre Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP G/T (@ 20° elevation, typical) 77.5 dB/K @ 7.5 GHz Maximum BUC Power 50W internal BUC Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Cross Level ± 30° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Polinting accuracy 0.1° RMS GPS Antenna Built in Radar Rejection 80 dB @ 9.6 GHz Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115 VAC @ 60 Hz or 220 - 230VAC @ 50/60 Hz Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Method 516.6 EMC MIL-STD-810G, Method 516.6 EMC MIL-STD-810G, Method 516.6 EMC MIL-STD-810G Method 516.6 MIL STD-810 Gmethod 516.6	Weight	~ 250 Kg
Stabilisation Type Antenna Type Prime Focus Reflector Diameter Radome Size H: 2.0 m (79") D: 2.1 m (83") Weight including Radome Frequency Rx: 7.25 - 7.75 GHz Tx: 7.90 - 8.40 GHz Antenna Gain Rx: 39.5 dBi / Tx: 40.5 dBi Reflector Material Carbon Fibre Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP G/T (@ 20° elevation, typical) Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level Antenna Movement, Polarisa-tion Ship Motion Heave +/- 5m @3s Pointing accuracy O1° RMS GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: Humidity Pyma Go Will-STD-810G Method 507.5 procedure II Shock Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD-810G Method 516.6	Height	2.0 m
Antenna Type Reflector Diameter Reflector Diameter Radome Size H: 2.0 m (79") D: 2.1 m (83") Weight including Radome Frequency Rx: 7.25 - 7.75 GHz Tx: 7.90 - 8.40 GHz Antenna Gain Rx: 39.5 dBi / Tx: 40.5 dBi Reflector Material Carbon Fibre Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power SoW internal BUC Antenna Movement, Elevation Antenna Movement, Cross Level 4: 30° Antenna Movement, Polarisa-tion Eigh Motion Heave +/- 5m @3s Pointing accuracy CPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: Humidity Piva @ 30 °C MIL-STD-810G Method 501.5 & 502.5 Humidity Piva Complete including RS103 FINC FINC FINC FINC FINC FINC FINC FINC	Diameter	2.1 m
Reflector Diameter Radome Size H: 2.0 m (79") D: 2.1 m (83") Weight including Radome 250 kg (551 lbs) Frequency Rx: 7.25 - 7.75 GHz Tx: 7.90 - 8.40 GHz Antenna Gain Rx: 39.5 dBi / Tx: 40.5 dBi Reflector Material Carbon Fibre Axial Ratio TX 1.0 Signal Polarization Circular RHCP or LHCP O/T (@ 20° elevation, typical) Maximum BUC Power SoW internal BUC Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation -10° - 120° Antenna Movement, Cross Level 4 30° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw +/- 5m @3s Pointing accuracy O.1° RMS OPS Antenna Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 15VAC @ 60 Hz or 220 - 230VAC @ 50/60 Hz Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 528, Table 528.III Shock Non-Operating MIL-STD-810G, Metod 520, 50 g 6 ms MIL-STD-810G, Metod 516.6 ML STD-810G Method 516.6 ML STD-810G Method 516.6	Stabilisation Type	
Radome Size H: 2.0 m (79") D: 2.1 m (83") Weight including Radome Z50 kg (551 lbs) Frequency Rx: 7.25 - 7.75 GHz Tx: 7.90 - 8.40 GHz Antenna Gain Reflector Material Axial Ratio Tx L0 Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Florarisa-tion L10° - 120° Antenna Movement, Polarisa-tion L10° - 120° Ship Motion Heave +/- 5m @35 Pointing accuracy O1° RMS GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: Uperating Temperature MIL-STD-810G Method 501.5 & 502.5 Phock Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 528, Table 528.III Shock Non-Operating MIL-STD-810G, Metod 529, Table 528.III Shock Non-Operating MIL-STD-810G, Metod 529, Table 528.III Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6	Antenna Type	Prime Focus
Weight including Radome 250 kg (551 lbs) Frequency Rx: 7.25 - 7.75 GHz Tx: 7.90 - 8.40 GHz Antenna Gain Reflector Material Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level 4 30° Antenna Movement, Polarisa-tion \$\frac{1}{2}\$ 120° Ship Motion \$\frac{1}{2}\$ 30° per 4s in pitch, roll and yaw Heave \$\frac{1}{2}\$ 50° Antenna Built in Radar Rejection Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 - 230VAC @ 50/60 Hz Vibration Operating MIL-STD-810C Method 507.5 procedure I ms, MIL-STD-810G, Method 507.5 procedure I ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 30 g 6 ms MIL-STD-810G, Method 516.6 ML STD 461F complete including RS103	Reflector Diameter	1.5 m (59")
Frequency Rx: 7.25 – 7.75 GHz Tx: 7.90 – 8.40 GHz Antenna Gain Reflector Material Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level Antenna Movement, Folarisa-tion ± 120° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw +/- 5m @3s Pointing accuracy CPS Antenna Radar Rejection Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Vibration Operating MIL-STD-810G Method 501.5 & 502.5 Humidity Procedure II ms, MIL-STD-810G, Method 507.5 procedure II psy of ms, 30 g 6 ms, 30 g 6 ms, MIL-STD-810G, Method 516.6 MIL STD 461F complete including RS103	Radome Size	H: 2.0 m (79") D: 2.1 m (83")
Antenna Gain Reflector Material Carbon Fibre Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level Antenna Movement, Polarisa-tion Ship Motion Heave 1-0° - 120° Ship Motion 2 30° per 4s in pitch, roll and yaw Heave 1-5 m @3s Pointing accuracy O,1° RMS GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: Nominal Voltage: Operating Temperature MIL-STD-810G Method 501.5 & 502.5 Humidity Piorating MiL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 528, Table 528.III Shock Non-Operating Transverse/Longitudinal: 20 g 20 ms; 30 g 6 ms MIL-STD-810G, Method 516.6 MIL-STD-810G Method 516.6 MIL-STD-610G Method 516.6	Weight including Radome	250 kg (551 lbs)
Reflector Material Axial Ratio Tx 1.0 Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power Antenna Movement, azimuth Antenna Movement, Elevation Antenna Movement, Cross Level Antenna Movement, Polarisa-tion Ship Motion Heave +/- 5m @ 3s Pointing accuracy CPS Antenna Radar Rejection Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: Derating Temperature Humidity Vibration Operating Shock Operating Shock Non-Operating MIL-STD-810G, Metod 528, Table 528.III FMC MIL STD 461F complete including RS103	Frequency	
Axial Ratio Tx Signal Polarization Circular RHCP or LHCP 7.5 dB/K @ 7.5 GHz Maximum BUC Power SoW internal BUC Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level Antenna Movement, Polarisa-tion Ship Motion Heave +/- 5m @3s Pointing accuracy GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: Derating Temperature Humidity Polye @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating Shock Operating MIL-STD-810G, Metod 528, Table 528.III Shock Non-Operating MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Antenna Gain	Rx: 39.5 dBi / Tx: 40.5 dBi
Signal Polarization Circular RHCP or LHCP C/T (@ 20° elevation, typical) Maximum BUC Power SoW internal BUC Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level Antenna Movement, Polarisa-tion \$\frac{\pmax}{120^\circ}\$ Ship Motion Heave \$\pmax**-/-5 m @3s Pointing accuracy CPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: Uperating Temperature 115VAC @ 60 Hz or 220 - 230VAC @ 50/60 Hz Power and the first conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity Power and the first conditioner MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G Method 516.6	Reflector Material	Carbon Fibre
G/T (@ 20° elevation, typical) Maximum BUC Power 50W internal BUC Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level ± 30° Antenna Movement, Polarisa-tion \$\frac{1}{2}120^\circ\$ Antenna Movement, Polarisa-tion \$\frac{1}{2}120^\circ\$ Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Pointing accuracy 0.1° RMS GPS Antenna Built in Radar Rejection Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 - 230VAC @ 50/60 Hz Operating Temperature Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 528, Table 528.III Transverse/Longitudinal: 20 g 20 ms; 40 g 6m, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Axial Ratio Tx	1.0
Maximum BUC Power 50W internal BUC Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation Antenna Movement, Cross Level ± 30° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Pointing accuracy O.1° RMS GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature Humidity 97% @ 30 °C MIL-STD-810G Method 501.5 & 502.5 Humidity Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating Shock Non-Operating MIL-STD-810G Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Signal Polarization	Circular RHCP or LHCP
Antenna Movement, azimuth Continuous, unlimited, (slip ring) Antenna Movement, Elevation -10° – 120° Antenna Movement, Cross Level ± 30° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Pointing accuracy O.1° RMS GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Antenna Movement, Elevation 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Antenna Movement, Elevation 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz 20 g 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity Vibration Operating MIL-STD-810G, Metod 528, Table 528.III 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 MES OPERATOR OF MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	G/T (@ 20° elevation, typical)	17.5 dB/K @ 7.5 GHz
Antenna Movement, Elevation Antenna Movement, Cross Level ± 30° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Pointing accuracy O.1° RMS GPS Antenna Built in Radar Rejection Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature MIL-STD-810G Method 501.5 & 502.5 Humidity Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 528, Table 528.III 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD-810G Method 516.6	Maximum BUC Power	50W internal BUC
Antenna Movement, Cross Level ± 30° Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Pointing accuracy 0.1° RMS GPS Antenna Built in Radar Rejection >80 dB @ 9.6 GHz Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Shock Non-Operating Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6	Antenna Movement, azimuth	Continuous, unlimited, (slip ring)
Antenna Movement, Polarisa-tion ± 120° Ship Motion ± 30° per 4s in pitch, roll and yaw +/- 5m @3s Pointing accuracy 0.1° RMS GPS Antenna Built in Radar Rejection >80 dB @ 9.6 GHz Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6	Antenna Movement, Elevation	-10° – 120°
Ship Motion ± 30° per 4s in pitch, roll and yaw Heave +/- 5m @3s Pointing accuracy 0.1° RMS GPS Antenna Built in Radar Rejection >80 dB @ 9.6 GHz Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103	Antenna Movement, Cross Level	± 30°
Heave+/- 5m @3sPointing accuracy0.1° RMSGPS AntennaBuilt inRadar Rejection>80 dB @ 9.6 GHzRadome MaterialPolyester laminate with Trident foam coreCompass InterfaceNMEA 0183Nominal Voltage:115VAC @ 60 Hz or 220 − 230VAC @ 50/60 HzOperating Temperature-20 − 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5Humidity97% @ 30 °C MIL-STD-810G Method 507.5 procedure IIVibration OperatingMIL-STD-810G, Metod 528, Table 528.IIIShock Operating20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6Shock Non-OperatingTransverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6FMCMIL STD 461F complete including RS103	Antenna Movement, Polarisa-tion	± 120°
Pointing accuracy GPS Antenna Built in Radar Rejection Polyester laminate with Trident foam core Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Ship Motion	± 30° per 4s in pitch, roll and yaw
GPS Antenna Radar Rejection >80 dB @ 9.6 GHz Radome Material Polyester laminate with Trident foam core Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD-810G Method 516.6 MIL STD-810G Method 516.6	Heave	+/- 5m @3s
Radar Rejection >80 dB @ 9.6 GHz Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Pointing accuracy	
Radome Material Polyester laminate with Trident foam core NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating MIL-STD-810G, Metod 528, Table 528.III 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103		
Compass Interface NMEA 0183 Nominal Voltage: 115VAC @ 60 Hz or 220 - 230VAC @ 50/60 Hz Operating Temperature -20 - 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103	Radar Rejection	>80 dB @ 9.6 GHz
Nominal Voltage: 115VAC @ 60 Hz or 220 – 230VAC @ 50/60 Hz Operating Temperature -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103	Radome Material	Polyester laminate with Trident foam core
Nominal Voltage: Hz -20 – 60 °C, with Air Conditioner MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103	Compass Interface	NMEA 0183
MIL-STD-810G Method 501.5 & 502.5 Humidity 97% @ 30 °C MIL-STD-810G Method 507.5 procedure II Vibration Operating MIL-STD-810G, Metod 528, Table 528.III Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103	Nominal Voltage:	
Vibration Operating MIL-STD-810G, Metod 528, Table 528.III 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 EMC MIL STD 461F complete including RS103	Operating Temperature	
Shock Operating 20 g, half-sine 11 ms, MIL-STD-810G, Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Humidity	
Shock Operating Method 516.6 Transverse/Longitudinal: 20 g 20 ms; 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Vibration Operating	MIL-STD-810G, Metod 528, Table 528.III
Shock Non-Operating 40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6 ms MIL-STD-810G Method 516.6 MIL STD 461F complete including RS103	Shock Operating	
	Shock Non-Operating	40 g 6 ms, Vertical: 15 g 20 ms; 30 g 6
2007/11, (213/12 10 01/2)	EMC	MIL STD 461F complete including RS103 200V/m, (2 MHz – 40 GHz)

Supports fast deployment

Antenna completely **assembled**, **balanced** and **tested** at factory.



Radome size in mm

 ${\it Note: Specifications \, subject \, to \, change \, without \, further \, notice}$

