



The new standard of satellite communication Pure Technology and performance

10ULV-Ka 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



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SPECIFICATIONS

ABOVE DECK

Dish Diameter	105cm(41")
Antenna Weight	184 Kg
Radome Material	Composite FRP
Frequency	TX : 29.5 ~ 31.0 GHz RX : 19.7 ~ 21.2 GHz
Antenna Gain	TX : 47.32 dBi @ 30.5 GHz RX : 45.03 dBi @ 20.7 GHz
G / T	24.26 dB/K @ 20.7 GHz @ 30deg. Elevation angle and 20.7GHz, Clear Sky
EIRP	66.35dBW @30.5GHz with 80W BUC
Operating Platform	3 - Axis
LNB	Single PLL LNB
Polarization	Circular (Automatic Switching LHCP/RHCP)
Elevation Angle	-20° to +110°
Azimuth Range	Unlimited
Cross Angle	± 35°
Tracking Speed	More than 90°/sec
Ship Motion	Roll : ±24° at 8-12 sec periods Pitch : ±14° at 6-12 sec periods Yaw : ±8° at 15-20 sec periods
Vibration Damper	Wire Rope
Temperature	-20°C ~ +55°C
Input Power	28V DC
Power Consumption	1200W max.
Communication to ACU	RS-422 Serial Communication

BELOW DECK

ANTENNA CONTROL UNIT (ACU)



ACU Size	19" Rack 1U size
Gyro Interface	NMEA 0183, Synchro, Step by Step
Input Power	85~254V AC, 12A, 47~63Hz
External I/O	RS-232C, RS-422, Mini-USB, Ethernet, Console
Monitoring	SMA Female port for RX & TX
STATUS LED	Tracking, Error, GPS

PACKING DIMENSION

Size	168 X 168 X 174 cm
Gross Weight	378 kg
Packed by	Wooden Crate

WARRANTY INFORMATION

3-year parts, 1-year labour warranty

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