

## Z Series MK4



### VSAT MARINE SATCOM

Choose the Z-series Mk4 if you are searching for the perfect and sophisticated solution for vessels. All aspects of design have been upgraded including mechanical, electrical and RF parts with user-friendly and new functions. This improvement will convince you of much higher tracking accuracy than the previous versions, which certainly brings you the great satisfaction.

#### Ready for High Throughput Satellite (HTS)

Supporting wide-band and advanced satellite carriers, DVB-S2X is selected for most of High Throughput Satellites. KNS Z-series Mk4 is compatible with DVB-S2X with built-in NIM tuner that enables carrier SNR direct tracking.

#### User-Friendly VSAT Antenna

Enjoy or work on the internet with user-friendly applications. KNS web-interface allows you to operate the antenna more easily just with some clicks in your phone, PC, or Tablets with Wi-Fi. You can immediately and simply update the firmware, check the current status in real time, and be daily reported the log history.

#### Enhanced Tracking Performance, Best Ever than Before

The tracking performance of Z-series Mk4 convinces you of the highest accuracy ever seen. Upgrading the motor driver part and KNS control algorithm, the error rate greatly lowered than previous versions.

#### Gyro Free Function Supporting

Don't be concerned with Gyro failure. Z-series Mk4 can support your connection although the vessel does not have gyro or in any case of the gyro failure. Gyro-free mode will sustain your network communication regardless of the vessel's failure.



Z10MK4-Ka



DUAL  
Dual Antenna System Support



High Tracking Speed  
More than 90° / sec



ACU  
Single cable solution (option)



Remote Software Upgrade & Control



Gyro Free Mode Support



SNMP support



-All-in-One PCU



HTS Communication Applicable

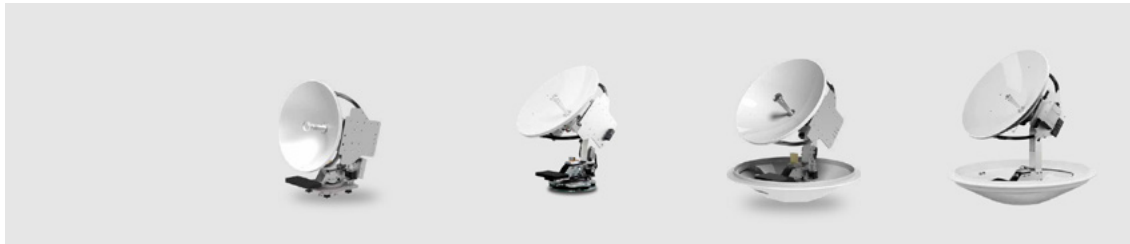
BELOW DECK  
KA-190 Antenna Control unit



3+1  
3-Year Parts Warranty  
1-Year Labor Warranty

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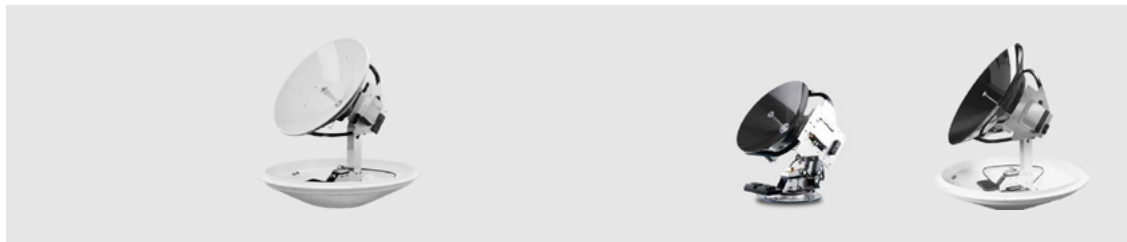




| Ku BAND                              | Z6MK4   | Z7MK4  | Z8MK4  | Z10MK4  |
|--------------------------------------|---|--|--|---|
| <b>Dish Diameter</b>                 | 61cm  | 75cm   | 83cm   | 100cm   |
| <b>Antenna Dimension</b>             | 85cm(D) x 84cm(H)   | 102cm(D) x 104cm(H)  | 113cm(D) x 117cm(H)  | 144cm(D) x 152cm(H)   |
| <b>Antenna Weight</b>                | 58kg  | 70kg   | 78kg   | 110kg   |
| <b>Frequency</b>                     | TX : 13.75 ~ 14.5GHz<br>RX : 10.7 ~ 12.75GHZ  | TX : 13.75 ~ 14.50GHz<br>RX : 10.70 ~ 12.75GHZ   | TX : 13.75 ~ 14.50GHz<br>RX : 10.70 ~ 12.75GHZ   | TX : 13.75 ~ 14.50GHz<br>RX : 10.70 ~ 12.75GHZ  |
| <b>Antenna Gain</b>                  | TX : 37.2dBi@ 14.25GHz<br>RX : 35.7dBi@ 11.75GHz  | TX : 39.1dBi@ 14.25GHz<br>RX : 37.5dBi@ 11.75GHz   | TX : 39.9dBi@ 14.25GHz<br>RX : 38.0dBi@ 11.75GHz   | TX : 41.0dBi@ 14.25GHz<br>RX : 40.0dBi@ 11.75GHz  |
| <b>G / T</b>                         | 14.25dBk(in Radome)<br>@30deg, Elevation angel and<br>11.75GHz, Clear Sky                             | 16.37dBk(in Radome)<br>@30deg, Elevation angel and<br>11.75GHz, Clear Sky                      | 16.89dBk(in Radome)<br>@30deg, Elevation angel and<br>11.75GHz, Clear Sky                      | 18.89dBk(in Radome)<br>@30deg, Elevation angel and<br>11.75GHz, Clear Sky                             |
| <b>Operating Platform</b>            | 3-Axis  | 3-Axis   | 3-Axis   | 3-Axis  |
| <b>Skew Control</b>                  | Automatic   | Automatic  | Automatic  | Automatic   |
| <b>Elevation Angle</b>               | -10° to +110°   | -10° to +100°  | -10° to +110°  | -20° to +110°   |
| <b>Azimuth Range</b>                 | Unlimited   | Unlimited  | Unlimited  | Unlimited   |
| <b>Cross Angle</b>                   | ±35°  | ± 35°  | ± 35°  | ± 35°   |
| <b>Ship Motion</b>                   | Roll : ±20° at 8~12 sec periods<br>Pitch : ±10° at 6~12 sec periods<br>Yaw : ±8° at 15~20 sec periods | Roll : ±24.7° at 8 sec periods<br>Pitch : ±15° at 6 sec periods<br>Yaw : ±8° at 15 sec periods | Roll : ±24.7° at 8 sec periods<br>Pitch : ±15° at 6 sec periods<br>Yaw : ±8° at 15 sec periods | Roll : ±24° at 8~12 sec periods<br>Pitch : ±14° at 6~12 sec periods<br>Yaw : ±8° at 15~20 sec periods |
| <b>Vibration Damper</b>              | Rubber Damper Included  | Rubber Damper Included   | Rubber Damper Included   | Rubber Damper Included  |
| <b>Temperature</b>                   | -20°C to +55°C  | -20°C to +55°C   | -20°C to +55°C   | -20°C to +55°C  |
| <b>Humidity</b>                      | Up to 100% @ 40°C   | Up to 100% @ 40°C  | Up to 100% @ 40°C  | Up to 100% @ 40°C   |
| <b>Certification / Qualification</b> | CE  | CE SES   | CE   | INTELSAT CE   |

\* Specificatios subject to change without notice

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| Ku BAND                              | Z12MK4   | Ka BAND                              | Z5MK4-Ka   | Z10MK4-Ka  |
|--------------------------------------|--|--------------------------------------|--|--|
| <b>Dish Diameter</b>                 | 120cm  | <b>Dish Diameter</b>                 | 56cm   | 105cm  |
| <b>Antenna Dimension</b>             | 161cm(D) x 163cm(H)  | <b>Antenna Dimension</b>             | 76cm(D) x 80cm(H)  | 144cm(D) x 152cm(H)  |
| <b>Antenna Weight</b>                | 120kg  | <b>Antenna Weight</b>                | 65kg   | 110kg  |
| <b>Frequency</b>                     | TX : 13.75 ~ 14.50GHz<br>RX : 10.70 ~ 12.75GHz   | <b>Frequency</b>                     | TX : 29.0 ~ 30.0GHz<br>RX : 19.2 ~ 20.2GHz   | TX : 29.0 ~ 30.0GHz<br>RX : 19.2 ~ 20.2GHz   |
| <b>Antenna Gain</b>                  | TX : 42.87dBi@ 14.25GHz<br>RX : 40.95dBi@ 11.75GHz   | <b>Antenna Gain</b>                  | TX : 43.19dBi@ 29.5GHz<br>RX : 39.59dBi@ 19.7GHz   | TX: 47.84dBi@ 30.0 GHz<br>RX : 44.59dBi@ 19.7 GHz  |
| <b>G / T</b>                         | 20.79dBk(in Radome)<br>@30deg, Elevation angel and<br>11.75GHz, Clear Sky                          | <b>G / T</b>                         | 17.05dBk(in Radome)<br>@30deg, Elevation angel and<br>19.7GHz, Clear Sky                           | 22.05dBk(in Radome)<br>@30deg, Elevation angel and<br>19.7GHz, Clear Sky                           |
| <b>Operating Platform</b>            | 3-Axis   | <b>Operating Platform</b>            | 3-Axis   | 3-Axis   |
| <b>Skew Control</b>                  | Automatic  | <b>Elevation Angle</b>               | -10° to +110°  | -20° to +110°  |
| <b>Elevation Angle</b>               | -10° to +110°  | <b>Azimuth Range</b>                 | Unlimited  | Unlimited  |
| <b>Azimuth Range</b>                 | Unlimited  | <b>Cross Angle</b>                   | ± 35°  | ± 35°  |
| <b>Cross Angle</b>                   | ± 35°  | <b>Ship Motion</b>                   | Roll : ±20°at 8~12 sec periods<br>Pitch : ±10°at 6~12 sec periods<br>Yaw : ±8°at 15~20 sec periods | Roll : ±24°at 8~12 sec periods<br>Pitch : ±14°at 6~12 sec periods<br>Yaw : ±8°at 15~20 sec periods |
| <b>Ship Motion</b>                   | Roll : ±24°at 8~12 sec periods<br>Pitch : ±14°at 6~12 sec periods<br>Yaw : ±8°at 15~20 sec periods | <b>Vibration Damper</b>              | Rubber Damper Included   | Rubber Damper Included   |
| <b>Vibration Damper</b>              | Rubber Damper Included   | <b>Temperature</b>                   | -20°C to +55°C   | -20°C to +55°C   |
| <b>Temperature</b>                   | -20°C to +55°C   | <b>Humidity</b>                      | Up to 100% @ 40°C  | Up to 100% @ 40°C  |
| <b>Humidity</b>                      | Up to 100% @ 40°C  | <b>Certification / Qualification</b> | CE  telenor   | CE  telenor   |
| <b>Certification / Qualification</b> | CE   |                                      |  |  |

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