



The new standard of satellite communication Pure Technology and performance

# 10ULV-Ku TACTICAL SATCOMS

ULV-series is a masterwork of KNS that excels in performance and sturdiness. Its high-end specification with incomparable performance is chosen by Naval Defense Force worldwide as a mission-critical solution.



\* This Specification can be changed without notice.

## Fully Complied with Military Standard

It is proved by MIL-STD tests that ULV-series operate without any issues even with the extreme impacts in the level of wartime situation. It shows excellent operation even in the harshest environment. Complied with MIL-STD-901D (Shock), MIL-STD-167-1A(Vibration), MIL-STD-461F (EMC), and MIL-STD-810G (Environment), ULV-series is considered as the best choice by Navies.

## Extreme Performance

KNS' ULV-series guarantees the ultimate durability and reliability with the strongest system. They are controlled by direct-driven motors which have high level of responsibility and implement a detailed positioning control. With a real-time precise algorithm, ULV-series never fails the critical missions that require a high accuracy and an extreme solidity on wartime conditions.

## Extended Functions for Military Application

The extended functions are configured in ULV-series for convenient operation.

- EMCON (Emergency Control): Using the EMCON switch, Tx can be muted in an emergency.
- Automatic Polarity Switching: In Ka-band, RHCP and LHCP is automatically switched depending on the carrier information.
- Web Interface: Monitoring and Control is available in Web-GUI. With Wi-Fi connectivity, no physical connection is required.



MIL-STD-901D / MIL-STD-167-1A  
MIL-STD-461F / MIL-STD-801G  
Compliance



Dual Antenna System  
Support



High Tracking Speed  
More than 90° / sec



All-in-One PCU



Rugged Structure  
for Military Application



# 10ULV-Ku TACTICAL SATCOMS



## SPECIFICATIONS

### ABOVE DECK

<b>Dish Diameter</b>	100cm(40")
<b>Antenna Weight</b>	184 Kg
<b>Radome Material</b>	Composite FRP
<b>Frequency</b>	TX : 13.75 ~ 14.5 GHz RX : 10.7 ~ 12.75 GHz
<b>Antenna Gain</b>	TX : 42.1 dBi @ 14.25 GHz RX : 40.8 dBi @ 12.50 GHz
<b>G / T</b>	20.11 dB/K @ 30deg. Elevation angle and 12.50GHz, Clear Sky
<b>Operating Platform</b>	4 - Axis (Includ skew control)
<b>BUC</b>	8W/16W/25W(optional)
<b>LNB</b>	Universal 4LO PLL LNB
<b>Polarization</b>	Linear (Automatic Skew Control)
<b>Elevation Angle</b>	-15° to +110°
<b>Azimuth Range</b>	Unlimited
<b>Cross Angle</b>	± 35°
<b>Tracking Speed</b>	More than 90°/sec
<b>Ship Motion</b>	Roll : ±24° at 8-12 sec periods Pitch : ±14° at 6-12 sec periods Yaw : ±8° at 15-20 sec periods
<b>Vibration Damper</b>	Wire Rope
<b>Temperature</b>	-30°C ~ +55°C
<b>Input Power</b>	28V DC
<b>Power Consumption</b>	1200W max.
<b>Communication to ACU</b>	RS-422 Serial Communication

### BELOW DECK

#### ANTENNA CONTROL UNIT (ACU)



<b>ACU Size</b>	19" Rack 1U size
<b>Gyro Interface</b>	NMEA 0183, Synchro, Step by Step
<b>Input Power</b>	85~254V AC, 12A, 47~63Hz
<b>External I/O</b>	RS-232C, RS-422, Mini-USB, Ethernet, Console
<b>Monitoring &amp; Control</b>	Web Interface Support (SCS)
<b>Wi-Fi Dongle</b>	Wi-Fi access is available (Optional)

#### PACKING DIMENSION

<b>Size</b>	168 X 168 X 174 cm
<b>Gross Weight</b>	378 kg
<b>Packed by</b>	Wooden Crate

#### WARRANTY INFORMATION

3-year parts, 1-year labour warranty

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