Business Proposal

GLOBAL KONET

Advanced Connectivity

Sales & marketing System integration,
I&C, Service Support By
Digisat Skill India Pvt Ltd
E Park Kharadi Pune 411014 - India

Mob +917219786119
+917774973344
Email: info@digisat.in
Website: www.digisat.in
www.digisatskills.com

ESA Satellite Antenna

Vehicles / Vessels

I. Omega2
MiNi
Alpha2
Alpha2 Jumbo

Potable / Man Pack

I. Noba
Nabi
Flip42
QFPA50

IoT / Drone

I. GA24
GU24

Vehicles / Vessels

OTM solutions optimized for command/control/control operations on the move (e.g. ambulance, passenger car, tactical armored vehicle, command vehicle, etc.)

The optimal solution for immediate response to high waves and course changes at sea, with electronic control for quick response and minimized downtime (for ships, naval vessels, etc.)

Omega2
ESA Antenna

MiNi
ESA Antenna

Alpha2
ESA Antenna

Alpha2 Jumbo
ESA Antenna

MiNi ESA Antenna (GU320)

KU Band OTM Antenna
Portable beamforming Antenna

- Frequency range
  Tx: 13.70 - 14.50GHz
  Rx: 10.70 - 12.75GHz
- EIRP: ≥ 41dBW
- G/T: ≥ 9dB/K

≤ 11kg

Open AMIP

Alpha2 ESA Antenna (GU420)

KU Band OTM Antenna
Active Beam Steering Array

- Frequency range
  Tx: 13.70 - 14.50GHz
  Rx: 10.70 - 12.75GHz
- EIRP: ≥ 48dBW
- G/T: ≥ 12dB/K

≤ 25kg

Open AMIP

Alpha2 Jumbo ESA Antenna (GU440)

KU Band OTM Antenna
Active Beam Steering Array

- Frequency range
  Tx: 13.70 - 14.50GHz
  Rx: 10.70 - 12.75GHz
- EIRP: ≥ 48dBW
- G/T: ≥ 15dB/K

≤ 30kg

Open AMIP

Omega2 ESA Antenna (GA450)

KA Band OTM Antenna
Active Beam Steering Array

- Frequency range
  Tx: 27.20 - 31.00GHz
  Rx: 17.50 - 21.20GHz
- EIRP: ≥ 52dBW
- G/T: ≥ 13dB/K

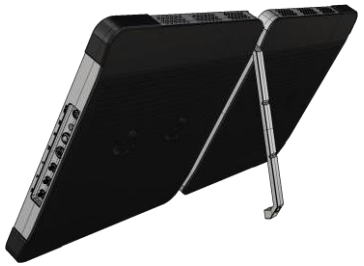
≤ 26kg

Open AMIP

Potable / Manpack

The ideal solution for all on-the-go operations (e.g. mountain, sea, land, etc.) provides seamless satellite communication anytime, anywhere

Lightweight and built-in batteries ensure reconnaissance/report/communications activities in environments without powers



Nova
Ka band Flip ESA

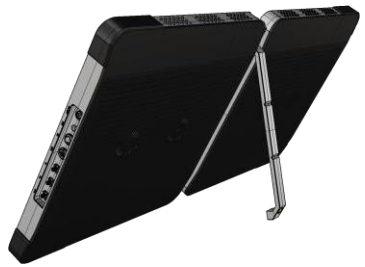
Nabi
Ku band Flip ESA

K-Flip
Ka band Flip ESA

QFPA50
Flat Antenna(Waveguide)

GLOBAL KONET
ESA Antenna

1.4 Portable/Manpack Spec.



Nova ESA Antenna (GA332)

KA Band
Active Beam Steering Array (ABSA)

- Frequency range
  Tx: 27.20 - 31.00GHz
  Rx: 17.50 - 21.20GHz
- EIRP: ≥ 52dBW
- G/T: ≥ 10dB/K

≤ 17.5kg

Foldable

Nabi ESA Antenna (GU330)

KU Band
Active Beam Steering Array (ABSA)

- Frequency range
  Tx: 13.70 - 14.50GHz
  Rx: 10.70 - 12.75GHz
- EIRP: ≥ 47dBW
- G/T: ≥ 10dB/K

≤ 16.5kg

Foldable

K-Flip ESA Antenna (GA330)

KA Band
Active Beam Steering Array (ABSA)

- Frequency range
  Tx: 27.20 - 31.00GHz
  Rx: 17.50 - 21.20GHz
- EIRP: ≥ 52dBW
- G/T: ≥ 12dB/K

≤ 26kg

Built-in batteries

QFPA50 Flat Antenna (QFPA50)

KU Band
Waveguide Array
Man-Pack Antenna

- Frequency range
  Tx: 14.00 - 14.50GHz
  Rx: 12.25 - 12.75GHz
- Tx Gain: ≥ 37.5dBi
- Rx Gain: ≥ 36.5dBi

Moving on wheels

Built-in batteries

GLOBAL KONET
ESA Antenna

IoT / Drone

A small satellite antenna that can be remotely controlled to track and manage energy, agriculture, transportation facilities, transportation equipment, etc.

Small structure and high performance for a wide range of applications

GA24 (GA230)
KA band ESA Antenna

- Frequency range
  Tx: 27.20 - 31.00GHz
  Rx: 17.50 - 21.20GHz
- EIRP: ≥ 29dBW
- G/T: ≥ 3dB/K
- Weight: ≤ 2.5kg
- Open AMIP Support

GU24 (GU220)
KU band ESA Antenna

- Frequency range
  Tx: 13.70 - 14.50GHz
  Rx: 10.70 - 12.75GHz
- EIRP: ≥ 22dBW
- G/T: ≥ -1.5dB/K
- Weight: ≤ 2.5kg
- Open AMIP Support

GK GLOBAL KONET
ESA Antenna

1.6 Key Features

ESA antenna verified for export

- Field testing completed in 5 countries in the world
- Export sales to Southeast Asia, Middle East, USA etc.
- Total Flat Panel Antenna Sales : 36 ea, as of JAN 2025

Stable Power consumption & Heat management

- Independent technology for heat management of beamforming IC chips
- Possesses multi-layer energy distribution technology
- Low power consumption and stable service compared to other companies

High Performance, Low Price

- Lowest price among products with the same performance
- Securing price competitiveness through mass production in 2025

Customer satisfaction high performance

- Differentiated High Performance G/T and EIRP Indicators
- Developing a collaboration model with global peers

Outstanding SW Technology

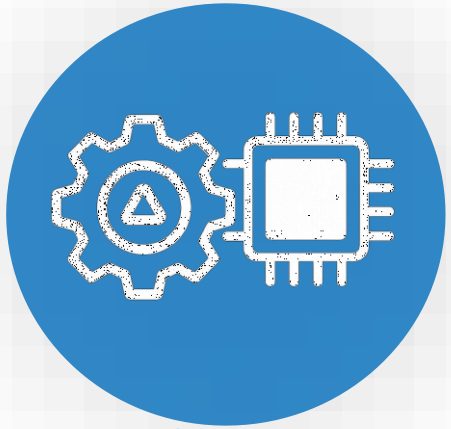
- Dualsat ESA antenna APP enables offering or monitoring services from multiple satellites through a single antenna.
- Real-time Satellite Tracking technology capable of tracking both GEO & LEO satellites.

Technology development leading the future

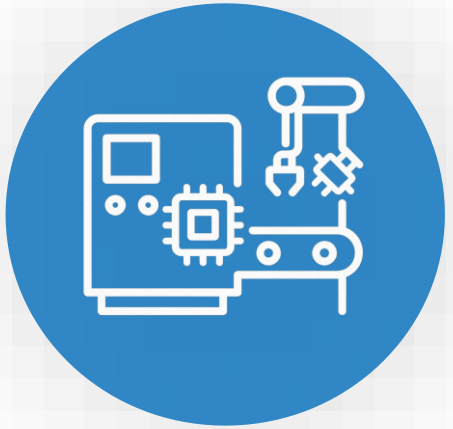
- Development of multi-orbit service antenna
- Development of hydrophobic technology to reduce rainfall attenuation

A Leading Provider of ESA Antenna Solutions

R&D Center



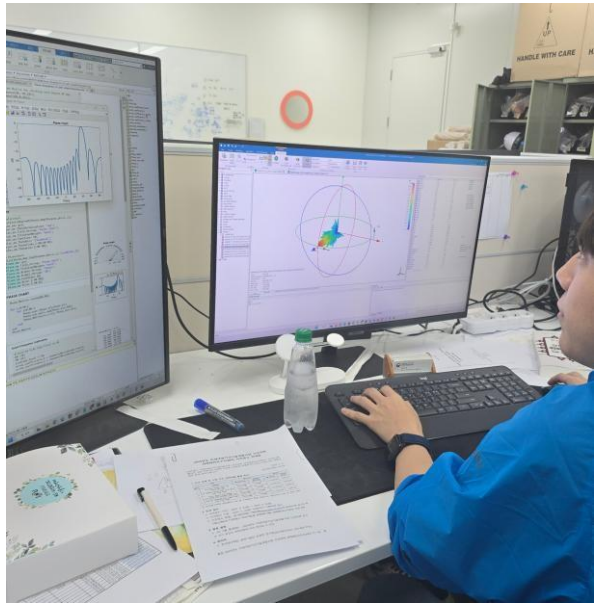
Core Technology



Mass Production Facilities

2. GK R&D Center

- We are independently developing lightweight, ultra-compact, high-performance ESA antenna solutions applicable to drones, vehicles, ships, and ground terminals.
- We possess antenna technologies for multi-platforms across various frequency bands (Ku/Ka), supporting high-speed beam steering, dual polarization, and full-duplex communication.
- Joint RGD is being conducted in collaboration with the ITRC Research Center at Incheon National University.

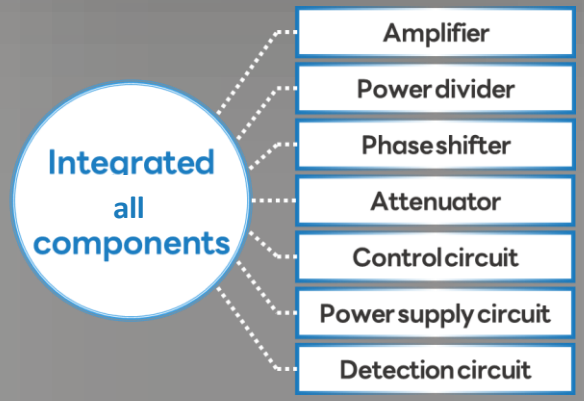


Technical Competitiveness

ESA antenna solution

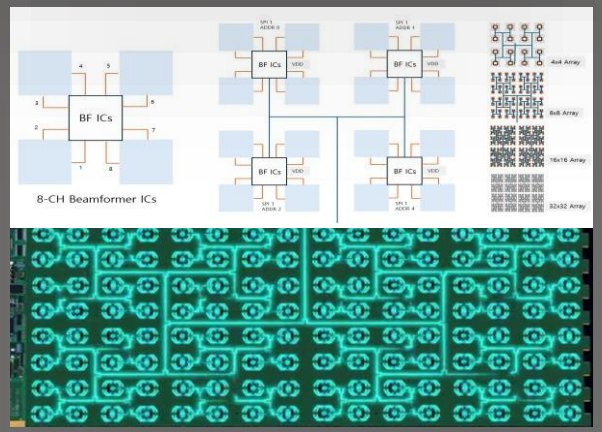
- Full duplex high-speed comm.
- Azimuth error auto-correction
- Built-in RF components for bandwidth expansion

One board panel application



- Securing integration technology without interference
- Easy to implement in low weight, small sizes
- Low profile solution in flat type

Low Consumption in Operation



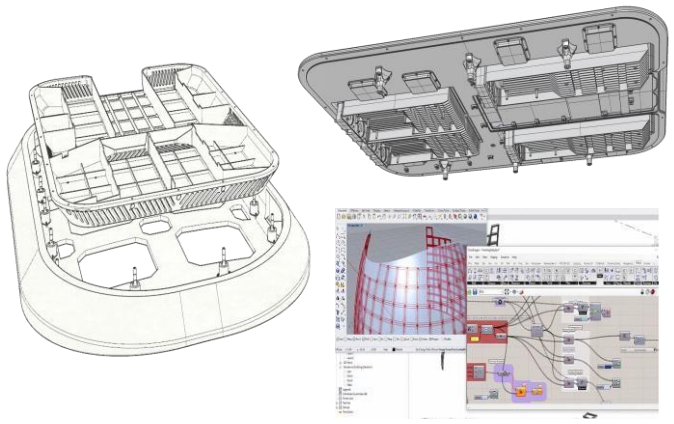
- Implementable in Dual Polarization
- Low power operation with built-in algorithms that enable quick switching of LHCP/RHCP

3D Antenna Design

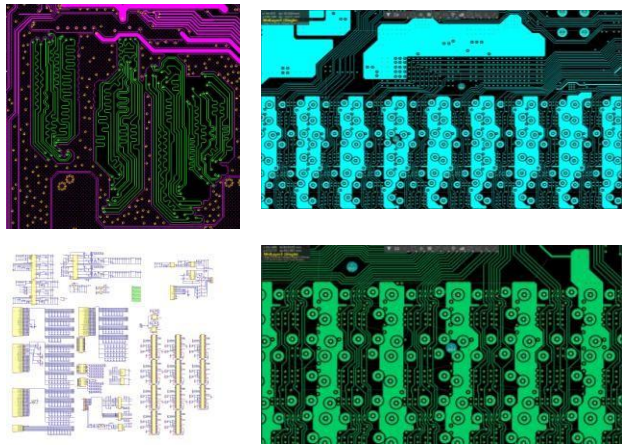
Easy design validation and reduced fabrication errors

Multilayer PCB design, modular 3D mechanical design, and EM simulation technology

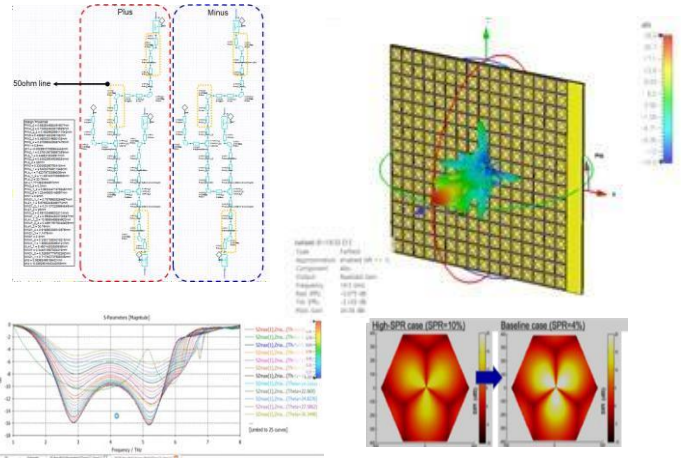
Modular Design based on Three-Dimensional Mechanical Shaping



Multi-Layer PCB Design and Analysis



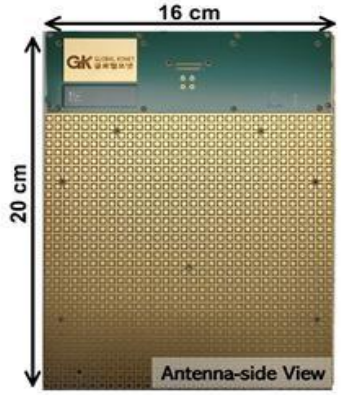
3D-ElectroMagnetic Simulation

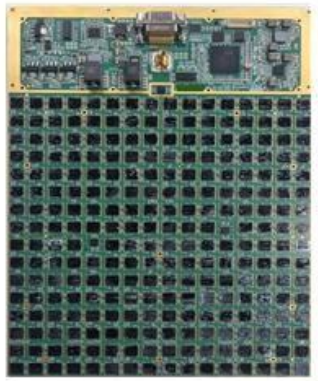


Excellent of Panel Design Technology

(Panel design technology to ensure stability and reliability through heat source analysis)

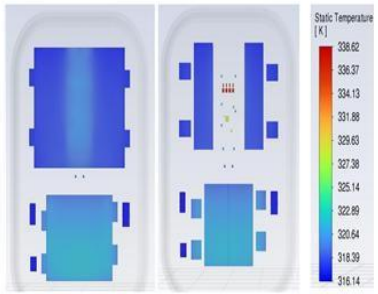
[256EA Unit Panel Board : Radiation Pattern Measured]



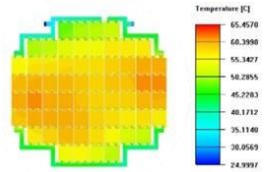


[1024EA Panel Board]

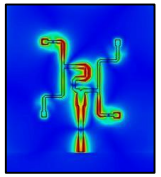
- Aperture Coupled Stack Radiator
- Feed-Network Circuit
- Power & Control Signal Distribution
- Wilkinson Feed Network



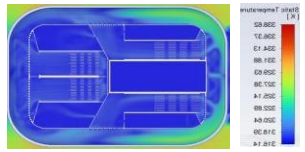
[Thermal Analysis Simulation]



[Radiator Heat Source]



[Feed network Heat Source]



[Frame Heat Source]

- ✓ Low Power Operations
- ✓ Thermal sensing device by sensor
- ✓ Circuit Design of Distributed Structure

2.4 Mass Production Facilities (1)

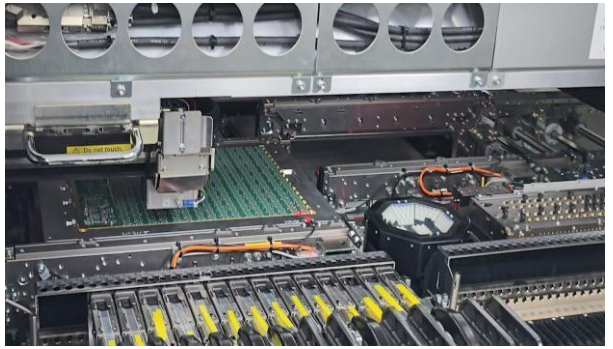
- Mass production of high-performance ESA antennas based on an advanced manufacturing infrastructure with an in-house antenna production system.
- Standardized processes, strict quality assurance (QA), and a flexible production line

- Incheon production line: Assembly and testing of ultra-compact ESA antennas
- SMT Partner collaboration
- Environmental test support: (MIL-STD compliant)
- Scalable to hundreds to thousands of units per month

SMT & Frame Process

- ✓ SMT, Assembly ASSY, Ex-X-Ray Port Inspection
- ✓ 5-Axis (X, Y, Z, A, C) Machining Based on 3D Drawings

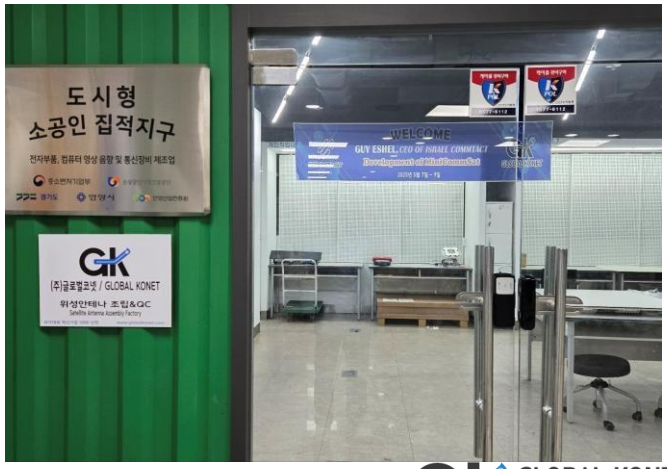
- Full-automatic rolling system reduces work time and prevents errors.
- Long temp high-speed mounter task for Multi-layer Gerber data.
- 360° workpiece rotation eliminates twisting in all directions.
- T able travel of 4×2m enables safe 3D rotational machining.



Inspection & Assembly Process

Quality Control & Environmental Testing

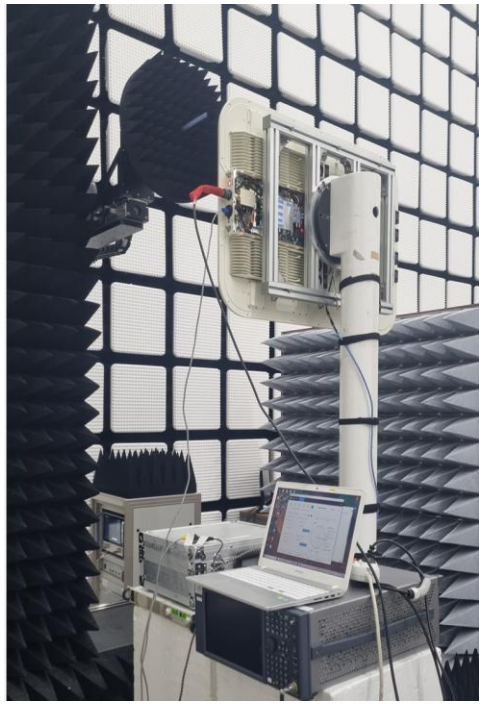
- Multi-stage quality inspection by process
- RF performance testing and OTA measurement
- Environmental testing based on MIL-STD-810
- Digital management of production history and quality data
- Temperature G humidity chamber : -50℃ ~ +150℃ / 3-~90% RH
- Thermal shock tester : -60 ℃ ~ +180 ℃
- Electrostatic Discharge) & Surge Test



QC : Measurement and Verification Method

[Antenna Test Configuration Set Up]

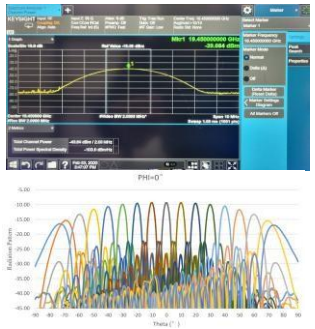
- Panel and antenna quality inspection
- All panels undergo 100% Chamber beam scanning testing.



[Near- Field → FFT→ Far- Field]

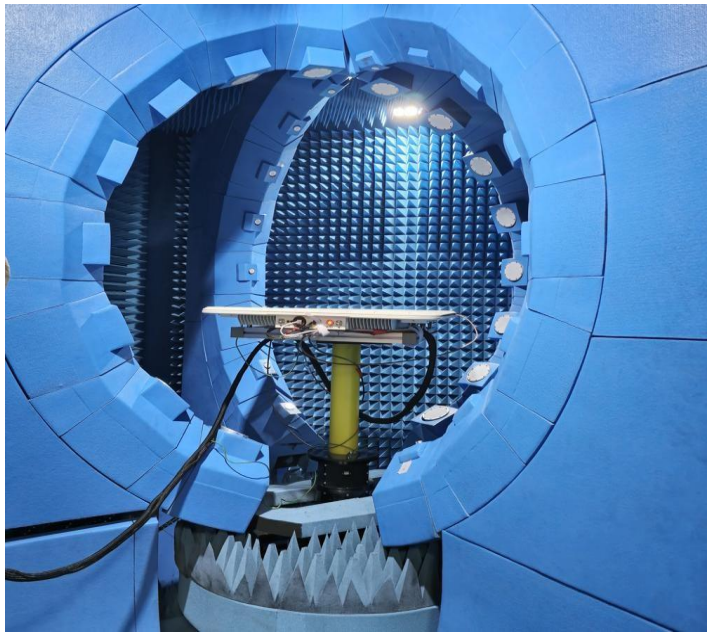
[P1dB Measured]

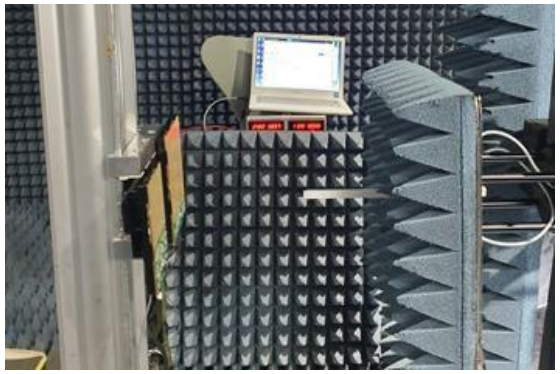
[S-parameter]



[Data]

[Received Power Measured]

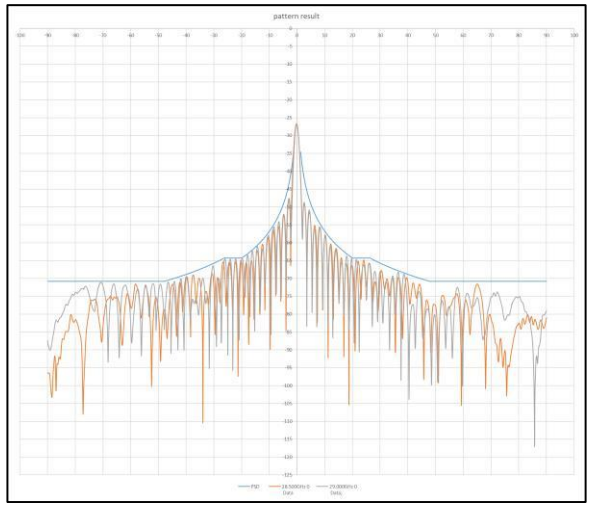


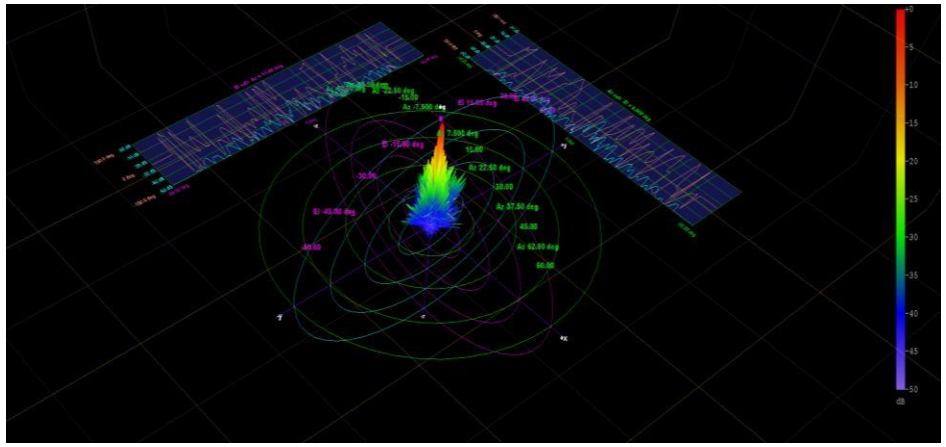


- We have completed the verification of our products through collaboration with Korea Radio Promotion Association and NSI-MI Korea agency
- We have our own calculator with theoretically based

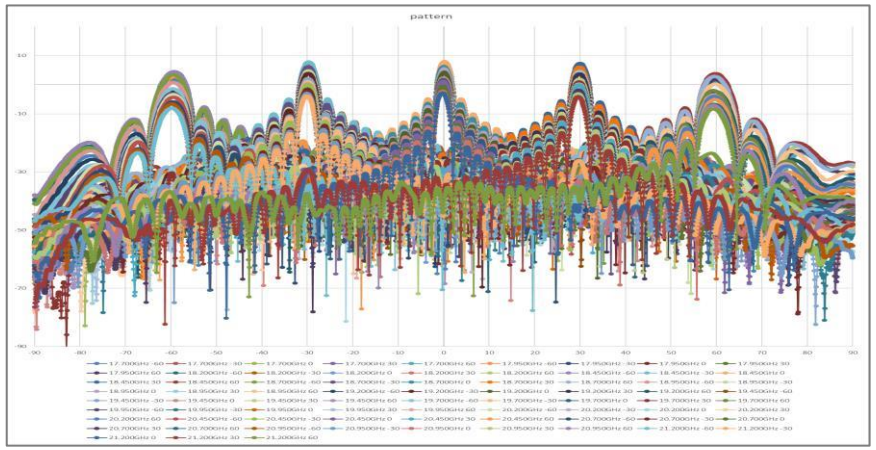
GLOBAL KONET ESA Antenna

Near Field Measurement G Chamber Test Result

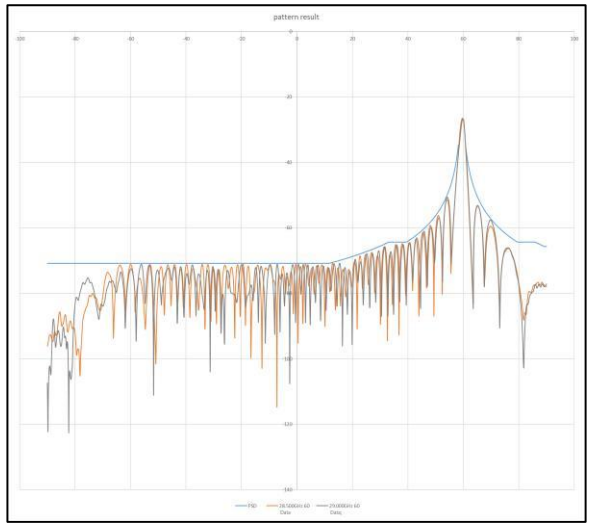


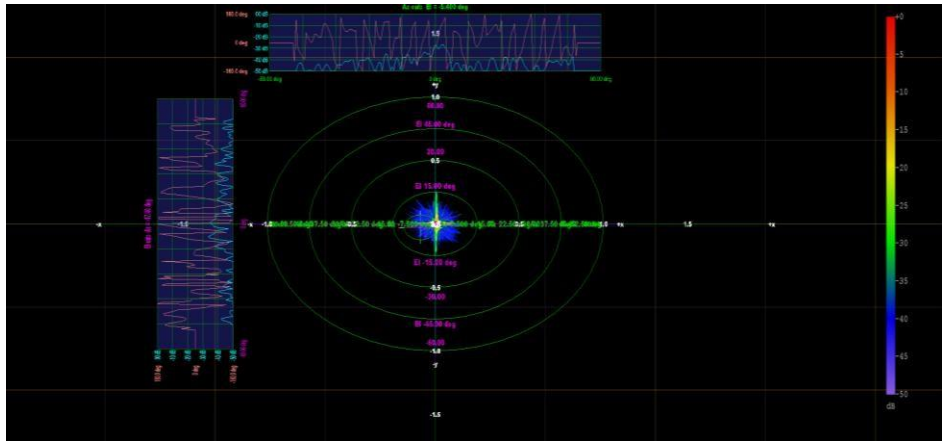


[4096 array Tx 3D Beam-pattern-1]

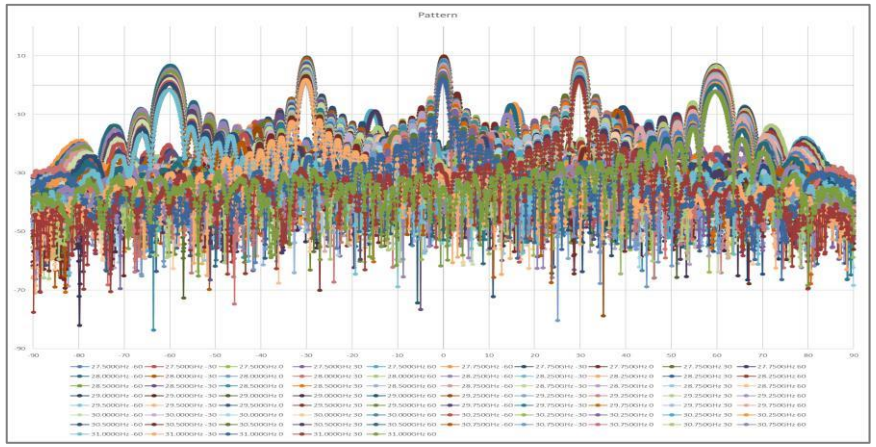


[360deg Omega2 Receive panels Pattern]





[4096 array Tx 3D Beam-pattern-2]



[360deg Omega2 Transmit panels Pattern]

Pannel RX Phi(70)(Theta(00) 3D Near field

Business Sales Capability

Sales Reference

Promotion & exhibition participation

Global Partnerships & Collaborative Projects

National Guidance Communications

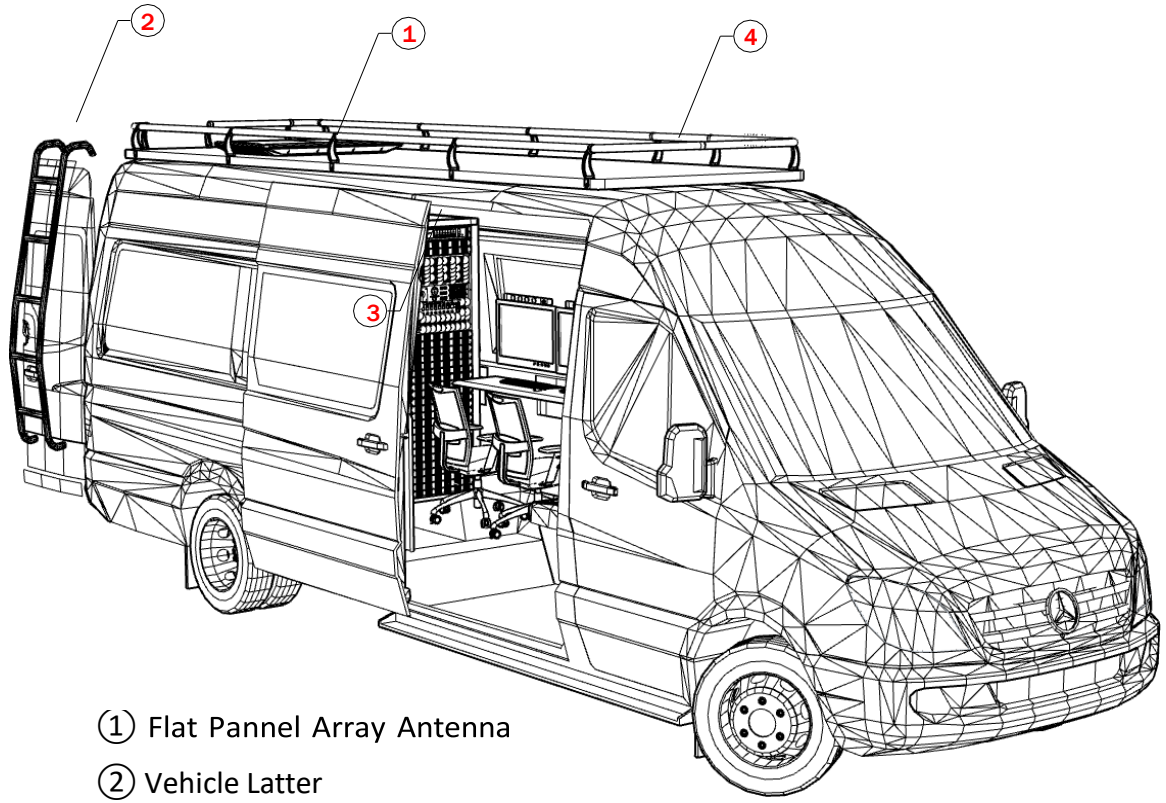
- Installed and operated between major national organizations in preparation for wartime or national emergency situations.

● QFPA50

– Portable Manpack Antenna

● GK800

– Gangwon Fire Department Disaster Recovery LTE Backup



① Flat Pannel Array Antenna

② Vehicle Latter

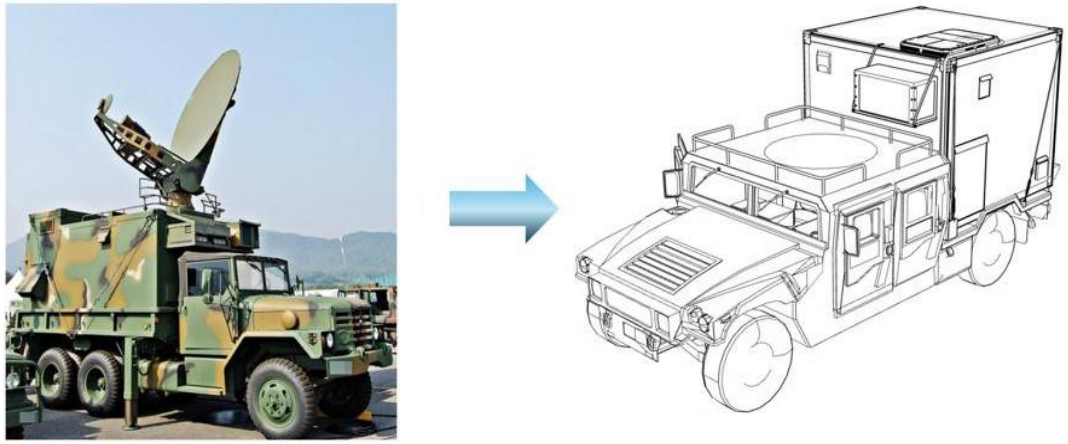
③ Rack (Shock Mount)

④ Vehicle Roof

GLOBAL KONET ESA Antenna

Omega2

- Korean Defense Trucks with ESA antennas
- Replacing 2.4m(120Kg), dish, X-band antenna
- Changes its operation from **SOTP** to **SOTM**



Alpha2

- Southeast Asia Maritime Communications

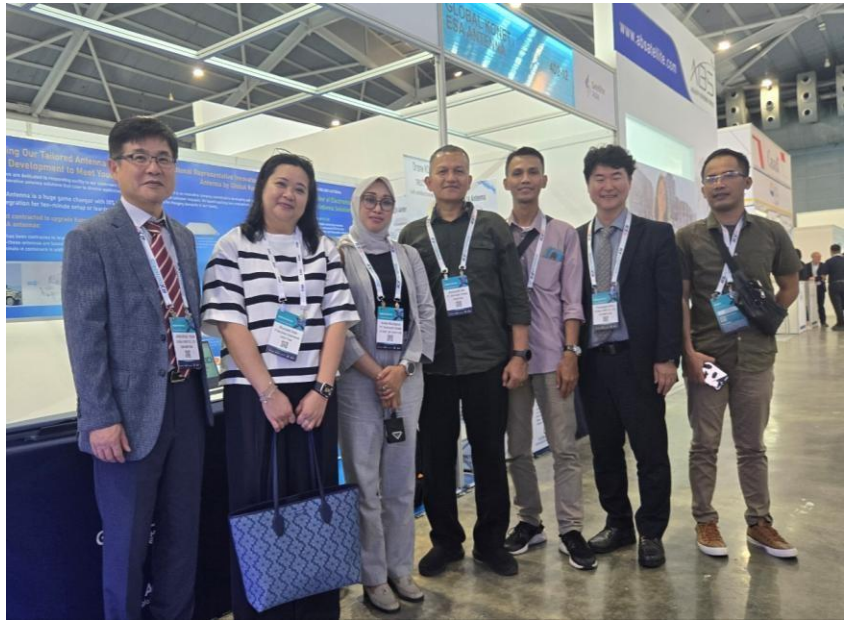
MiNi, GU24, GA24

- Middle-east military communications
- Satellite manufacturer based in the U.S.

3.3 Exhibitions (25 ~ 24)

Jan. 2025, CES, Las Vegas(US)

Mar. 2025, Satellite Show, Washington (US)



May 2025, Communic Asia, Singapore (SG)

Mar. 2024, Satellite Show, Washington (US)

June 2024, InLEX Daejeon (KOREA)

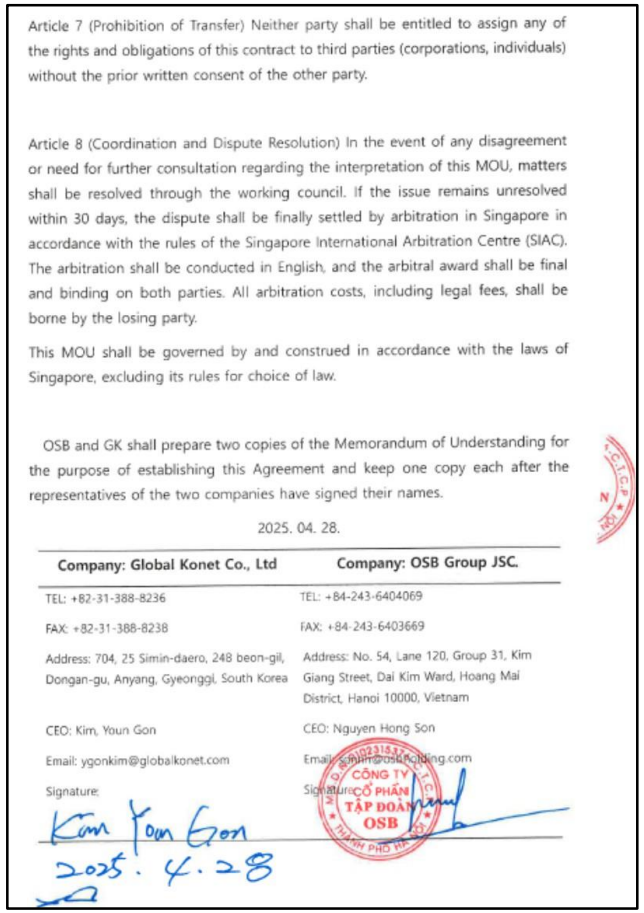
Oct. 2024, KADEX Gyeryongdae (KOREA)

Global Service Partners

We are working together to protect our partner's business and to succeed.

VietnamOSB Development Plan

- Integrated Terminal for Starlink and GK ESA Antenna



Article 7 (Prohibition of Transfer) Neither party shall be entitled to assign any of the rights and obligations of this contract to third parties (corporations, individuals) without the prior written consent of the other party.

Article 8 (Coordination and Dispute Resolution) In the event of any disagreement or need for further consultation regarding the interpretation of this MOU, matters shall be resolved through the working council. If the issue remains unresolved within 30 days, the dispute shall be finally settled by arbitration in Singapore in accordance with the rules of the Singapore International Arbitration Centre (SIAC). The arbitration shall be conducted in English, and the arbitral award shall be final and binding on both parties. All arbitration costs, including legal fees, shall be borne by the losing party.

This MOU shall be governed by and construed in accordance with the laws of Singapore, excluding its rules for choice of law.

OSB and GK shall prepare two copies of the Memorandum of Understanding for the purpose of establishing this Agreement and keep one copy each after the representatives of the two companies have signed their names.

2025. 04. 28.

Company: Global Konet Co., Ltd	Company: OSB Group JSC.
TEL: +82-31-388-8236	TEL: +84-243-6404069
FAX: +82-31-388-8238	FAX: +84-243-6403669
Address: 704, 25 Simin-daero, 248 beon-gil, Dongan-gu, Anyang, Gyeonggi, South Korea	Address: No. 54, Lane 120, Group 31, Kim Giang Street, Dai Kim Ward, Hoang Mai District, Hanoi 10000, Vietnam
CEO: Kim, Youn Gon	CEO: Nguyen Hong Son
Email: ygonkim@globalkonet.com	Email: [illegible]@osbholding.com
Signature: Kim Youn Gon 2025. 4. 28	Signature: CÔNG TY CỔ PHẦN TẬP ĐOÀN OSB

[MOU]

Key Development Objective

•To develop a **hybrid terminal** that supports **dual satellite connectivity** integrating **Starlink's LEO satellite network** and GK's **ESA antenna system** into a unified platform.

•Strategic Market Deployment

•**OSB Group**, GK's regional partner, will **lead the commercialization** of the integrated terminal in **Vietnam's military sector**.

•The product is expected to address critical communication needs in tactical and remote operations, where multi-satellite redundancy and mobility are essential.

GLOBAL KONFT
ESA Anten

Ongoing Defense Business Activities

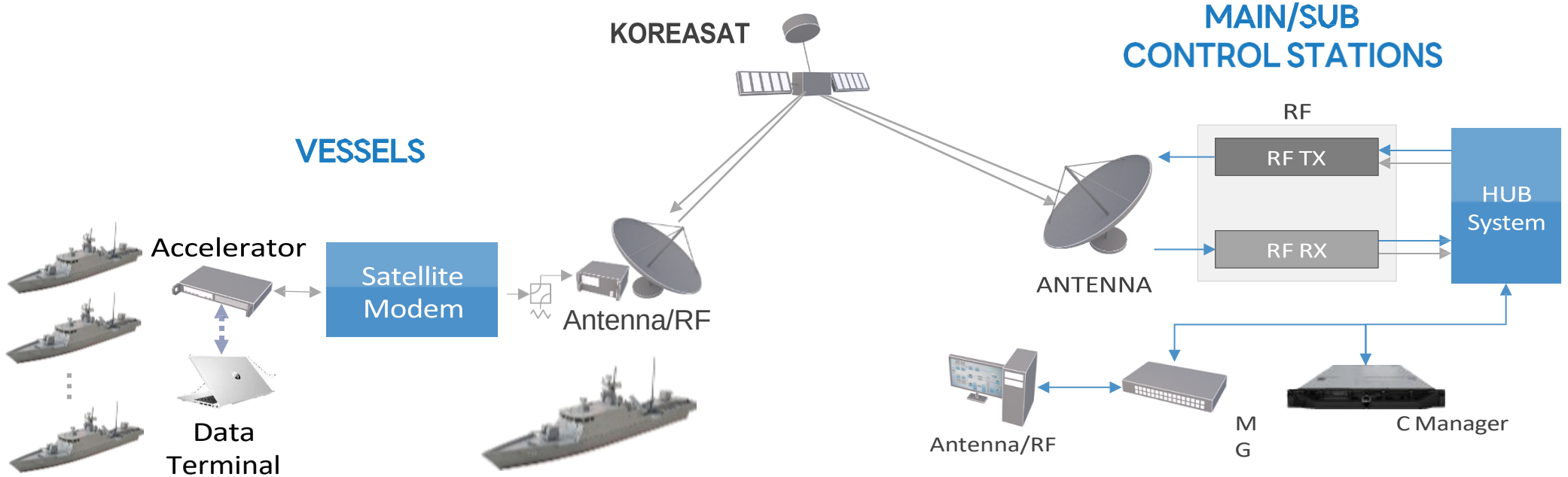
Navy MOSCOS-II

Combat Efficiency Improvement Project

Developme nt S/W Project & More

MOSCOS (Mobile Satellite Communication Operational System)-II

- Project to replace the aging MOSCOS-I
- MOSCOS: A Satellite Communication System used by the Republic of Korea Navy
- MOSCOS: A System that enables voice and data communication between land-based bases and naval vessels via Geostationary Satellite
- MOSCOS-II consists of Main and Sub-Control Stations and Remote Stations(Vessels)
- Main and Sub-Control Stations consist of Antenna/RF, HUB System and network equipments including several servers.
- Remote Stations consist of Antenna/RF, Satellite Modem and network equipments.

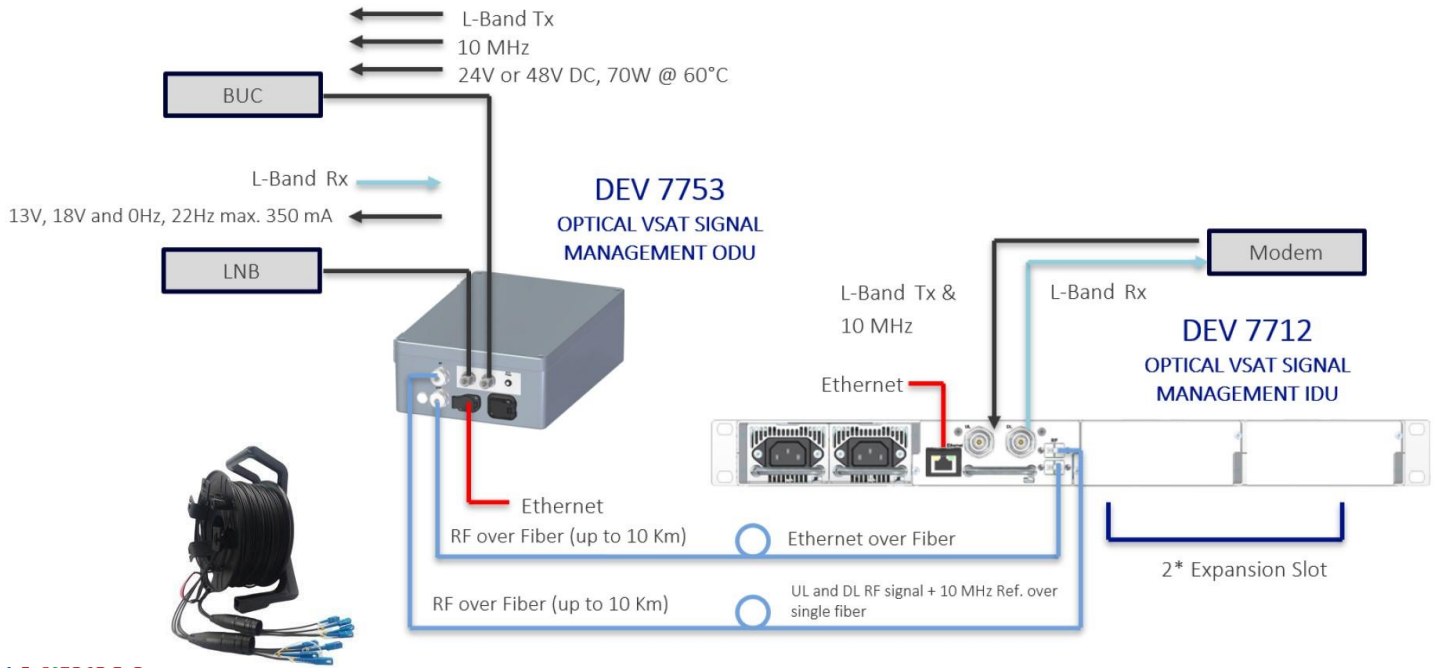


Switching HUB

SkyLink MGC Server

Combat Efficiency Improvement Projectof RASCS(Rear Area Satellite Communication System)

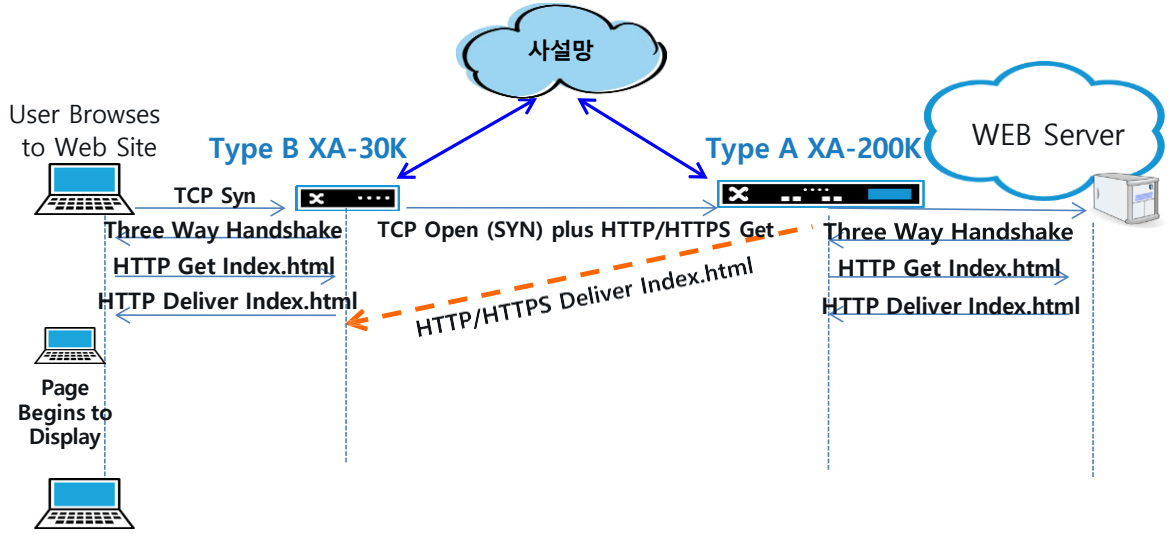
- A project to improve the rear area network processing capability of the Army's tactical command and control system (C4I) to enhance combat efficiency
- RASCS: A Satellite Communication System used by the Republic of Korea Army
- RASCS: A communications network that utilizes a geostationary satellite to strengthen the command, control, and communications system (C4I) in the rear areas of the Korean military
- This project aims to build an indoor operating environment for network section by installing optical link modules and extending optical cables, and to enhance operational capabilities by reducing delay times.



Rear Area Satellite Communication System

Performance improvement Project of MIMS-C(Military Intelligence Management System-Combined)

- A project to improve the existing joint military information processing system to support joint operations between the Korean and US military
- Improved situational city functions, automatic data classification and search functions, and linking capabilities of the existing MIMS-C system
- MIMS-C: Integrated joint military information processing system to support joint operations in wartime and peacetime
- Global Konet was involved in improving link capabilities by supplying network accelerators

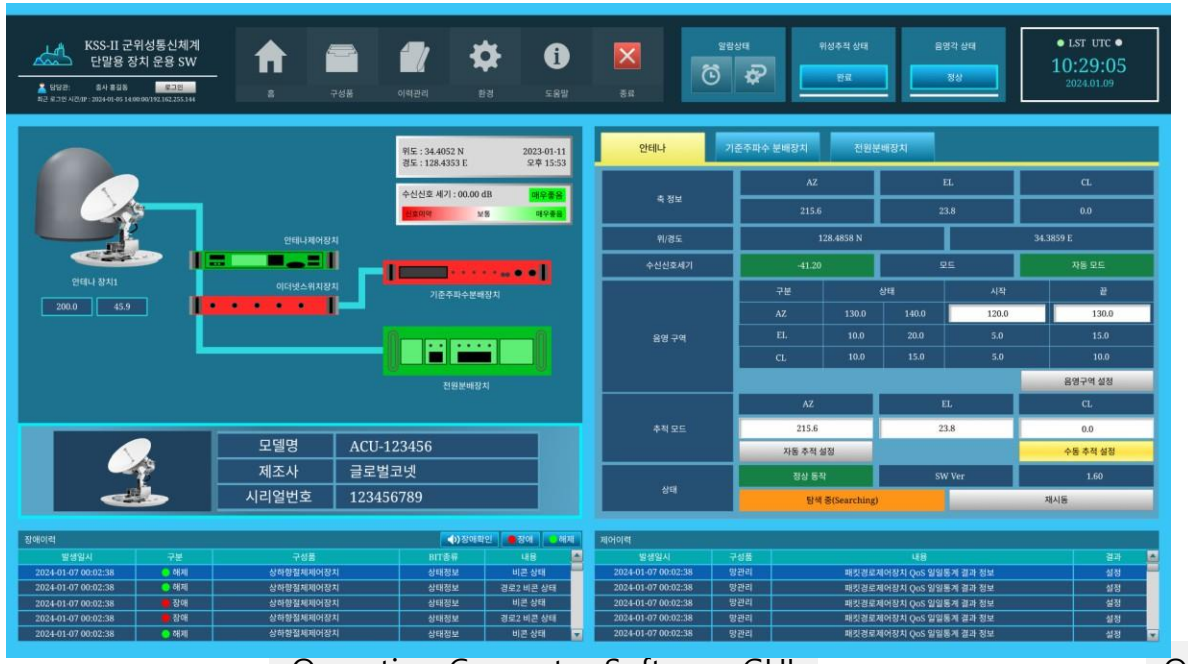


WAN Accelerator Type A XA-200K

WAN Accelerator B Type XA-30K

Development S/W Project of KSS-II terminal device

- Project to develop S/W of terminal device for KSS-II(Korean Submarines, Type II) of MSCS-II(Military Satellite Communication System, Type II)
- MSCS-II: A 2nd-generation military communication system that ensures mobility and survivability through dedicated satellite communication terminals without the assistance of any ground, sea, or air infrastructure using geostationary satellites
- Global Konet was responsible for developing operating computer software for terminal devices.



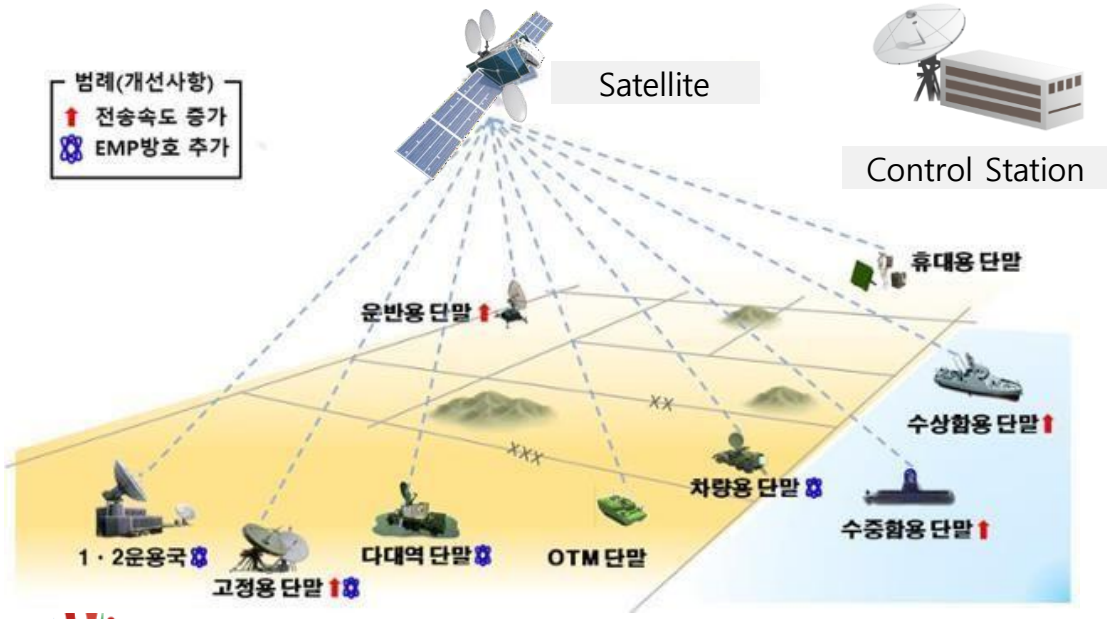
Operating Computer Software GUI

Operating Computer Software LOGIN Screen

KSS-II

Development Project of MSCS-III (Military Satellite Communication System-III) terminals

- Project to develop several types of terminals for MSCS-III (2026~2035, ~$2.4 Billion)
- MSCS-III: A next-generation military satellite communications system aimed at replacing the ROK military's aging MSCS-II, strengthening defense capabilities against electromagnetic wave attacks, and improving data transmission speeds
- MSCS-III consists of Satellite, Control Station, Fixed Terminal, Multi-Band Terminal, OTM Terminal, Vehicle Terminal, Naval Terminal, Submarine Terminal, Transportable Terminal and Portable Terminal.
- Global Konet is currently in discussions with system companies such as LIG Nex1 and Hanwha Systems to participate in various terminal development projects.



Military Satellite Communication System-III

Fixed Terminal

Naval Terminal

Vehicle Terminal

Transportable Terminal

OTM Terminal

Submarine Terminal

Portable Terminal

Multi-Band Terminal

GLOBAL KONET
ESA Antenna

Thank You

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