

COMPANY PROFILE

2020



Main Product

- mmWave/5G high performance antenna, cable and RF design solution for commercial and defense industry

Overview

- Established in 2015 | Headquarters in Pangyo, Korea
- mmWave and 5G technology leadership position in North America, Korea, Europe, Japan and China

Competitiveness

- Secured low loss, high frequency fusion material processing technology for mmWave and 5G
- Leading high performance antenna and cable design technology for mmWave and 5G
- Secured fusion material technology and design technology for antenna and cable suited for aerospace and automotive industry
- Skilled R&D resources and IPR



1. Company that offers Value

Company that generates value through research and development to fulfill various customers' needs in order to cope with rapid changing market in 4th industrial revolution

2. Company that provides Total Solution for 5G Smart Connected Device

Company that delivers total solution platform service through providing material technology + design technology and fusion platform between technology to technology for 5G smart connected devices

3. Social Company that shares Happiness

Company that shares happiness with customers, employees and suppliers through creative development results and returns those results to society

4 business units + 4 R&D categories

Digital design

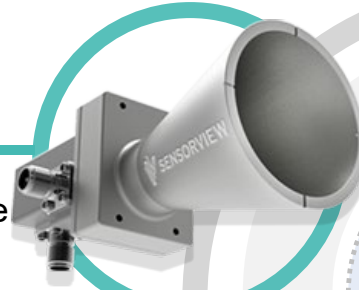
Analog design

Energy feeding

New material

Antenna Division

- 5G/mm-wave antenna & module
- Automotive V2X solution



Cable Division

- Low energy consumption cable
- mm-wave high performance cable



IoT Division

- IoT solution
- AI integrated IoT
- Design Art integrated IoT



Material Division

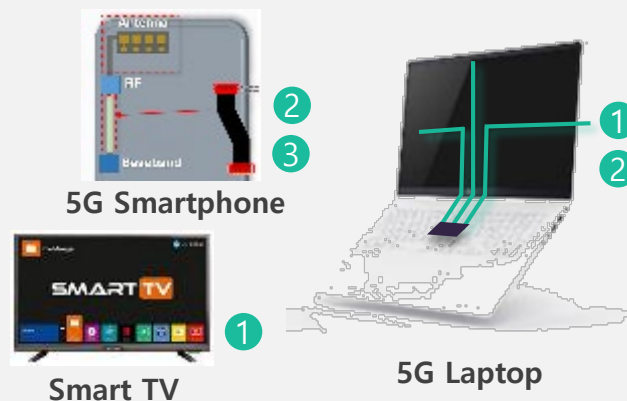
- Low loss material
- High reliability material



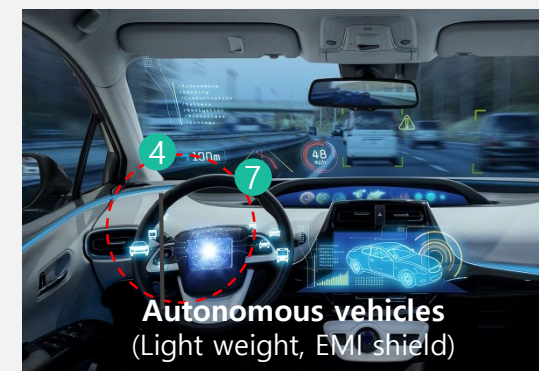
5G Infra Solution



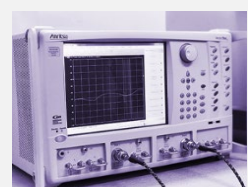
5G Wireless Devices



Connected Car based on 5G



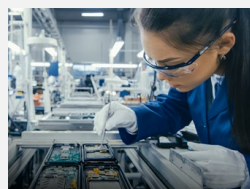
RF T&M/ 5G(mmWave) T&M



Network Analyzer



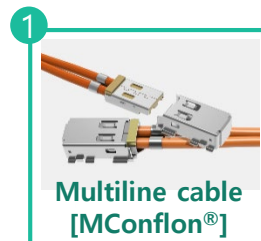
5G OTA Solution



Semiconductor Test Equipment



Micro Coaxial Cable



Multiline cable [MConflon®]



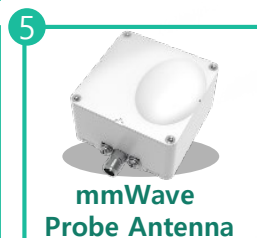
TLIA®



Flex-S®



mmWave Array antenna



mmWave Probe Antenna



In-building Antenna



Low-loss phase-matched microwave cable



Phase-matched adapter



Precision RF connector

Aerospace & Defense

Aircraft

AESA radar system



Light weight cables



Ant. array RF Cables

LOGIR (Low-cost Guided Imaging Rocket)



INVENTED FOR 5G
SENSORVIEW



SENSORVIEW

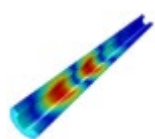
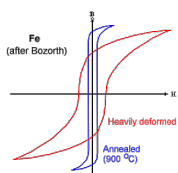
mmWave/5G low loss. Flexible Cable

| Coolductor® | Conflon® | Zenild® | Aeroflon® | Nanoflon®

Coolductor®

Super low loss
High power rating

[Element Technology]



[Application]



5G Antenna



- World's 1st technology
- More than 300% better performance

Conflon®

EMI shielded
Light weight

[Element Technology]



[Application]



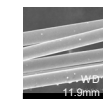
- World's 1st technology
- 200% better performance

Zenild®

Light weight /
EMI shielded Highly tensile

[Element Technology]

- Plating on fiber
- Stronger than steel
- Same electrical conductivity as silver

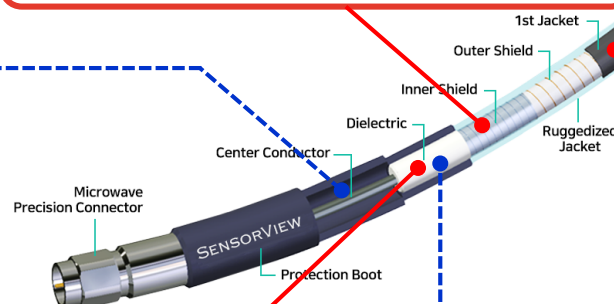


[Application]



■ 60% less weight in same size

- World's 2nd in production after NASA
- 130% better performance



Aeroflon®

Low loss for 5G (up to 67GHz)
Phase stable / low weight / highly flexible

[Element Technology]



- Material
- Low dielectric constant

[Application]



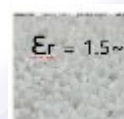
5G Infra

- In global top 10
- More than 130% better performance

Nanoflon®

Super low loss flexible dielectric material

[Element Technology]

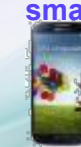


Low permittivity material



[Application]

100% used in 5G smart phones



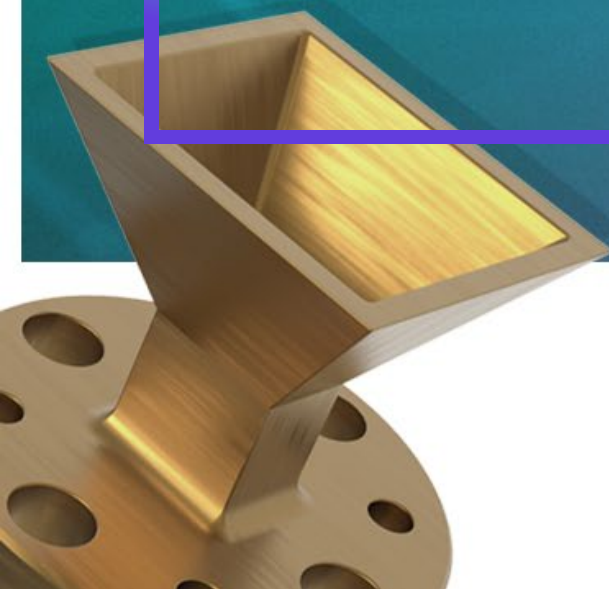
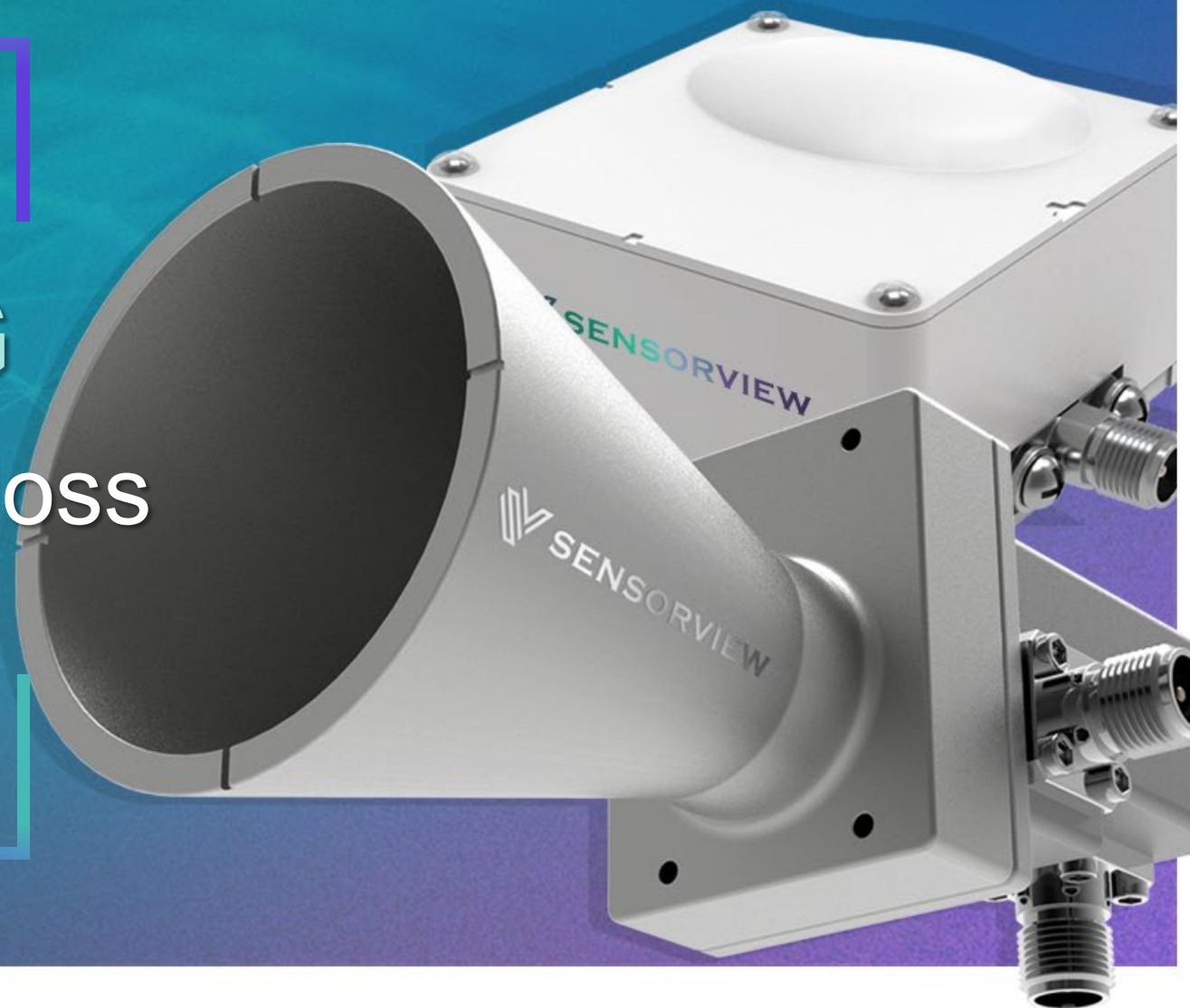
- World's 1st technology

INVENTED FOR 5G
SENSORVIEW



SENSORVIEW

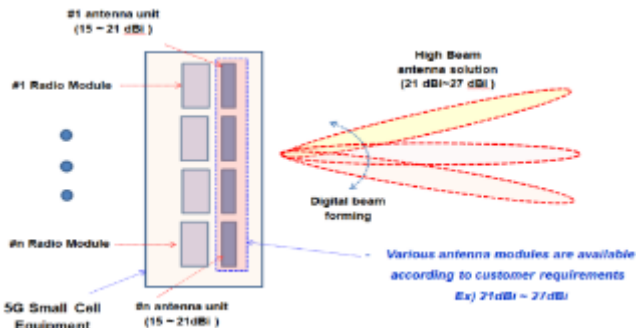
mmWave/5G higher gain. Low loss Antenna



| Gain+[®] | SLLFM[®] | TLIA[®] | MFocus[®] | JPlug[®]

Gain+®

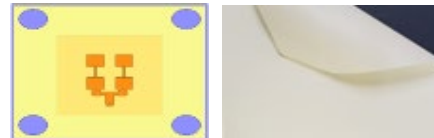
Low loss planar lens for additional higher gain



- ▶ Low loss dielectric lens solution
- ▶ Additional antenna gain available for 5G small-cell cell planning
- ▶ High performance design @ small size

SLLFM®

Low Loss (dielectric loss) Antenna



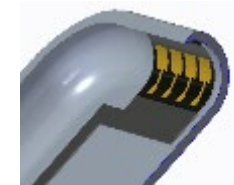
- ▶ Low Loss mmWave Antenna Technology
- ▶ Minimized dielectric loss solution @mmWave

TLIA®

Transmission Line Integrated Antenna for 5G/60GHz



- ▶ 2.5D flexible Low Loss mobile antenna
- ▶ Low loss transmission line Integrated MIMO antenna
- ▶ Beam-forming support



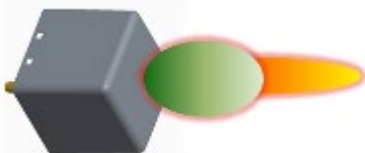
Cable integrated 5G antenna for smart phone



Cable integrated 60GHz antenna for smart TV

MFocus®

Antenna beam/gain variable solution w/o phase shifter for in-building solution

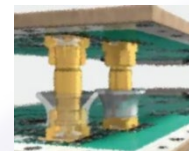


Expected 5G antenna system

- ▶ Variable Beam & Gain Without phase shifter
- ▶ Available for tunable gain/beam tilt of 5G antenna

JPlug®

Just plug-in-connection minimized board-to-board connector for 5G antenna



Existing connector (3 parts)



Proposed new connector (1~2 parts)

- ▶ Low loss solution
- ▶ Minimized horizontal-to-vertical transition solution
- ▶ Low cost solution

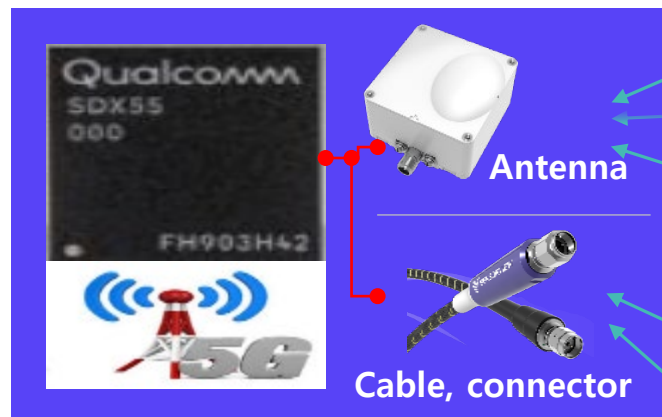
Various advanced technologies that can be used in many different industries

		Applicable product		Core technologies of Sensorview						Application
		Cable	Antenna	Lower dielectric constant Aeroflon®	Lower permittivity Nanoflon®	Lower conductor loss Coolductor®	Plating on PTEE Conflon®	Plating on fiber Zenild®	Precision assembly	
1	Low loss	●	●	○	○	○	○		○	RF connectivity
2	Low noise	●					○	○		High sensitivity measurement
3	Light weight	●	◐	○	○		○	○		Aircraft, Automotive
4	Low profile	●		○	○	○	○			Mobile phone, AP
5	Low cost	●	●	○	○		○			Test & Measurement cable
6	Flexibility	●	●	○				○		Test cable & RRH
7	High power	●	●	○	○	○				High power component, TVAC
8	EMI shielding	●					○	○	○	Chamber, defense system
9	Phase stable	●	●	○	○					Phased array antenna, Radar
10	Phase matching	●		○			○		○	Phased array, High speed digital
11	Composite	●						○	○	5G infrastructure

Global monopoly technology introduced by Sensorview

Better 5G System Performance, Lower CAPEX/OPEX

Low loss materials & antenna
design solution
for mmWave/5G band



**1. High Gain & Low Loss
(conductor + dielectric) antenna**
+1.X~2.XdB gain

**2. Low b'd-to-b'd connector loss
antenna**
+ 0.5 ~ 1.XdB gain

**3. Low Loss Planar Lens/
Pattern Reshaping**
+ 1~2 dB gain

4. Super Low Loss Cable
1dB/m↓ @GEN1, +2dB/m ↓ @GEN2

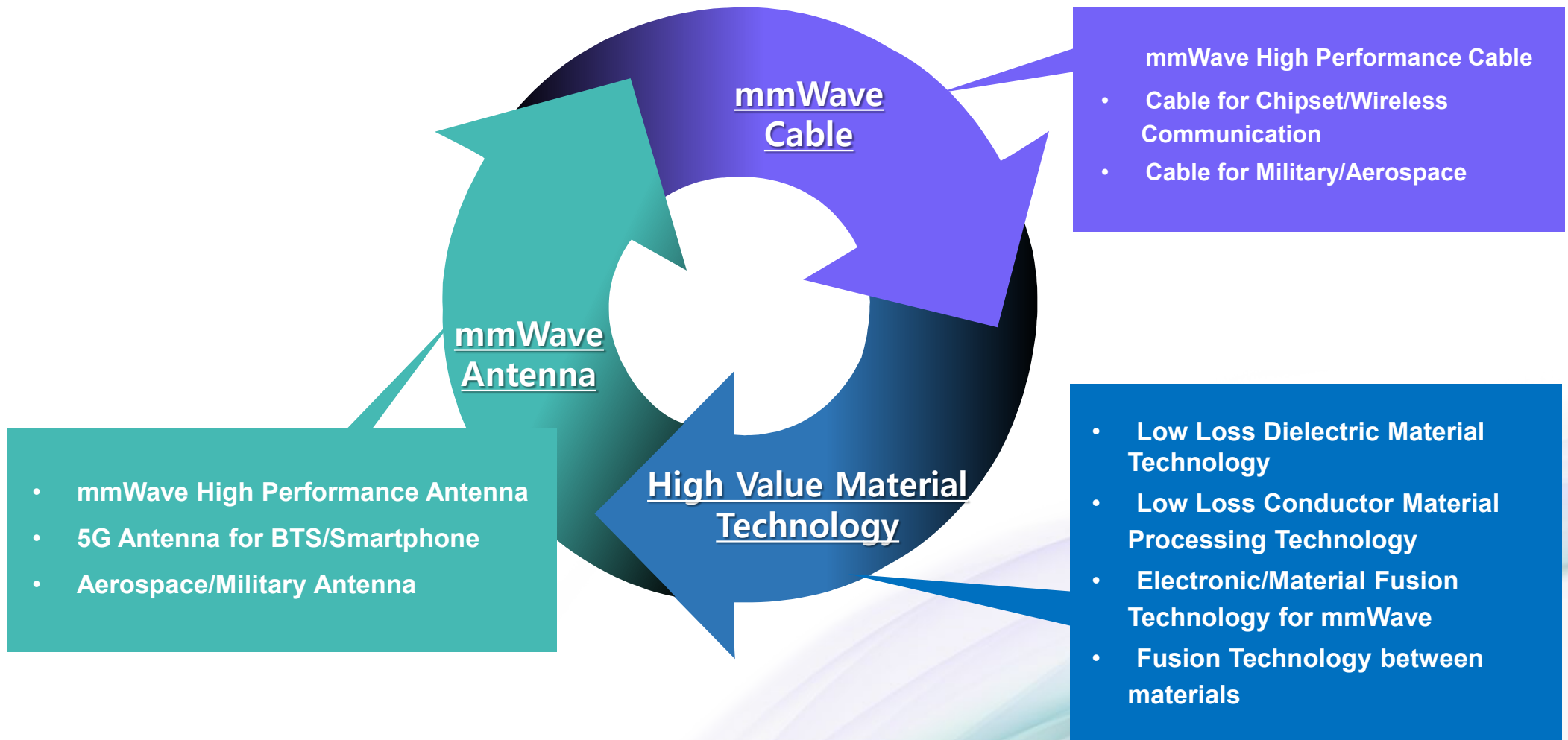
**5. High Phase/Loss(Insertion) Stability,
Perfect Phase Matching Cable**
3~4 times better

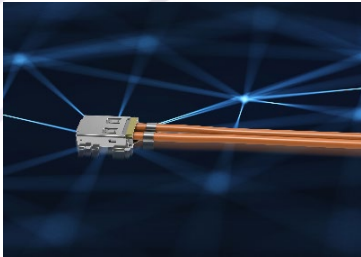
6. Ultra Low Weight Cable for Aircraft
weight 30% ↓

max. +3dB (200% ↑)
(재료 솔루션)

max. +2dB (60% ↑) /m
(재료 솔루션)

“Sustainable value-added business based on material/design fusion technology”





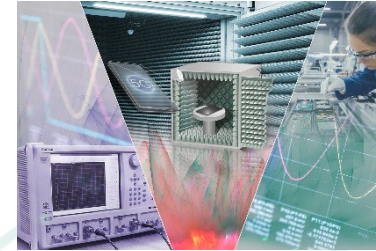
Micro IF Interconnection



Low-loss microwave cable



mmWave Patch Antenna



High shielding chamber



mmWave Horn Antenna



Thank You

Your trusted partner for 5G and beyond-5G

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