

Z_SERIES VSAT

The SuperTrack Z-Series MK2 is the perfect solution for ships looking for VSAT communication network with broadband speed at sea. Through our 3-axis stabilization solution, you may enjoy all the functions of VSAT to stay in touch with your network via high speed access to the internet, email, multiple VoIP phones and more.



AMI Marine Co., Ltd
Ph: +84 (254) 3513 345
Fax: +84 (254) 3513 346
Email: Vietnam@amisales.com.vn

A: 6th Floor, Silver Sea Towers,
47 Ba Cu street, Ward 1, Vung Tau City,
Ba Ria - Vung Tau Province - Vietnam
Visit us online: www.amisales.com.vn

SUPERTRACK MARINE SATCOMS

Z_SERIES MK2 Ku / C - Band Communication

Z-Series Antenna Radome
Honeycomb Radome for durability and higher tolerance preventing any possible damage due to harsh environments.

Tracking Speed
More than 90°/ sec

Unlimited Azimuth
Uninterrupted searching keeps you in business however your ship turns. Cable wrap free.

Pre-programmed Satellite Database
Editable 80 satellite data

Accurate Signal Acquisition by KNS's Distinctive Algorithm
Pointing Accuracy : ± 0.2 deg_{p-p}


KA-165 Antenna Control Unit
3 Types of Gyro Input : NMEA, Synchro, Step by Step
Input Power : 100~120V AC / 200~240V AC, 50/60Hz, 8A/4A
Output Power (Antenna Input Power)
: TX - 48V DC, 3.2A / RX - 48V DC, 4.18A
External I/O : RS232C, Mini USB, Ethernet, Console
Size : 19" Rack 1U size
Remote Access : T-monitor, SCS Software, Telnet Terminal

Z
A
C
S
K
M
X

Z_SERIES MK2 Ku / C - Band Communication

NEW



KU-BAND	Z4MK2	Z6MK2	Z7MK2	Z8MK2
Dish Diameter	45cm	61cm	75cm	83cm
Antenna Dimension	60cm(D) X 69cm(H)	85cm(D) X 84cm(H)	102cm(D) X 104cm(H)	113cm(D) X 117cm(H)
Antenna Weight	32kg	43kg	69kg	87kg
Frequency	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz
Antenna Gain	TX : 33.2 dBi @ 14.25 GHz RX : 33.0 dBi @ 11.75 GHz	TX : 37.2 dBi @ 14.25 GHz RX : 35.7 dBi @ 11.75 GHz	TX : 39.1 dBi @ 14.25 GHz RX : 37.5 dBi @ 11.75 GHz	TX : 39.9 dBi @ 14.25 GHz RX : 38 dBi @ 11.75 GHz
G / T	11.0dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	14.25dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	16.37dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	16.89dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky
Operating Platform	3-Axis	3-Axis	3-Axis	3-Axis
Skew Control	-90° to +90°	Automatic	Automatic	Automatic
Elevation Angle	-20° to +95°	-10° to +95°	-10° to +100°	-20° to +105°
Azimuth Angle	640°	Unlimited	Unlimited	Unlimited
Cross Angle	± 35°	± 35°	± 35°	± 35°
Ship Motion	Roll: ±20° at 8~12 sec periods Pitch: ±10° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods	Roll: ±20° at 8~12 sec periods Pitch: ±10° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods	Roll: ±24.7° at 8 sec periods Pitch: ±15° at 6 sec periods Yaw: ±8° at 15 sec periods	Roll: ±24° at 8~12 sec periods Pitch: ±14° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods
Vibration Damper	Rubber Damper Included	Rubber Damper Included	Rubber Damper Included	Rubber Damper Included
Temperature	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C
Humidity	Up to 100% @ 40°C	Up to 100% @ 40°C	Up to 100% @ 40°C	Up to 100% @ 40°C
Hybrid /All-in-one	Hybrid	Hybrid / All-in-one	Hybrid / All-in-one	Hybrid / All-in-one
Certification / Qualification		 INTELSAT  0678 	 INTELSAT  0678 	 0678 
Radome	Plastic / FRP	FRP Honeycomb	FRP Honeycomb	FRP Honeycomb

*Specifications subject to change without notice

SUPERTRACK MARINE SATCOMS



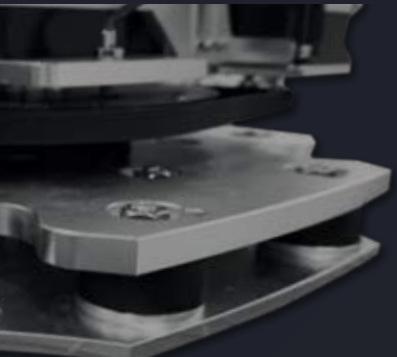
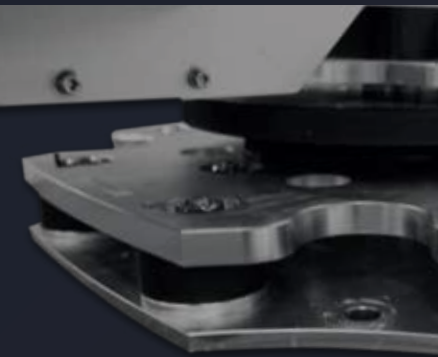
KU/C-BAND	Z10MK2	Z12MK2	Z24MK2	Z24MK2-C
Dish Diameter	100cm	120cm	240cm	240cm
Antenna Dimension	144cm(D) X 152cm(H)	161cm(D) X 163cm(H)	315cm(D) X 308cm(H)	315cm(D) X 308cm(H)
Antenna Weight	114kg	142kg	530kg	530kg
Frequency	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 5.85 ~ 6.725 GHz RX : 3.4 ~ 4.2 GHz
Antenna Gain	TX : 41.0 dBi @ 14.25 GHz RX : 40 dBi @ 11.75 GHz	TX : 42.87 dBi @ 14.25 GHz RX : 40.95 dBi @ 11.75 GHz	TX : 49.1 dBi @ 14.25 GHz RX : 47.8 dBi @ 11.75 GHz	TX : 41.6 dBi @ Mid. Frequency RX : 36 dBi @ Mid. Frequency
G / T	18.89dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	20.79dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	27.27dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	20.6dB/K (in Radome) @ 30deg, Elevation angel and RX mid freq., Clear Sky
Operating Platform	3-Axis	3-Axis	3-Axis	3-Axis
Skew Control	Automatic	Automatic	Automatic	Automatic
Elevation Angle	-20° to +110°	-20° to +110°	-10° to +120°	-10° to +120°
Azimuth Angle	Unlimited	Unlimited	Unlimited	Unlimited
Cross Angle	± 35°	± 35°	± 35°	± 35°
Ship Motion	Roll: ±24° at 8~12 sec periods Pitch: ±14° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods	Roll: ±24° at 8~12 sec periods Pitch: ±14° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods	Roll: ±15° at 8~12 sec periods Pitch: ±10° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods	Roll: ±15° at 8~12 sec periods Pitch: ±10° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods
Vibration Damper	Rubber Damper Included	Rubber Damper Included	-	-
Temperature	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C
Humidity	Up to 100% @ 40°C	Up to 100% @ 40°C	Up to 100% @ 40°C	Up to 100% @ 40°C
Hybrid /All-in-one	Hybrid / All-in-one	Hybrid / All-in-one	-	-
Certification / Qualification	 INTELSAT  0678  MIL-STD-167-1A	 INTELSAT  0678  MIL-STD-167-1A		
Radome	FRP Honeycomb	FRP Honeycomb	FRP	FRP

*Specifications subject to change without notice

Z
A
C
S
K
M
X

COMPARISON BETWEEN MK2 and MK3

ADU (Above Deck Unit)			
Features	Mk2	Mk3	Remark
Automatic Satellite Searching	√	√	
Auto Skew Control	√	√	Mk2 : 1 deg min skew control angle Mk3 : 0.1 deg min skew control angle
Skew Calibration Setting Free		√	No skew calibration setting required after replacing major components
Motor Compatibility		√	Same motor can be used for all 3 axis and all MK3 model
Interface Unit (LCIU, YIU)		√	Located between PCU and each motor that act as a bridge to shorten the cable to make easy replacement and protect motor driver module
Home Index Sensor	Hall sensor	Proximity sensor	Proximity sensor has better durability (Enclosed in the YIU and also easy to replace)
Co-pol Switch Module	(Optional)	√	
All-in-one PCU	(External)	√	
Brake System	√	√	Prevent the antenna from free moving during power off
Shock Absorber		√	Remove the impact from rough sea condition and conventional weapon fire
Wire Rope Isolator & Rubber Damper	√	√	Reduce vibration
Bluetooth Connection Between PC & PCU		√	
Certification	Intelsat, CE0678, MIL-STD-167, Thaicom	Intelsat, CE0678, MIL-STD-901, MIL-STD-461, MIL-STD-167, Anatel, Eutelsat	

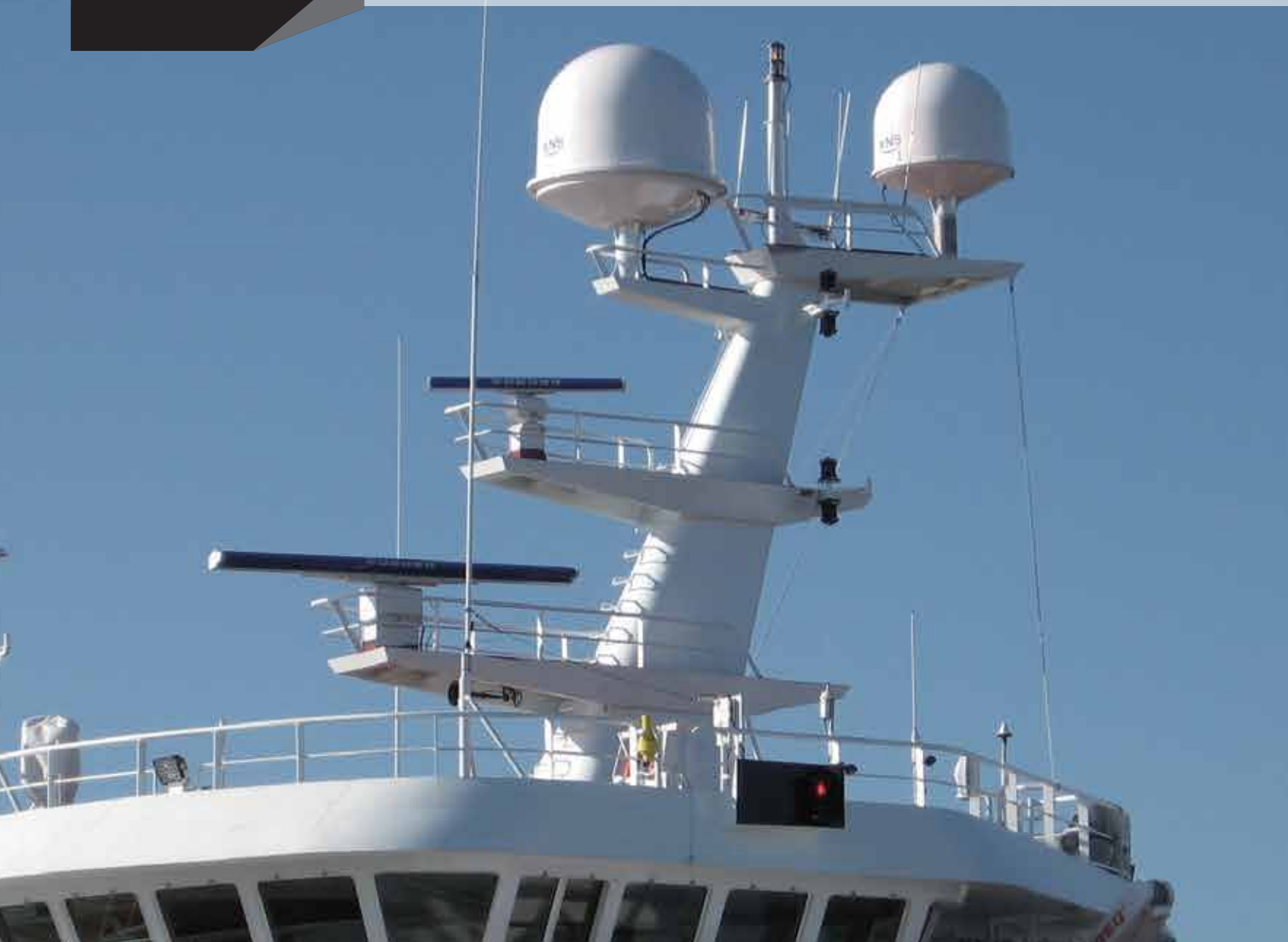


SUPERTRACK

BDU (Below Deck Unit)			
Features	KA-165 ACU	KA-180 ACU	Remark
Main Power Filter Board		√	Decrease noise level, prevent noise interference in the Rack
Extended Power Supply		√	Supply both Rx & TX power, can be extended to 640W (Additional 320W power supply can be installed for high power BUC), individual Tx & Rx power control
Dual Fan	(Single fan)	√	Increased cooling capability, provide constant cooling even when one of the fan fails
Temp Monitoring		√	Able to check temperature inside both ACU and PCU
Power Consumption Monitoring		√	Able to check both Rx & Tx power consumption
Remote Software Upgrade		√	
Gyro Interface	√	√	
ABS Status Monitoring	√	√	Displays ABS status, support iDirect, Comtech, Hughes, STM etc.
Dual Antenna System	√ (With mediator)	√ (With VCS)	
Built-in Impedance Matching Pad		√	LNB impedance 75 Ohm & ACU impedance 50 Ohm, modem interface 50 Ohm

Z_SERIES VSAT

This High-End SuperTrack Z-Series MK3 allows your ultimate effectiveness of network connection even though in harsher environment. You will feel the definite difference from what you expected at VSAT connection via our high performance and easy maintenance within more rigid body structure which is proudly approved for naval vessels. (MIL-STD-901 compliance)



Z_SERIES MK3 Ku / Ka - Band Communication



Z-Series Antenna Radome

Honeycomb Radome for durability and higher tolerance preventing any possible damage due to harsh environments.

Tracking Speed

More than 90° / sec

Motor Compatibility

Universal Motors throughout each Axis

All-In-One PCU

PCB modules integrated in one PCU for easy maintenance

Remote Upgrade

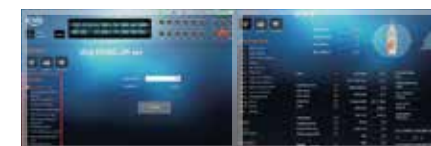
Shock Absorber & Wire Rope Isolator

MIL-STD-901 complied

KA-180 Antenna Control Unit

3 Types of Gyro Input : NMEA, Synchro, Step by Step
Input Power : 100~120V AC / 200~240V AC, 50/60Hz, 8A/4A
Output Power : 48V DC, 4.18A
External I/O : RS232C, Mini USB, Ethernet, Console
Size : 19" Rack 1U size
Remote Access : SCS Software, Telnet Terminal, T-monitor, Web Interface

Wireless ACU Connectivity Via Bluetooth



Remote Upgrade / Control

* Optional - Heater / Air-conditioner

Z_SERIES MK3 Ku / Ka - Band Communication



KU-BAND	Z7MK3	Z7MK3 Shock ver.
Dish Diameter	75cm	75cm
Antenna Dimension	102cm(D) X 104cm(H)	113cm(D) X 117cm(H)
Antenna Weight	67kg	86kg
Frequency	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz
Antenna Gain	TX : 39.1 dBi @ 14.25 GHz RX : 37.5 dBi @ 11.75 GHz	TX : 39.1 dBi @ 14.25 GHz RX : 37.5 dBi @ 11.75 GHz
G / T	16.37dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	16.37dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky
Operating Platform	3-Axis	3-Axis
Skew Control	Automatic	Automatic
Elevation Angle	-10° to +100°	-10° to +100°
Azimuth Angle	Unlimited	Unlimited
Cross Angle	± 35°	± 35°
Ship Motion	Roll: ±24.7° at 8 sec periods Pitch: ±15° at 6 sec periods Yaw: ±8° at 15 sec periods	Roll: ±24.7° at 8 sec periods Pitch: ±15° at 6 sec periods Yaw: ±8° at 15 sec periods
Vibration Damper	Rubber Damper Included	Wire Rope and Shock Absorber Included
Temperature	-20°C to +55°C	-20°C to +55°C
Humidity	Up to 100% @ 40°C	Up to 100% @ 40°C
Hybrid /All-in-one	Hybrid	Hybrid
Certification / Qualification	 ANATEL  0678	 ANATEL  0678  RoHS MIL-STD-901 MIL-STD-461 MIL-STD-167
Radome	FRP Honeycomb	FRP Honeycomb

*Specifications subject to change without notice



KU-BAND	Z8MK3	Z10MK3
Dish Diameter	83cm	100cm
Antenna Dimension	113cm(D) X 117cm(H)	144cm(D) X 152cm(H)
Antenna Weight	103kg	103kg
Frequency	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz
Antenna Gain	TX : 39.9 dBi @ 14.25 GHz RX : 38 dBi @ 11.75 GHz	TX : 41.0 dBi @ 14.25 GHz RX : 40 dBi @ 11.75 GHz
G / T	16.89dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	18.89dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky
Operating Platform	3-Axis	3-Axis
Skew Control	Automatic	Automatic
Elevation Angle	-12° to +110°	-18° to +110°
Azimuth Angle	Unlimited	Unlimited
Cross Angle	± 35°	± 35°
Ship Motion	Roll: ±24° at 8~12 sec periods Pitch: ±14° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods	Roll: ±25° at 8~12 sec periods Pitch: ±15° at 6~12 sec periods Yaw: ±8° at 15~20 sec periods
Vibration Damper	Rubber Damper Included	Rubber Damper, Wire Rope and Shock Absorber included
Temperature	-20°C to +55°C	-20°C to +55°C
Humidity	Up to 100% @ 40°C	Up to 100% @ 40°C
Hybrid /All-in-one	Hybrid	Hybrid
Certification / Qualification	 0678	 0678  ANATEL  0678 MIL-STD-901 MIL-STD-461 MIL-STD-167
Radome	FRP Honeycomb	FRP Honeycomb

*Specifications subject to change without notice

Z_SERIES MK3 Ku / Ka - Band Communication



KU-BAND	Z12 MK3	Z15 MK3
Dish Diameter	120cm	150cm
Antenna Dimension	161cm(D) X 163cm(H)	212cm(D) X 1206cm(H)
Antenna Weight	138kg	260kg
Frequency	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz	TX : 13.75 ~ 14.5 GHz RX : 10.75 ~ 12.75 GHz
Antenna Gain	TX : 42.87 dBi @ 14.25 GHz RX : 40.95 dBi @ 11.75 GHz	TX : 45.25 dBi @ 14.25 GHz RX : 43.8 dBi @ 11.75 GHz
G / T	20.79dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky	22.89dB/K (in Radome) @ 30deg, Elevation angel and 11.75GHz, Clear Sky
Operating Platform	3-Axis	3-Axis
Skew Control	Automatic	Automatic
Elevation Angle	-10° to +110°	-15° to +110°
Azimuth Angle	Unlimited	Unlimited
Cross Angle	± 35°	± 35°
Ship Motion	Roll: ±25° at 8-12 sec periods Pitch: ±15° at 6-12 sec periods Yaw: ±8° at 15-20 sec periods	Roll: ±25° at 8-12 sec periods Pitch: ±15° at 6-12 sec periods Yaw: ±5° at 5-50sec periods
Vibration Damper	Rubber Damper and Shock Absorber Included	Rubber Damper and Shock Absorber Included
Temperature	-20°C to +55°C	-20°C to +55°C
Humidity	Up to 100% @ 40°C	Up to 100% @ 40°C
Hybrid /All-in-one	Hybrid	-
Certification/Qualification	-	-
Radome	FRP Honeycomb	FRP Honeycomb

*Specifications subject to change without notice



KA-BAND	Z6 MK3-ka	Z10 MK3-ka
Dish Diameter	60cm	100cm
Antenna Dimension	102cm(D) X 104cm(H)	144cm(D) X 152cm(H)
Antenna Weight	62kg	119kg
Frequency	TX : 29.0 ~ 31.0 GHz RX : 19.2 ~ 21.2 GHz	TX : 29.0 ~ 31.0 GHz RX : 19.2 ~ 21.2 GHz
Antenna Gain	TX : 43.71 dBi @ 30.0 GHz RX : 40.78 dBi @ 20.2 GHz	TX : 44.9 dBi @ 29.5 GHz RX : 42.5 dBi @19.7 GHz
G / T	17.02dB/K (in Radome) @ 30deg, Elevation angel and RX mid freq., Clear Sky	19.6dB/K (in Radome) @ 30deg, Elevation angel and RX mid freq., Clear Sky
Operating Platform	3-Axis	3-Axis
Skew Control	N / A	N / A
Elevation Angle	-10° to +100°	-15° to +110°
Azimuth Angle	Unlimited	Unlimited
Cross Angle	± 35°	± 35°
Ship Motion	Roll: ±24.7° at 8 sec periods Pitch: ±15° at 6 sec periods Yaw: ±8° at 15 sec periods	Roll: ±24° at 8-12 sec periods Pitch: ±14° at 6-12 sec periods Yaw: ±8° at 15-20 sec periods
Vibration Damper	Rubber Damper Included	Rubber Damper, Wire Rope and Shock Absorber included
Temperature	-20°C to +55°C	-20°C to +55°C
Humidity	Up to 100% @ 40°C	Up to 100% @ 40°C
Hybrid /All-in-one	-	-
Certification/Qualification	-	 MIL-STD-901 C06780 MIL-STD-461 MIL-STD-167
Radome	FRP Sponge	FRP Sponge

*Specifications subject to change without notice

Z
A
C
S
K
M
X