



# COMPANY PROFILE

Gigalane

# ABOUT GIGALANE



Company : GIGALANE CO., LTD

Established: Jan. 31. 2000

CEO : Hyunje Kim

Address in HQ: 61, Dongtansandan 10-gil, Dongtanmyeon, Hwaseong-si, Gyeonggi-do, Korea

Address in VN : A part of lot CN-09, Van Trung IP, Van Trung Ward, Viet Yen Town, Bac Giang province, VietNam

Number of Workers: Total: 522  
Korea: 192 (R&D 32%, Quality 7%),  
Vietnam: 330 (Korean 7 persons)

Products :

- AFU/ Antenna
- RF Connector
- RF Cable/Cable Assembly/ Cable haness

# Company Introduction

## HQ

Korea



- RF Components (Connector/Cable, etc.)  
R&D and Production
- Semi-conductor Equipment  
R&D and Production

## RF

### R&DLaboratory

Korea



- Install large-scale infrastructure to support development.
- Owns a CR Chamber, Far-Field Chamber, and reliability testing equipment

## C3 Technology

Korea



- A subsidiary owned by Gigalane.
- Exclusive manufacturer of specialized RF cables for aerospace in Korea.
- Exclusive manufacturer of TICN RF cables in Korea

## GIGALANE VINA

Viet Nam



- Owns connector and cable assembly lines, automation equipment.
- Owns an AFU Test Room, AFU assembly line, and large-scale SMT production line

## GIGALANE WUXI

China



- New manufacturing plant in China, specializing in equipment.
- Develops equipment and Etcher machines such as CCP/Asher/RIE specialized for 200~300mm.
- R&D and production of Etchers and Imprinters.

# Gigalane

Company : GIGALANE VINA CO., LTD

Established: Jan. 20. 2019

CEO : Hyunje Kim

Address in VN : A part of lot CN-09, Van Trung IP, Van Trung Ward, Viet Yen Town, Bac Giang province, VietNam

Number of Workers: 330 (Korean 7 persons)

Products :

- AFU/ Antenna
- RF Connector
- RF Cable/Cable Assembly/ Cable harness



## GIGALANE VINA



HCM City



# PRODUCTION FACILITIES

Viet Nam factory



**SMT Line**

**AFU Ass'y Line**

**AFU TEST  
Room**

**GBB Ass'y/  
Inspection Line**

Board to Board  
connector

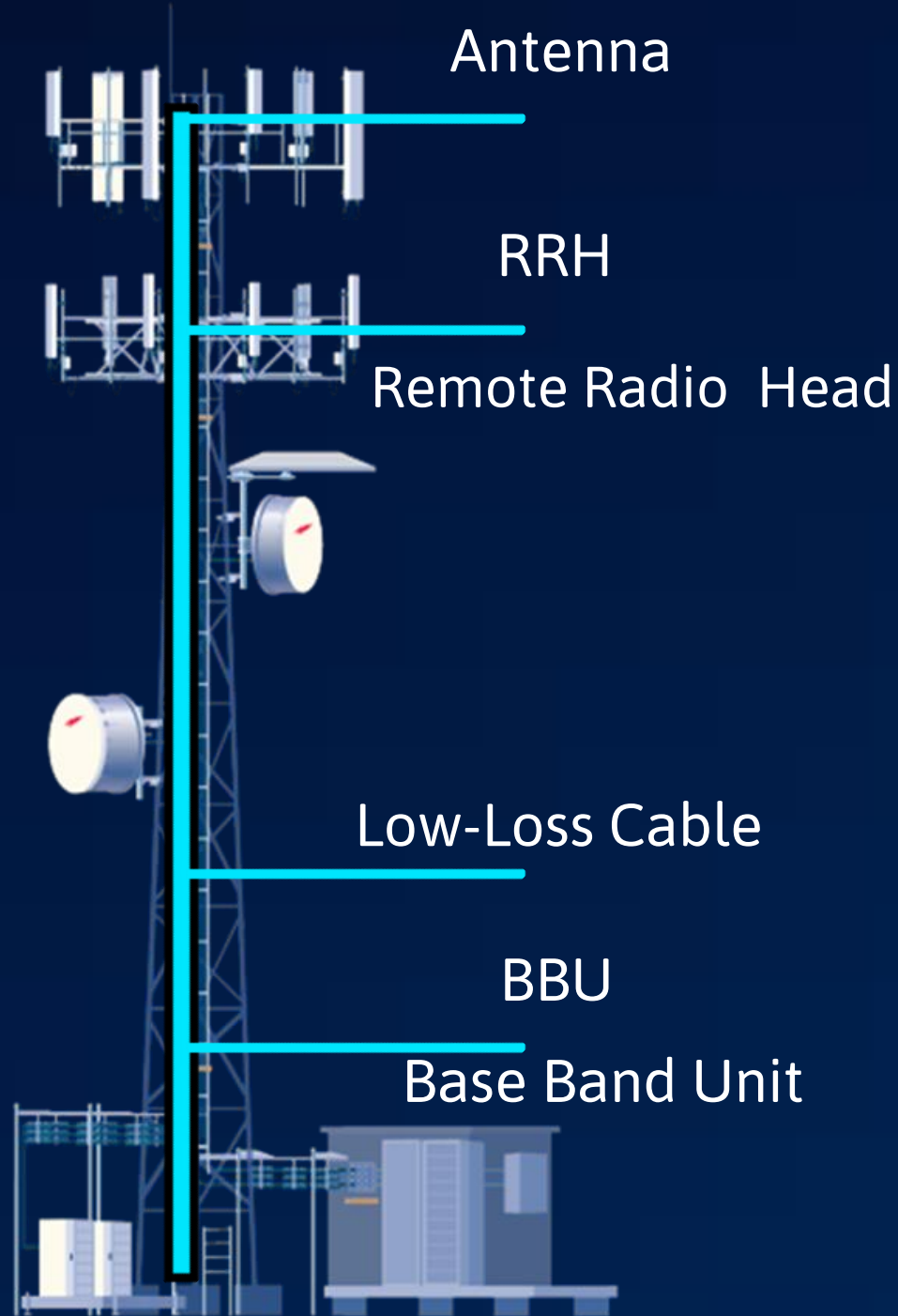
**Auto Inspection  
Line**

POGO Type Connector

**Connector Ass'y  
Line**

Mobile Connector

# 5G Network infrastructure



<p><b>Antenna module</b></p>	<p><b>SMALL CELL ANTENNA</b></p> 	<p><b>AP Antenna</b></p> 	<p><b>Base Station Antenna</b></p> 		
<p><b>RRH/BBU RF connectivity</b></p>	<p><b>B TO B CONNECTOR</b></p> 	<p><b>DOWN SIZING B TO B CONNECTOR</b></p> 	<p><b>QUICK LOCK</b></p> 	<p><b>SMA RIGID</b></p> 	<p><b>DIRECTBOARD CONTACT CONNECTOR</b></p> 
<p><b>Low-loss cable assembly</b></p>	<p><b>N, DIN, 4.3-10, 2.2-5 CONNECTOR</b></p> 	<p><b>PIM COAX JUMPERS</b></p> 	<p><b>MONITORING ASSEMBLIES</b></p> 	<p><b>FEEDER CABLES</b></p> 	

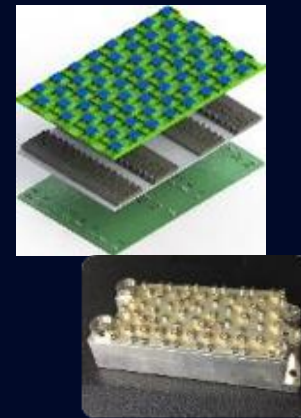


# Business Overview

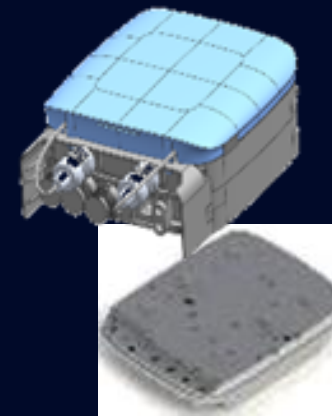
## RF

- For 5G Network InfrastructuAFU / MMU andRF Connectivity Components re
- High-frequency RF Components up to 67.5GHz

ANTENNA & FILTER FOR 5G BASE STATION



Smallcell, Antenna for AP



Open-RAN RU



Board to Board Connectors



High-frequency RF Component



RF Cable Assembly



## Harness

- Cable Assy 10pin Connector.
- Cable Assy 12pin Connector.
- Housing panel connector to Terminal Cable.
- Ethernet Cable.
- Power On-Off Switch Cable.

HOUSING PANEL CONNECTOR TO TERMINAL CABLE.



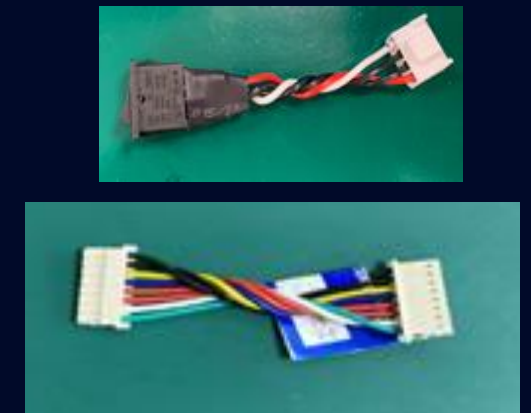
CABLE ASSY 10PIN, 12PIN CONNECTOR.



ETHERNET CABLE



POWER SWITCH CABLE.

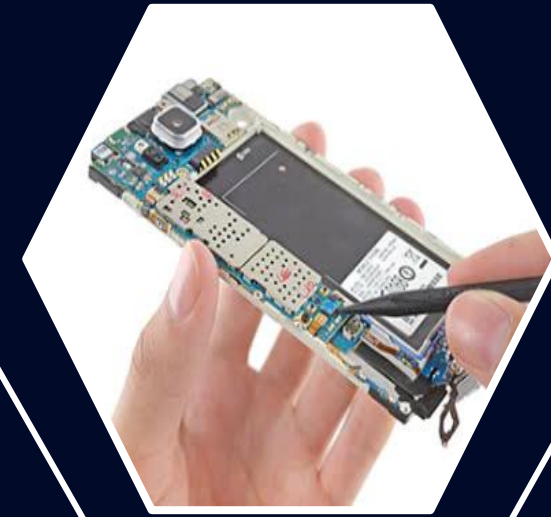


# Business Overview

With Development and Manufacturing capability for Radio Frequency interconnect and semiconductor technology fusion, Gigalane is growing as the front runner at RF interconnect solution.

Gigalane is the only company that manufacture high frequency of over 10GHz RF connectivity for Smart phones and mobile devices, Mobile network, Test & measurement and cutting-edge solution for aerospace & military industry.

**RF**  
Radio  
Frequency



Mobile &  
Wireless  
Devices

5G Network  
infrastructure



Test &  
Measurement

Defense &  
Aerospace

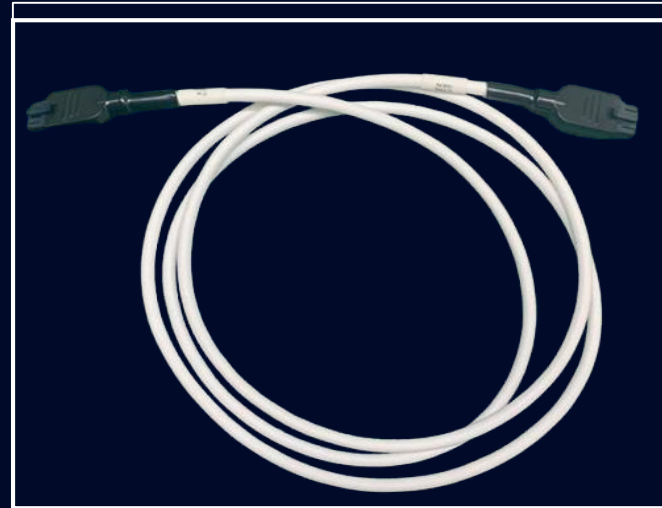


# Business Overview

## Cable Harness

Used to connect electrical systems between automatic control cabinets and devices in fields such as industrial plants, automated machinery, automobiles, etc., for the purpose of operating those automatic control cabinets.

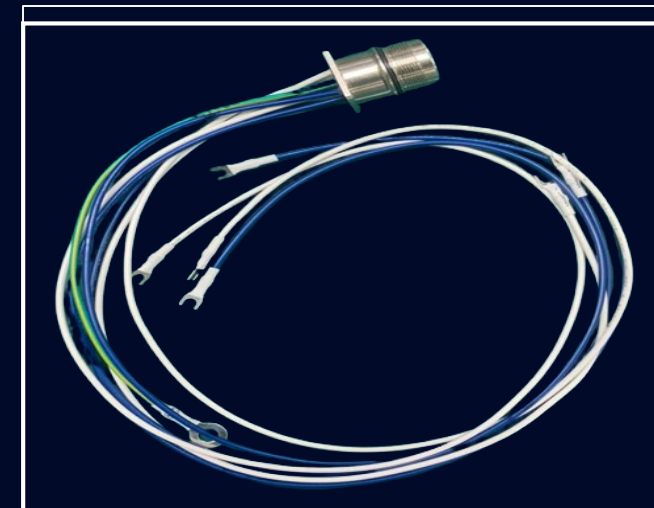
*Some examples of standard cable harness models*



43025-1000 Cable 2  
connectors  
(10pin Connector)



DF11-12DC-2C Cable 2  
connectors  
(12pin Connector)

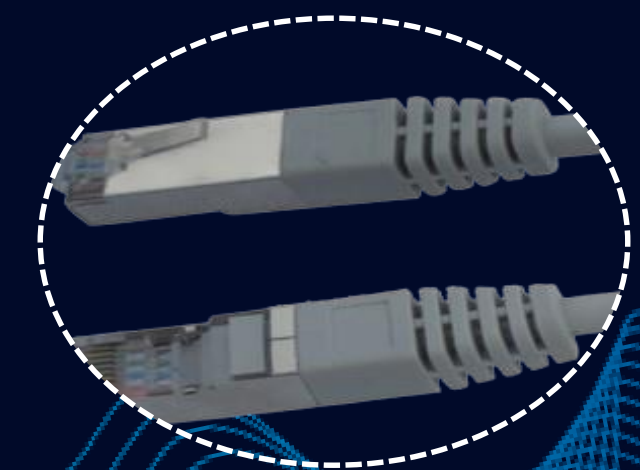
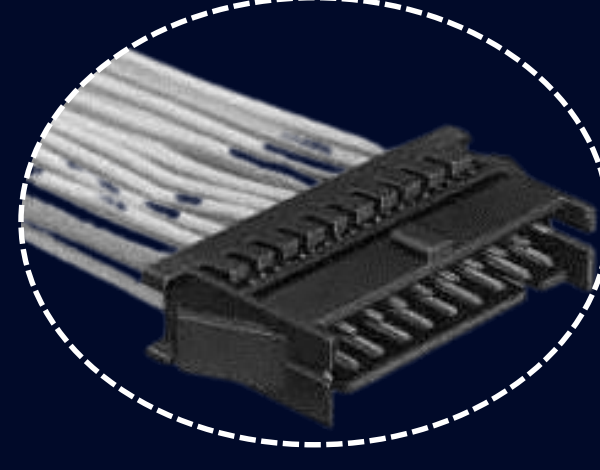


Housing Panel  
Connector TO Y  
Terminal Cable



CABLE Ethernet 2  
connectors

**Harness**



# Business Overview

CONNECTORS

## RF Connector

- Board to Board Connector**
- Outdoor Connector**
- Test & Measurement Connector**

- GBB : Board to Board Connector



- GDBC : Direct Contact Connector



- 4.3-10 Connector



- 2.2-5 Connector

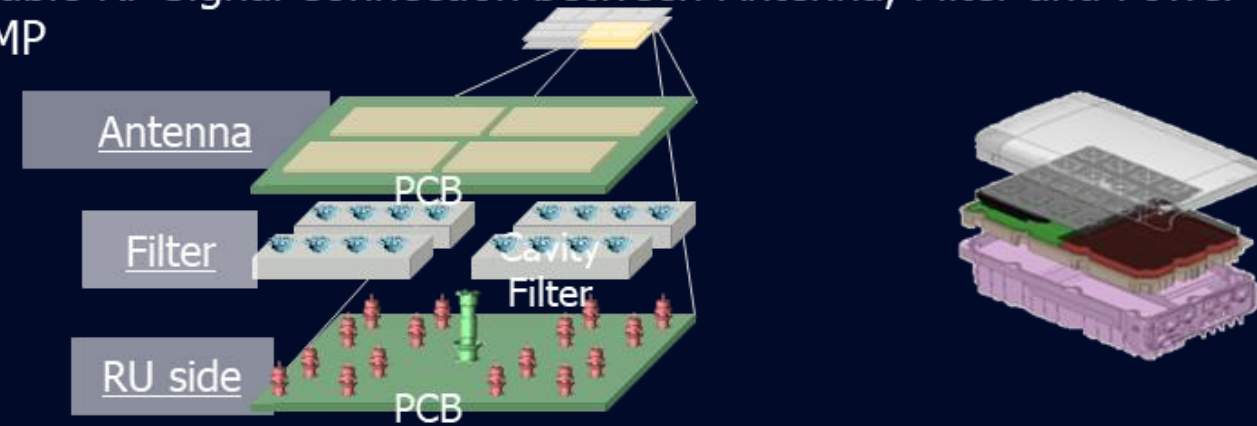


- End-launch Connector

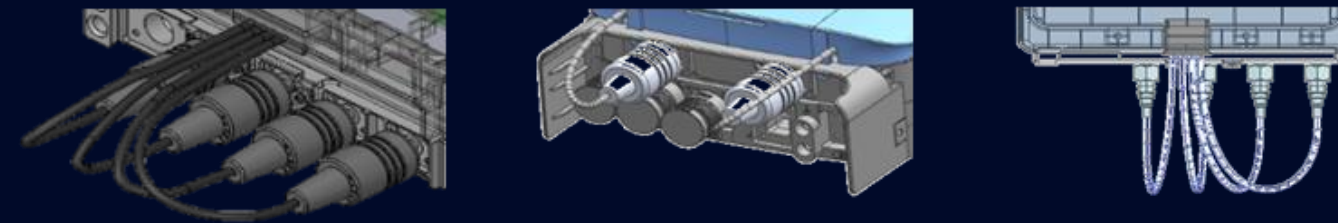


## Applications

Stable RF Signal Connection between Antenna, Filter and Power AMP



Low PIMD and Low Attenuation Connector for RRU Equipment



Evaluation Board for Verification of Analog RF Semi-conductor



## Connectors up to 67GHz

- MCX Series
- MMCX Series
- SMB Series
- BNC Series
- DIN(7/16) Series

- N Series
- TNC Series (11GHz)
- TNCA Series (18GHz)
- BMA Series

- SMA Series
- 3.5mm Series

- SMP Series (40GHz)
- 2.92mm Series (40GHz)
- 2.4mm Series (50GHz)

- 1.85mm Series (67GHz)



# Business Overview

## CONNECTORS

### 2 Piece, 3 Piece type



#### GBB (Gigalane Board to Board)

- Low PIM, Low VSWR & I/L
- Wide working range: axial  $\pm 1.0\text{mm}$ , radial  $\pm 1.0\text{mm}$



#### GBB SMD type (Signal type: L)

- Optimization of I/L and VSWR characteristics below 6 GHz
- SMD process defect prevention



#### GHBB (High power GBB)

- High power rating: CW400W @ 2.1GHz
- Low PIM, Low VSWR & I/L



#### GsBB (Small GBB)

- Small size (Area:  $4.0\text{mm}^2$ , Min. mating height: 11mm)
- Operating frequency (8.5GHz)

### 1 Piece type



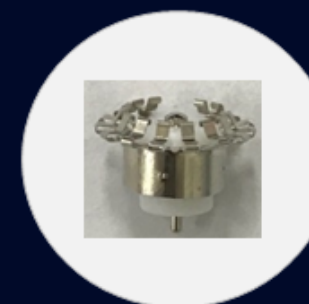
#### Double pogo

- Direct board contact type (Press fit)
- Low VSWR & I/L
- Wide working range: axial  $\pm 1.0\text{mm}$



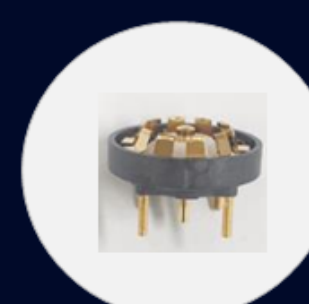
#### GDBC1

- Direct board contact type (SMD, Screw)
- Low VSWR & I/L
- Wide working range: axial  $\pm 1.0\text{mm}$ , radial  $\pm 0.5\text{mm}$



#### GDBC2

- Direct board contact type (Press fit)
- Working range: axial  $\pm 0.3\text{mm}$
- Low weight



#### GDBC3

- Direct board contact type (SMD)
- Working range: axial  $\pm 0.4\text{mm}$
- Low weight

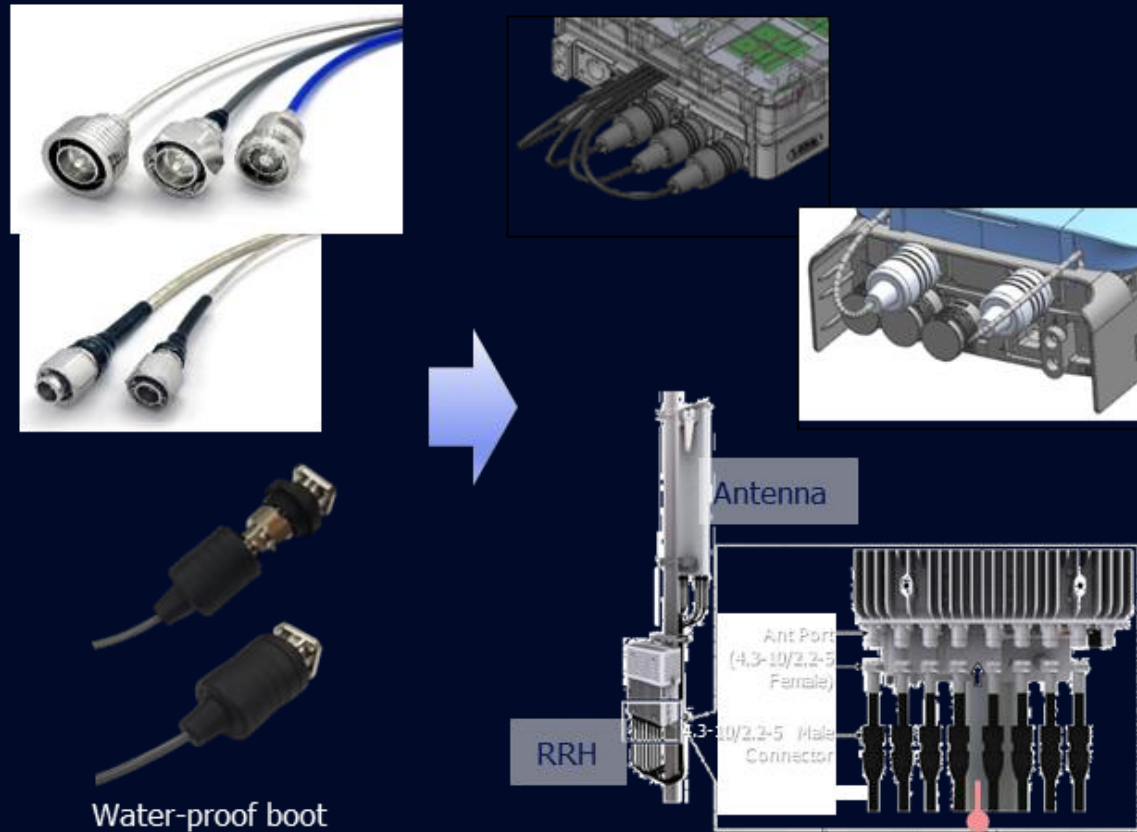
# Business Overview

## Cable/Cable Assembly

### RF Cables for 5G Infrastructure

#### 4.3-10 / 2.2-5 Cable Assemblies

provide excellent VSWR & PIM performance, Suitable for 5G equipment Distributed Antenna System(DAS) & Cellular installations

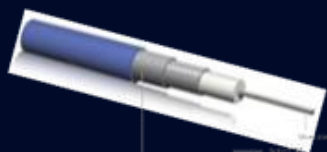


4.3-10  
2.2-5  
Cable  
Ass'y

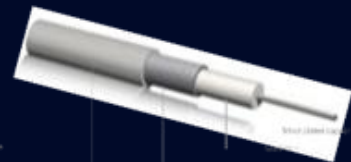
#### RF Cable for General Use from DC to 40GHz, VP 70%, Cost-efficient

RF Cable  
Common  
Types

MF series  
High flexibility



SF series  
Hand-Formability



SR series  
Semi-rigid



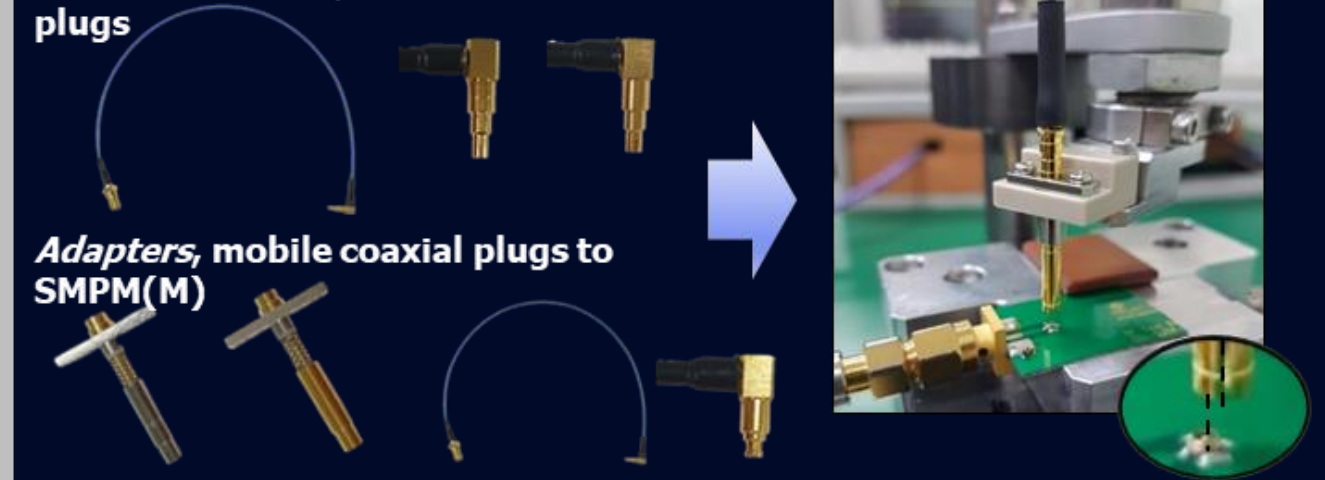
### RF Cables for Test Measurement

Mobile  
RF  
Test jig  
solution

**Test Jig solution up to 8 GHz.** Outstanding durability and self-alignment.

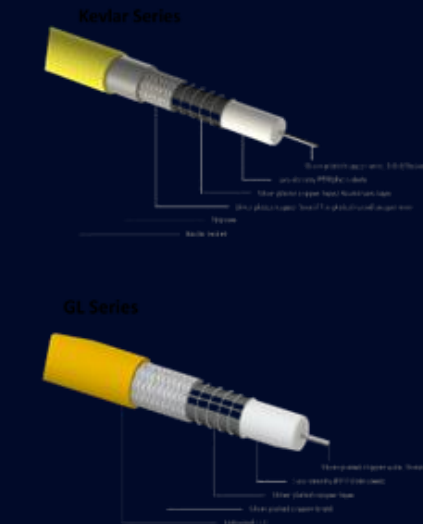
**Cable assemblies, SMA to mobile coaxial plugs**

**Adapters, mobile coaxial plugs to SMPM(M)**



Low-  
loss RF  
cable

**Low-loss RF cable up to 50 GHz**



※ Antenna measurement chambers



Major clients



**Ultra Low-loss RF cable up to 67 GHz**

GUL100  
(67.5GHz)

GUL140  
(40GHz)

GUL200  
(26.5GHz)

# Business Overview

## Cable/Cable Assembly

### Base Station & Small Cell



#### 4.3-10 / 4.3-10-B Cable ass'y

- Low PIMD
- Prevent mating with Mini Din (4.1-9.5) type



#### 2.2-5 Cable ass'y

- Small size (Volume: 53% ↓ vs. 4.3-10)
- High Frequency (20GHz)



#### Outdoor Cable ass'y

- Ant-Dust, UV, Salt water resistance, Armor

### Test & Measurement



#### Low Loss & Stable Cable ass'y

- Cable: FEP/PUR Jacket (6GHz, 18GHz, 26GHz, 40GHz, 50GHz, 67GHz)
- Connector: SMA, N, K, 2.4, type



#### Super Flexible & Low Loss Cable ass'y

- Cable: Kevlar jacket (6GHz, 18GHz, 26GHz, 40GHz, 50GHz)
- Connector: SMA, N, K, 2.4 type



#### Phase Matched Cable Ass'y

- Phase matched:  $\pm 5^\circ$ @18GHz,  $\pm 7^\circ$ @26GHz,  $\pm 10^\circ$ @40GHz
- Connector: SMA, N, K type

## PRODUCTS AND CUSTOMERS



**SAMSUNG**

**SK** telecom

**CISCO**

# PRODUCTS AND CUSTOMERS



한국항공우주산업|주



Hanwha Systems

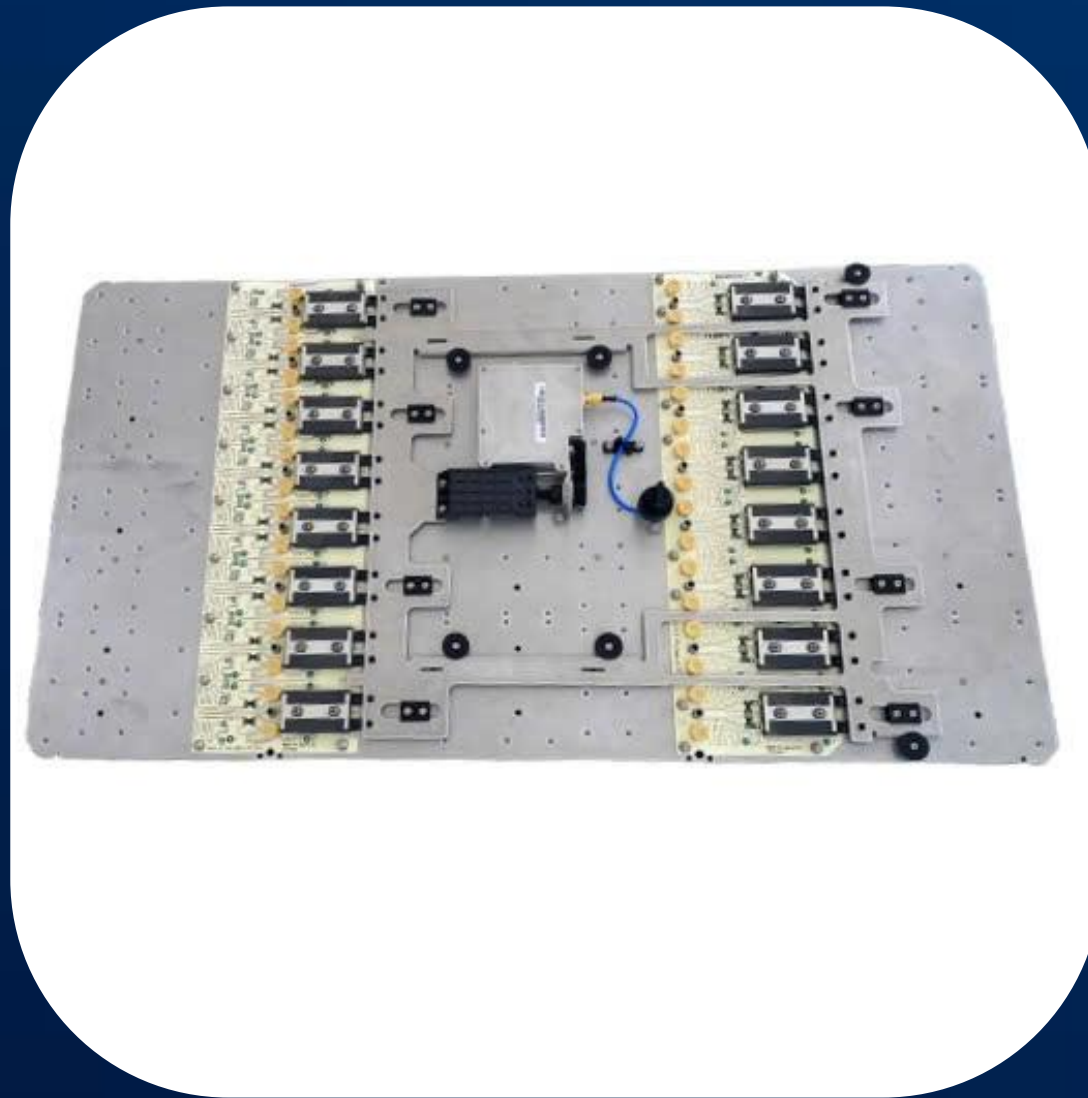
Intellian

# PRODUCTS AND CUSTOMERS



# Intellian

# PRODUCTS AND CUSTOMERS



# High Quality

Advanced technology  
Deliver Customer Ontime  
Price competitiveness



## AFU, RF Connector, Antenna RF Cable/Cable Assembly, Adapters

Products with  
Large Variety & High Quality



## RF R&D Laboratory

Equipment : CR Chamber/ Far-field Chamber/  
Reliability Test Equipment(incl. Shield Room)



## Human resources

A skilled workforce, professional technicians,  
and an intelligent management team



Gigalane

Thank You