



5G and Beyond  
Connecting to the future

# End-to-End Solutions



UBCS CO., LTD.  
Connecting Systems



# 5G and Beyond Connecting to the future

UBCS has provided SK Telecom, Korea's telecommunications company, with one of the best end-to-end solutions for building base stations and in-building systems (networks) for the last several years.

Based on our experience in Korea, we work with our customers to design, manufacture, and create lasting connections with optimal products for 5G Networks.

## UBCS Co., Ltd.

CEO : Sung-Kwon Kim

Date of Establishment : 2005

Address : [15564] 96, Chungjang-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, Republic of Korea

Solutions : Power & Optical Fiber Connectivity, RF Connectivity, Test & Measurement

Main item : Power, Optic Connectors & Cable Assemblies, Waterproof Kits, RF Coaxial Connectors & Cable Assemblies, Passive Components (Combiners, Power Splitters)

Annual Sale (2021) : \$9,784,940





## History ● MILESTONES IN CONNECTIVITY

- 2021** Designated "Small Giants" by the Ministry of Employment and Labor.
- 2020** Selected as the No.1 vendor (RF Passive Components) from SK Telecom / Designated as a Innovation Business (Inno-Biz) by the Small & Midium Business Administration.
- 2019** Selected as a 5G vendor from SK Telecom, Designated as a Management Innovation Business (Main-Biz) by the Small & Midium Business Administration.
- 2018** Selected as a vendor in Korean disaster's network / Registered as KT Commerce's supplier.
- 2016** Selected as the No.1 vendor (RF Coaxial Connector) from SK Telecom.
- 2013** Established the corporate R&D center.
- 2012** Registered as a corporation.
- 2007** Acquired ISO 9001, ISO 14001 certificate.
- 2005** Established UBCS Co., Ltd.





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# Power, Optical Fiber Connectivity

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## Outdoor Wireless Networks

UBCS's portfolio includes power and optical fiber communications products that connect 4G & 5G Radio Units and rectifiers and serve the outdoor wireless networks.

To provide an optimal user experience, they are designed and customized to serve customer needs. UBCS provides the most robust and high performing solutions with our high-quality products.



Outdoor wireless networks



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### AC 20A / 220V FIC (F) Power Plug (Push-Pull\_4SQ)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation
- 2 Compatible with rectifier equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type



#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / FIC / Female
Connector Dimension	Ø32 x 98mm
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	500 (Cycle)
Pulling Force	200N

#### OPERATING SPECIFICATIONS

Rated Voltage	AC 220V
Rated Current	20A
Dielectric Withstanding Voltage	AC 1000V, 5mA, 60sec
Insulation Resistance	DC 500V, 10sec, Min 100MΩ
Contact Resistance	≤1.25mΩ

#### ENVIRONMENT TEST

Air-Leakage	1 bar / 30second (Less than 0.03bar)
Operating Temperature	-40 to +85℃
UV Test	720hours
Corrosion Test	Temperature: 35℃ / Salinity 5% / Spray volume 1~2 ml / Test time: 168 hrs (KSD 9502)
Vibration Test	Vibration frequency: 10~55Hz, displacement: 0.75mm, time of duration: 6H



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### AC 20A / 220V SAC (M) Power Receptacle (Push-Pull)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation
- 2 Compatible with rectifier equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions



FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type

#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / Male
Connector Dimension	32.6 x 32.6 x 41.2mm
Dust & Waterproof Rate	IP68
Mating Durability	300 (Cycle)

#### OPERATING SPECIFICATIONS

Rated Voltage	AC 220V
Rated Current	20A
Dielectric Withstanding Voltage	AC 1000V

#### ENVIRONMENT TEST

Operating Temperature	-40 to +90°C
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# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 40A / 50V SAC (F) Power Receptacle (Push-Pull)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation
- 2 Compatible with rectifier equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type



#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / Female
Connector Dimension	32.6 x 32.6 x 41.2mm
Dust & Waterproof Rate	IP68
Mating Durability	300 (Cycle)

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 200V
Rated Current	40A
Dielectric Withstanding Voltage	AC 1000V

#### ENVIRONMENT TEST

Operating Temperature	-40 to +90°C
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# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 40A / 50V SAC & FIC (M) Power Plug (Push-Pull\_4SQ)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Compatible with rectifier equipment
- 2 Safety waterproofing function
- 3 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type



#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / SOC & FIC / Male
Connector Dimension	Ø32 x 79mm (SOC) / Ø32 x 98mm (FIC)
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	500 (Cycle)
Pulling Force	200N

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 48V
Rated Current	40A
Dielectric Withstanding Voltage	AC 1000V, 5mA, 60sec
Insulation Resistance	DC 500V, 10sec, Min 100MΩ
Contact Resistance	≤1.25mΩ

#### ENVIRONMENT TEST

Air-Leakage	1bar / 30second (Less than 0.03bar)
Operating Temperature	-40 to +85°C
UV Test	720hours
Corrosion Test	Temperature: 35°C / Salinity 5% / Spray volume 1~2 ml / Test time: 168 hrs (KSD 9502)
Vibration Test	Vibration frequency: 10~55Hz, displacement: 0.75mm, time of duration: 6H



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 40A / 50V SAC (M) Power Plug (Push-Pull\_4SQ)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Compatible with high power outdoor equipment for 5G antenna etc.
- 2 Safety waterproofing & Dust protect function
- 3 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
SAC : Solder Assembled Connector  
SS : Samsung  
NK : Nokia  
ELG : Ericsson  
M : Male

F : Female  
RC : Rectifier  
PP : Push-Pull Type  
BN : Bayonet Type  
SC : Screw Type



#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / SOC / Male
Connector Dimension	Ø32 x 83mm
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	500 (Cycle)
Pulling Force	200N

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 48V
Rated Current	40A to 63A
Dielectric Withstanding Voltage	AC 1000V, 5mA, 60sec
Insulation Resistance	DC 500V, 10sec, Min 100MΩ
Contact Resistance	≤1.25mΩ

#### ENVIRONMENT TEST

Air-Leakage	1bar / 3second (Less than 0.03bar)
Operating Temperature	-40 to +85℃
UV Test	720hours
Corrosion Test	Temperature: 35℃ / Salinity 5% / Spray volume 1~2 ml / Test time: 720hrs
Vibration Test	Vibration frequency: 10~55Hz, displacement: 0.75mm, time of duration: 6hrs



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 40A / 50V FIC (F) Power Plug (Push-Pull\_4SQ)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation cables
- 2 Compatible with outdoor equipment for 5G antenna etc.
- 3 Safety waterproofing & Dust protect function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type



#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / FIC / Female
Connector Dimension	Ø32 x 98mm
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	500 (Cycle)
Pulling Force	200N

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 48V
Rated Current	40A
Dielectric Withstanding Voltage	AC 1000V, 5mA, 60sec
Insulation Resistance	DC 500V, 10sec, Min 100MΩ
Contact Resistance	≤1.25mΩ

#### ENVIRONMENT TEST

Air-Leakage	1bar / 1minute (Less than 0.03bar)
Operating Temperature	-40 to +85℃
UV Test	720hours
Corrosion Test	Temperature: 35℃ / Salinity 5% / Spray volume 1~2 ml / Test time: 720 hrs
Vibration Test	Vibration frequency: 10~55Hz, displacement: 0.75mm, time of duration: 6H



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 65A / 50V FIC (F) Power Plug (Push-Pull\_6SQ)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation cables
- 2 Compatible with High power outdoor equipment for 5G antenna etc.
- 3 Safety waterproofing & Dust protect function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions



FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type

#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / FIC / Female
Connector Dimension	Ø32 x 98mm
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	500 (Cycle)
Pulling Force	200N

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 48V
Rated Current	63A
Dielectric Withstanding Voltage	AC 1000V, 5mA, 60sec
Insulation Resistance	DC 500V, 10sec, Min 100MΩ
Contact Resistance	≤1.25mΩ

#### ENVIRONMENT TEST

Air-Leakage	1bar / 3sec (Less than 0.03bar)
Operating Temperature	-40 to +85℃
UV Test	720hours
Corrosion Test	Temperature: 35℃ / Salinity 5% / Spray volume 1~2 ml / Test time: 720 hrs
Vibration Test	Vibration frequency: 10~55Hz, displacement: 0.75mm, time of duration: 6H

### Signal 5A Connector & Cable Assembly (Push-Pull)

UBCS's Signal connectors and cable assemblies are designed for the user's convenience in outdoor network environments and ensure the best connectivity solutions.

#### FEATURES / BENEFITS

- 1 Push-Pull Type for easy field installation
- 2 Compatible with rectifier equipment
- 3 Excellent durability
- 4 High and Safety communication signal performance
- 5 Complied of IP67 & IP68 outdoor level

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
SAC : Solder Assembled Connector  
SS : Samsung  
NK : Nokia  
ELG : Ericsson  
M : Male

F : Female  
RC : Rectifier  
PP : Push-Pull Type  
BN : Bayonet Type  
SC : Screw Type



#### SPECIFICATIONS

Connector Type	Push-Pull
Mating Cycle	300 (Cycle)
Rated Voltage	50V
Rated Current	5A
Withstanding Voltage	1000V
Insulation Resistance	DC 500V, 10sec, Min 100MΩ
Operating Temperature	-40 to +90℃
Waterproof	IP67 ~ IP68



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 80A / 50V SAC (F) Power Receptacle (Push-Pull)

UBCS's DC/AC Power connectors are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy connection mount [Push-Pull Type]
- 2 Compatible all of rectifier & batteries for high power equipment
- 3 Safety waterproofing function
- 4 Easy & Safety solder type

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions



FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type

#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / Female
Connector Dimension	Ø33 x 37.6mm
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	300 (Cycle)

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 420V
Rated Current	80A
Dielectric Withstanding Voltage	2000V

#### ENVIRONMENT TEST

Operating Temperature	-40 to +85℃
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# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### DC 80A / 50V Cable Assembly (Push-Pull)

UBCS's DC/AC power cable assemblies are mainly used to power supply between base station antennas and equipment such as 4G & 5G radio units, rectifiers, etc. for outdoor wireless networks.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation [Push-Pull Type]
- 2 Compatible between rectifier & battery equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
SAC : Solder Assembled Connector  
SS : Samsung  
NK : Nokia  
ELG : Ericsson  
M : Male

F : Female  
RC : Rectifier  
PP : Push-Pull Type  
BN : Bayonet Type  
SC : Screw Type



#### FUNCTIONAL SPECIFICATIONS

Connector Type	Push-Pull / Male
Dust & Waterproof Rate	IP67 ~ IP68
Mating Durability	300 (Cycle)

#### OPERATING SPECIFICATIONS

Rated Voltage	DC 420V
Rated Current	80A
Dielectric Withstanding Voltage	2000V
Insulation Resistance	DC 500V, 10sec, Min 100MΩ

#### ENVIRONMENT TEST

Operating Temperature	-40 to +85℃
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# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Power, Optic Connectors & Cable Assemblies

### CPRI DLC (6.3mm) Optic Plug (Push-Pull)

UBCS's Optic cable assemblies are designed for the user's convenience in outdoor network environments and ensure the best connectivity solutions.

#### FEATURES / BENEFITS

- 1 Push-Pull Type for easy field installation
- 2 Moving tolerance length for SFP position of inner equipment
- 3 High and Safety optical performance
- 4 Complied of IP67 & IP68 outdoor level
- 5 Satisfy CPRI communication conditions

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
 SAC : Solder Assembled Connector  
 SS : Samsung  
 NK : Nokia  
 ELG : Ericsson  
 M : Male

F : Female  
 RC : Rectifier  
 PP : Push-Pull Type  
 BN : Bayonet Type  
 SC : Screw Type



#### SPECIFICATIONS

Connector Type	Push-Pull
Operating Wavelength	1260 ~ 1620nm
Environmental Conditions	Outdoor
Configuration	Single Mode (9/125μm)
Insertion Loss	≤0.5dB
Return Loss	≥50dB
Operating Temperature	-40 to +85℃
Storage Temperature	-40 to +85℃
Waterproof	IP67 ~ IP68
UV & Salt Spray Test	720hours

# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Accessories (Waterproof Kits)

### OJC Waterproof Kit (Screw\_SS / NK / ELG)

UBCS's Waterproof kits protect the optic connector and cable in the event of humidity and dust in the harsh outdoor environment.

They are mainly used in the outdoor wireless networks for connection between outdoor equipment such as FTTA solution equipment.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation [Screw Type]
- 2 Compatible with RRU or AAU equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions



FIC : Field Installable Connector  
SAC : Solder Assembled Connector  
SS : Samsung  
NK : Nokia  
ELG : Ericsson  
M : Male

F : Female  
RC : Rectifier  
PP : Push-Pull Type  
BN : Bayonet Type  
SC : Screw Type

#### SPECIFICATIONS

Connector Type	Screw Type
Waterproof Rate	IP64
Mating Durability	500 (Cycle)
Temperature Rating	-40 to +85℃



# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Accessories (Waterproof Kits)

### RJ45 Alarm Waterproof Kit (Screw\_SS)

UBCS's Waterproof kits protect the RJ45 connector and cable in the event of humidity and dust in the harsh outdoor environment.

They are mainly used in the outdoor wireless networks for connection between outdoor equipment such as FTTA solution equipment.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation [Screw Type]
- 2 Compatible with rectifier equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector  
SAC : Solder Assembled Connector  
SS : Samsung  
NK : Nokia  
ELG : Ericsson  
M : Male

F : Female  
RC : Rectifier  
PP : Push-Pull Type  
BN : Bayonet Type  
SC : Screw Type



#### SPECIFICATIONS

Connector Type	Screw Type
Waterproof Rate	IP64
Mating Durability	500 (Cycle)
Temperature Rating	-40 to +85°C

# Power, Optical Fiber Connectivity - Outdoor Wireless Networks

## Accessories (Waterproof Kits)

### RJ45 Waterproof Kit (Screw\_Rectifier)

UBCS's Waterproof kits protect the RJ45 connector and cable in the event of humidity and dust in the harsh outdoor environment. They are mainly used in the outdoor wireless networks for connection between outdoor equipment such as FTTA solution equipment.

#### FEATURES / BENEFITS

- 1 Safety & Easy field installation
- 2 Compatible with rectifier equipment
- 3 Safety waterproofing function
- 4 Excellent durability

#### APPLICATIONS

- 1 5G Networks
- 2 Outdoor Wireless Networks
- 3 FTTA Solutions

FIC : Field Installable Connector	F : Female
SAC : Solder Assembled Connector	RC : Rectifier
SS : Samsung	PP : Push-Pull Type
NK : Nokia	BN : Bayonet Type
ELG : Ericsson	SC : Screw Type
M : Male	



#### SPECIFICATIONS

Connector Type	Screw Type
Waterproof Rate	IP67
Mating Durability	300 (Cycle)
Temperature Rating	-40 to +85°C

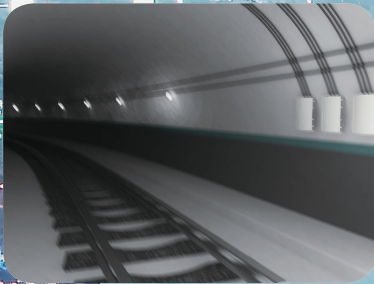




5G Networks



In-buildings (DAS)



Indoor Coverage

# RF Connectivity

## Wireless Infrastructure

UBCS provides a portfolio of high-performance and reliable "RF connectivity" as well as smart cabling solutions in various wireless infrastructure environments such as base stations, in-buildings, subways, and tunnels where mobile coverage is operated.





# RF Connectivity - Wireless Infrastructure

Coaxial Connectors, DC ~ 4GHz

## 7-16 DIN Series

UBCS' connectors address a wide variety of RF application needs from base stations, in-building (DAS), indoor and outdoor networks, testing & measurement.

### FEATURES / BENEFITS

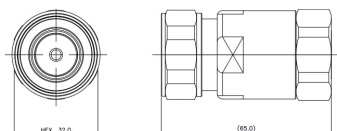
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 High durability
- 4 Low PIM

### APPLICATIONS

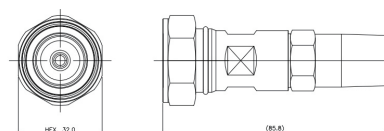
- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Outdoor and Indoor
- 6 Radios and Filter Output



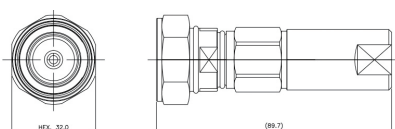
### BLOCK DIAGRAM / LINE UP



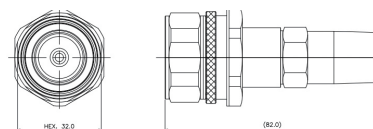
7-16 DIN Male for 7/8" Flexible Coaxial Cable [Straight]



7-16 DIN Male for 1/2" Flexible Coaxial Cable [Straight]



7-16 DIN Male for 1/2" Flexible Coaxial Cable,  
Smooth Wall Type [Straight]



7-16 DIN Male for 1/2" Flexible Coaxial Cable  
[Straight, Anti-loosening]

### SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	DC ~ 4GHz			
Insertion Loss	$-0.05 \times \sqrt{f(\text{GHz})}$ dB			
VSWR	1.2:1 Max.			
PIMD	3rd PIMD	≤ -150 dBc	5th PIMD	≤ -160 dBc
Insulation Resistance	≥ 10GΩ			
Center Contact Resistance	≤ 0.005Ω			
Outer Contact Resistance	≤ 0.01Ω			
Operating Temperature	-40 °C ~ +70 °C			
Humidity	IEC68-2-30			
Vibration	IEC68-2-6			



# RF Connectivity - Wireless Infrastructure

Coaxial Connectors, DC ~ 4GHz

## N Series

UBCS' connectors address a wide variety of RF application needs from base stations, in-building (DAS), indoor and outdoor networks, testing & measurement.

### FEATURES / BENEFITS

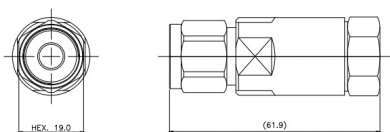
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 High durability
- 4 Low PIM

### APPLICATIONS

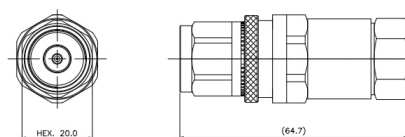
- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Outdoor and Indoor
- 6 Radios and Filter Output



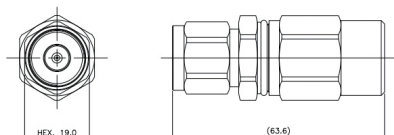
### BLOCK DIAGRAM / LINE UP



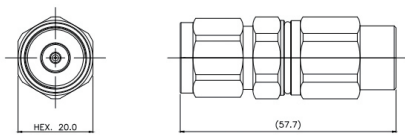
N Male for 1/2" Flexible Coaxial Cable [Straight]



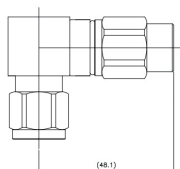
N Male for 1/2" Flexible Coaxial Cable [Straight, Anti-loosening]



N Male for 1/2" Flexible Coaxial Cable, Smooth Wall Type [Straight]



N Male for 2/5" Flexible Coaxial Cable, Smooth Wall Type [Straight]



N Male for 2/5" Flexible Coaxial Cable, Smooth Wall Type [Right Angle]

### SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	DC ~ 4GHz			
Insertion Loss	-0.05 x √f(GHz) dB			
VSWR	1.2:1 Max.			
PIMD	3rd PIMD	≤ -150 dBc	5th PIMD	≤ -160 dBc
Insulation Resistance	≥ 10GΩ			
Center Contact Resistance	≤ 0.005Ω			
Outer Contact Resistance	≤ 0.01Ω			
Operating Temperature	-40 °C ~ +70 °C			
Humidity	IEC68-2-30			
Vibration	IEC68-2-6			

# RF Connectivity - Wireless Infrastructure

Coaxial Connectors, DC ~ 4GHz

## 4.3-10 Series

UBCS' connectors address a wide variety of RF application needs from base stations, in-building (DAS), indoor and outdoor networks, testing & measurement.

### FEATURES / BENEFITS

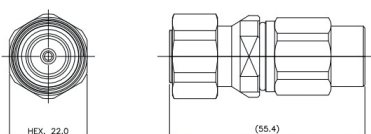
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 High durability
- 4 Low PIM

### APPLICATIONS

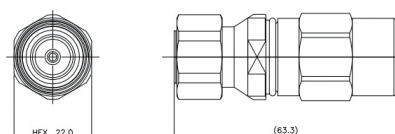
- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Outdoor and Indoor
- 6 Radios and Filter Output



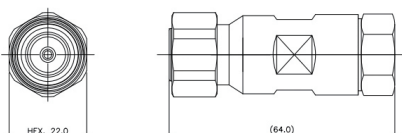
### BLOCK DIAGRAM / LINE UP



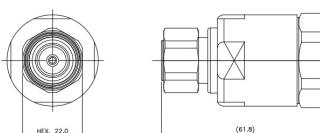
4.3-10 Male for 2/5" Flexible Coaxial Cable, Smooth Wall Type [Straight]



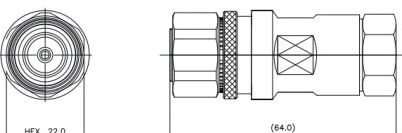
4.3-10 Male for 1/2" Flexible Coaxial Cable, Smooth Wall Type [Straight]



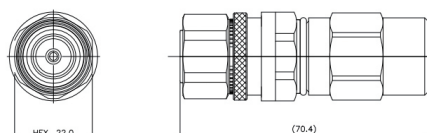
4.3-10 Male for 1/2" Flexible Coaxial Cable [Straight]



4.3-10 Male for 7/8" Flexible Coaxial Cable [Straight]



4.3-10 Male for 1/2" Flexible Coaxial Cable [Straight, Anti-loosening]



4.3-10 Male for 2/5" Flexible Coaxial Cable, Smooth Wall Type [Straight, Anti-loosening]

### SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	DC ~ 4GHz			
Insertion Loss	$-0.05 \times \sqrt{f(\text{GHz})}$ dB			
VSWR	1.2:1 Max.			
PIMD	3rd PIMD	≤ -150 dBc	5th PIMD	≤ -160 dBc
Insulation Resistance	≥ 10GΩ			
Center Contact Resistance	≤ 0.005Ω			
Outer Contact Resistance	≤ 0.01Ω			
Operating Temperature	-40 °C ~ +70 °C			
Humidity	IEC68-2-30			
Vibration	IEC68-2-6			



# RF Connectivity - Wireless Infrastructure

## Coaxial Cable Assemblies

### Jumper & Feeder

UBCS is focusing on developing and manufacturing more efficient cable assemblies considering the user's optimal work and installation environment.

#### FEATURES / BENEFITS

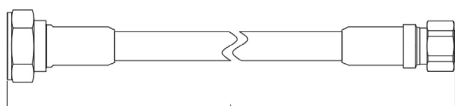
- 1 Robust mechanical design
- 2 Outstanding PIM performance
- 3 High durability
- 4 Low VSWR and attenuation

#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Outdoor and Indoor



#### BLOCK DIAGRAM / LINE UP



7-16 DIN Male - 4.3-10 Male

7-16 DIN Male - 7-16 DIN Male

7-16 DIN Male - 7-16 DIN Male\_Right Angle

7-16 DIN Male - N Male

N Male - 4.3-10 Male

N Male - N Male



4.3-10 Male - 4.3-10 Male\_Anti-Loosening

7-16 DIN Male - 4.3-10 Male\_Anti-Loosening

7-16 DIN Male - 7-16 DIN Male\_Anti-Loosening

7-16 DIN Male - N Male\_Anti-Loosening

N Male - 4.3-10 Male\_Anti-Loosening

N Male - N Male\_Anti-Loosening

#### SPECIFICATIONS

Impedance		50Ω
Frequency Range Up To		DC ~ 4GHz
Insertion Loss		$[(\text{Cable loss} + 0.1) \times \sqrt{f(\text{GHz})}] \times 1.15$
VSWR	DC ~ 2.7 GHz	1.2:1 Max.
	DC ~ 4 GHz	1.3:1 Max.
PIMD	“3rd Order IM Product @2 x 43dBm”	Static: ≤ -160dBc
		Dynamic: ≤ -150dBc
	5rd Order IM Product @2 x 43dBm	Static: ≤ -170dBc
		Dynamic: ≤ -160dBc
Operating Temperature		-40 °C ~ +70 °C
Waterproof (Protection Class)		IP67
Connector Type		Custom

# RF Connectivity - Wireless Infrastructure

## Passive Components

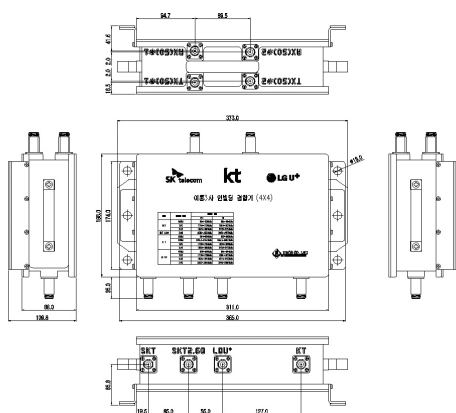
### 4X4 Combiner, 819-2700MHz, N Female

UBCS' combiner combines RF signals at a certain impedance level. Our products are designed for use in-building or indoor and can be used to provide wireless coverage in base stations, buildings, subways, tunnels, etc.

#### FEATURES / BENEFITS

- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### BLOCK DIAGRAM



#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor



#### SPECIFICATIONS

Impedance		50Ω			
Frequency Range Up To	SK Telecom (Pass Band)	800M		1.8G	2.1G
		824~839MHz		1715~1735MHz	1940~1960MHz
		869~884MHz		1810~1830MHz	2130~2150MHz
	KT (Pass Band)	800M	900M	1.8G	2.1G
		814~824MHz	904.3~914.3MHz	1735~1765MHz	1960~1980MHz
		859~869MHz	949.3~959.3MHz	1830~1859MHz	2150~2170MHz
	LGU+ (Pass Band)	800M	1.8G	2.1G	2.6G
		839~849MHz	1770~1780MHz	1920~1940MHz	2520~2540MHz
884~894MHz		1861~1870MHz	2110~2130MHz	2640~2660MHz	
SK Telecom 2.6G (Pass Band)	2.6G				
	2500~2520MHz, 2540~2550MHz, 2620~2640MHz, 2660~2670MHz				
Insertion Loss		4.8dB Max. (KT 1.8G TX , LGU+ 1.8G TX 5.8dB Max. KT 1.8G RX , LGU+ 1.8G RX 5.3dB Max.)			
Return Loss		-18.0dB Max. (Input Port)			
Isolation		All other path	22dB Max. / KT 1.8G TX ↔ LGU+ 1.8G TX 20dB Max.		
		LGU+→KT port	48dB Min.@884~894MHz		
			45dB min.@904.3~914.3MHz		
			30dB min.@2110~2130MHz		
SKT→LGU+ port		50dB min.@1810~1830MHz			
SKT→KT port		50dB min.@904.3~914.3MHz			
PIMD		“5th -160dBc Min. 7th -170dBc Min @ 43dBm x 2Tone SKT 2.6G Port 3rd (-150dBc), 5th Test			
Max Input Power		SKT port : 240W Max. (avg. power) KT port : 320W Max. (avg. power) LGU+ port : 320W Max. (avg. power) SKT 2.6G port : 80W Max. (avg. power)			
Connector Type		N(F) Type			
Operating Temperature		-30℃ ~ +60℃			
Waterproof (Protection Class)		IP67			
Humidity		95%			

# RF Connectivity - Wireless Infrastructure

## Passive Components

### 4X2 Combiner, 100W 3350-3900MHz, N Female

819~2550MHz, 3350~3500MHz, 3500~3600MHz, 3600~3900MHz

UBCS' combiner combines RF signals at a certain impedance level. Our products are designed for use in-building or indoor and can be used to provide wireless coverage in base stations, buildings, subways, tunnels, etc.

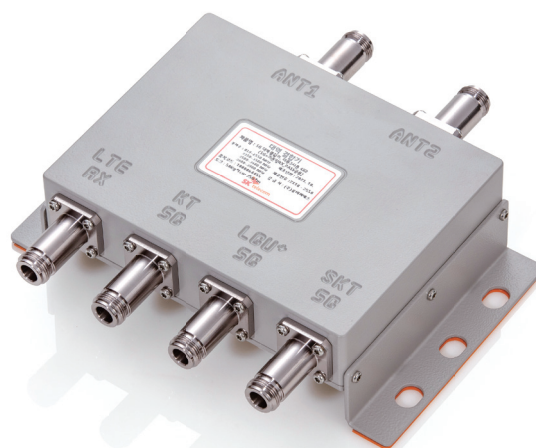
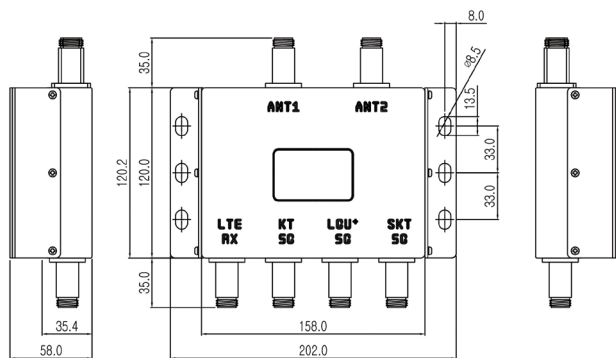
#### FEATURES / BENEFITS

- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor

#### BLOCK DIAGRAM



#### SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	P1	P2	P3	P4, P5
	KT	SK Telecom	LG U+	LTE(Rx)
	3500~3600MHz	3600~3900MHz	3350~3500MHz	819~2550MHz
Insertion Loss	P1	P2	P3	P4
	-4.5dB Min.	-4.5dB Min.	-4.5dB Min.	-0.4dB Min.
Return Loss	-18.0dB Max. (Input Port)			
Isolation	-20dB Max. (P1↔P2, P1↔P3, P4↔P2,P3)			
	-30dB Max. (P2↔P3, P4↔P1)			
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone			
Connector Type	N Type (F)			
Input Power Rating Per Port	P1	P2	P3	P4, P5
	100W Max.	100W Max.	100W Max.	10W Max.
Operating Temperature	-30 °C ~ +60 °C			
Waterproof (Protection Class)	IP67			
Humidity	95%			



# RF Connectivity - Wireless Infrastructure

## Passive Components

### 3X2 Combiner, 100W 3350-3900MHz, N / 4.3-10 Female

3350~3500MHz, 3500~3600MHz, 3600~3900MHz

UBCS' combiner combines RF signals at a certain impedance level. Our products are designed for use in-building or indoor and can be used to provide wireless coverage in base stations, buildings, subways, tunnels, etc.

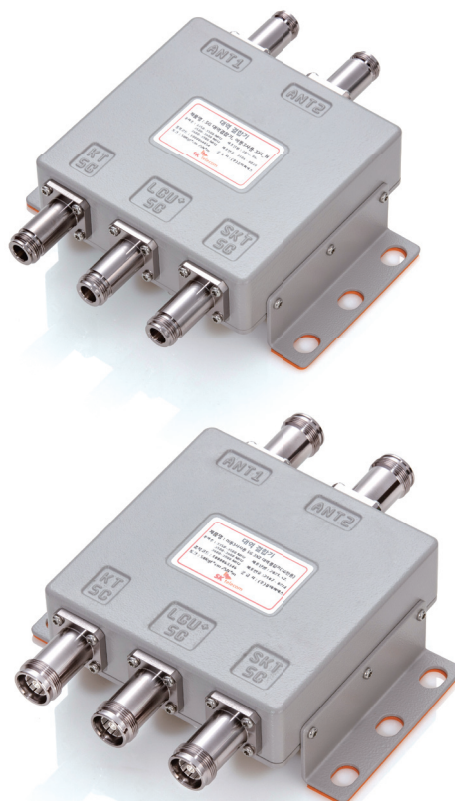
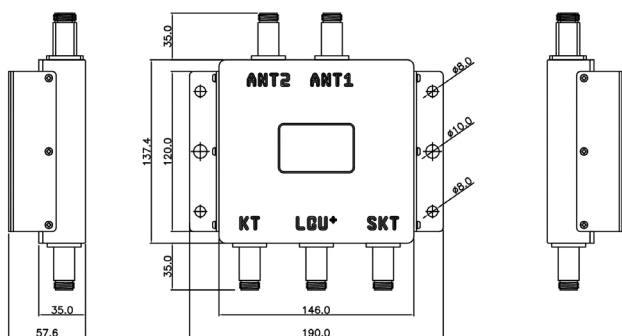
#### FEATURES / BENEFITS

- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor

#### BLOCK DIAGRAM / LINE UP



#### SPECIFICATIONS

Impedance	50Ω		
Frequency Range Up To	P1	P2	P3
	KT	SK Telecom	LG U+
	3500~3600MHz	3600~3900MHz	3350~3500MHz
Insertion Loss	P1	P2	P3
	-4.2dB Min.	-4.2dB Min.	-4.2dB Min.
Return Loss	-18.0dB Max. (Input Port)		
Isolation	-20dB Max. (P1↔P2, P1↔P3)		
	-30dB Max. (P2↔P3)		
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone		
Connector Type	N Type (F) / 4.3-10 (F)		
Input Power Rating Per Port	P1	P2	P3
	100W Max.	100W Max.	100W Max.
Operating Temperature	-30 °C ~ +60 °C		
Waterproof (Protection Class)	IP67		
Humidity	95%		

# RF Connectivity - Wireless Infrastructure

## Passive Components

### 3X1 Combiner, 100W 3350~3900, N Female

3350~3500MHz, 3500~3600MHz, 3600~3900MHz

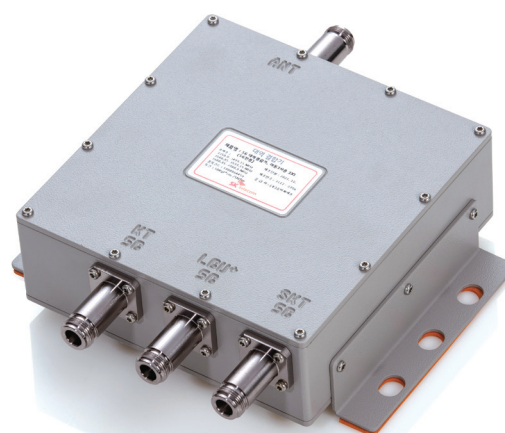
UBCS' combiner combines RF signals at a certain impedance level. Our products are designed for use in-building or indoor and can be used to provide wireless coverage in base stations, buildings, subways, tunnels, etc.

#### FEATURES / BENEFITS

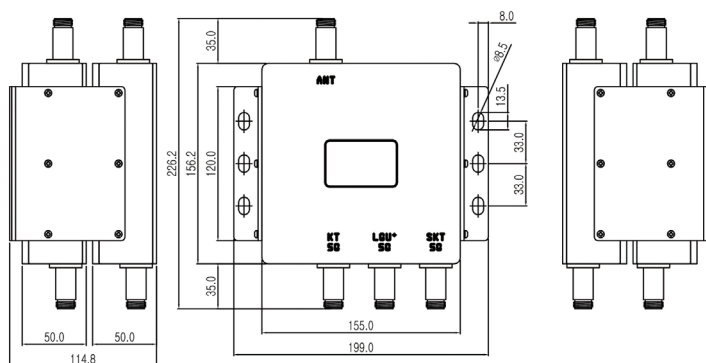
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor



#### BLOCK DIAGRAM / LINE UP



#### SPECIFICATIONS

Impedance	50Ω		
Frequency Range Up To	P1	P2	P3
	KT	SK Telecom	LG U+
	3500~3600MHz	3600~3900MHz	3350~3500MHz
Insertion Loss	P1	P2	P3
	-0.7dB Min. (Band AVG.)		
Return Loss	-18.0dB Max. (Input Port)		
Isolation	-20dB Max. (P1↔P2, P1↔P3)		
	-30dB Max. (P2↔P3)		
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone		
Connector Type	N Type (F)		
Input Power Rating Per Port	P1	P2	P3
	100W Max.	100W Max.	100W Max.
Operating Temperature	-30 °C ~ +60 °C		
Waterproof (Protection Class)	IP67		
Humidity	95%		

# RF Connectivity - Wireless Infrastructure

## Passive Components

### 2X2 Hybrid Combiner, 500W 819-3900MHz, N Female

819~960MHz, 1710~1870MHz, 1885~2170MHz, 2300~2700MHz, 3350~3900MHz

UBCS' combiner combines RF signals at a certain impedance level. Our products are designed for use in-building or indoor and can be used to provide wireless coverage in base stations, buildings, subways, tunnels, etc.

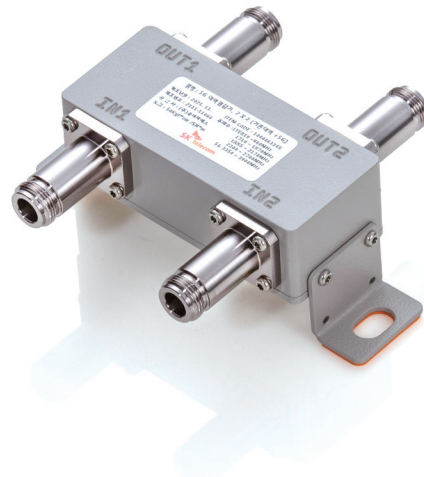
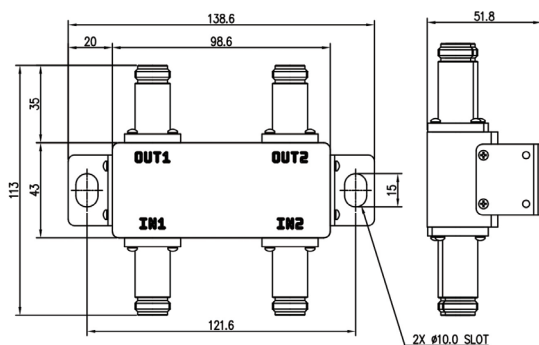
#### FEATURES / BENEFITS

- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor

#### BLOCK DIAGRAM



#### SPECIFICATIONS

Impedance	50Ω	
Frequency Range Up To	LTE ~ 2700MHz	5G 3350~3900MHz
Insertion Loss	-3.8dB Min.	
Return Loss	-18.0dB Max. (Input Port)	
Isolation	-22dB Max.	
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone	
Connector Type	N Type (F)	
Input Power Rating Per Port	500W Max.	
Operating Temperature	-30 °C ~ +60 °C	
Waterproof (Protection Class)	IP67	
Humidity	95%	





# RF Connectivity - Wireless Infrastructure

## Passive Components

### Wilkinson, 3-Way Power Splitters 819-3900MHz, N Female

819~960MHz, 1710~1870MHz, 1885~2170MHz, 2300~2400MHz,  
2500~2690MHz, 3350~3900MHz

UBCS' power splitter evenly distributes signal received in one input unit to two, three or four output units. Designed for the needs of South Korea's 5G telecommunications industry.

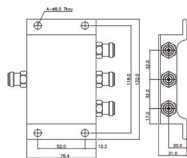
#### FEATURES / BENEFITS

- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

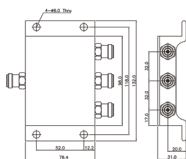
#### APPLICATIONS

- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor

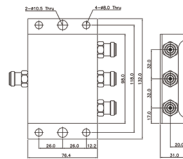
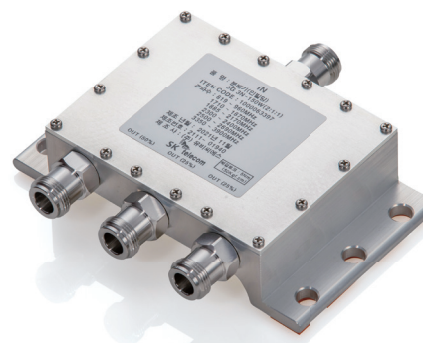
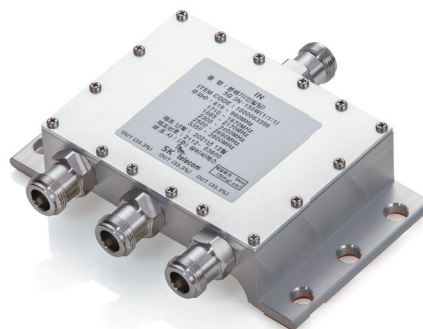
#### BLOCK DIAGRAM / LINE UP



3-Way Power Splitter, N Female, 150W 819-3900MHz  
[1:1:1 Split Ratio]



3-Way Power Splitter, N Female, 150W 819-3900MHz  
[2:1:1 Split Ratio]



3-Way Power Splitter, N Female, 150W 819-3900MHz  
[8:1:1 Split Ratio]

#### SPECIFICATIONS

Impedance	50Ω
Frequency Range Up To	819~960MHz, 1710~1870MHz, 1885~2170MHz, 2300~2400MHz, 2500~2690MHz, 3350~3900MHz
VSWR	1.2:1 Max.
Isolation	-20.0dB (Max.)
PIMD	-150dBc @ 3th (CW 10W 2tone)
Connector Type	N Type (F)
Input Power Rating Per Port	150W Max.
Operating Temperature	-30 °C ~ +60 °C
Waterproof (Protection Class)	IP67
Humidity	95%
Port	4 Port





# RF Connectivity - Wireless Infrastructure

## Passive Components

### Junction, 2-Way Power Splitters 819-3900MHz, N Female

**819~960MHz, 1710~1870MHz, 1885~2170MHz,  
2300~2400MHz, 2500~2690MHz, 3350~3900MHz**

UBCS' power splitter evenly distributes signal received in one input unit to two, three or four output units. Designed for the needs of South Korea's telecommunications industry.

#### FEATURES / BENEFITS

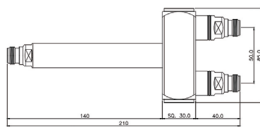
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

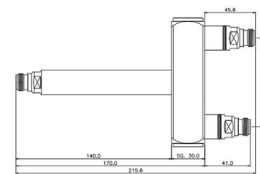
- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor



#### BLOCK DIAGRAM / LINE UP



2-Way Power Splitter [Type U], N Female, 300W 3350-3900MHz [1:1 Split Ratio]



2-Way Power Splitter [Type U], N Female, 300W 3350-3900MHz [7:3 Split Ratio]

#### SPECIFICATIONS

Impedance	50Ω
Frequency Range Up To	819~960MHz, 1710~1870MHz, 1885~2170MHz, 2300~2400MHz, 2500~2690MHz, 3350~3900MHz
VSWR	1.2:1 Max.
PIMD	-155dBc @ 3th (CW 20W 2tone)
Connector Type	N Type (F)
Input Power Rating Per Port	300W Max.
Operating Temperature	-40 °C ~ +70 °C
Waterproof (Protection Class)	IP67
Humidity	95%
Port	3 Port

# RF Connectivity - Wireless Infrastructure

## Passive Components

### Junction, 2-Way Power Splitters 3350-3900MHz, 4.3-10 Female

**3350~3900MHz**

UBCS' power splitter evenly distributes signal received in one input unit to two, three or four output units. Designed for the needs of South Korea's telecommunications industry.

#### FEATURES / BENEFITS

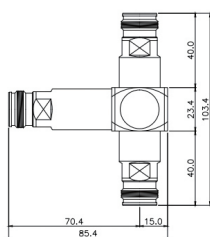
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

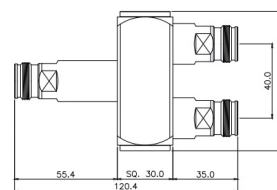
- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor



#### BLOCK DIAGRAM / LINE UP



2-Way Power Splitter [Type T], 4.3-10 Female, 500W  
3350-3900MHz [1:1 Split Ratio]



2-Way Power Splitter [Type U], 4.3-10 Female, 500W  
3350-3900MHz [1:1 Split Ratio]

#### SPECIFICATIONS

Impedance	50Ω
Frequency Range Up To	3350~3900MHz
VSWR	1.2:1 Max.
PIMD	-155dBc @ 3th (CW 20W 2tone)
Connector Type	4.3-10 (F)
Input Power Rating Per Port	500W Max.
Operating Temperature	-40 °C ~ +70 °C
Waterproof (Protection Class)	IP67
Humidity	95%
Port	3 Port

# RF Connectivity - Wireless Infrastructure

## Passive Components

### Junction, 3-Way Power Splitters 819-3900MHz, N Female

819~960MHz, 1710~1870MHz, 1885~2170MHz,  
2300~2400MHz, 2500~2690MHz, 3350~3900MHz

UBCS' power splitter evenly distributes signal received in one input unit to two, three or four output units. Designed for the needs of South Korea's telecommunications industry.

#### FEATURES / BENEFITS

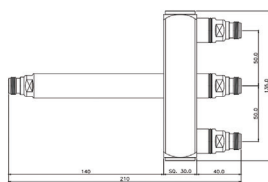
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

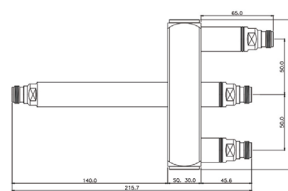
- 1 5G Networks
- 2 Wireless Infrastructure
- 3 Antenna Systems
- 4 In-building Systems (DAS)
- 5 Indoor



#### BLOCK DIAGRAM / LINE UP



3-Way Power Splitter [Type U], N Female, 300W 3350-3900MHz [1:1:1 Split Ratio]



3-Way Power Splitter [Type U], N Female, 300W 3350-3900MHz [2:1:1 Split Ratio]

#### SPECIFICATIONS

Impedance	50Ω
Frequency Range Up To	819~960MHz, 1710~1870MHz, 1885~2170MHz, 2300~2400MHz, 2500~2690MHz, 3350~3900MHz
VSWR	1.2:1 Max.
PIMD	-155dBc @ 3th (CW 20W 2tone)
Connector Type	N Type (F)
Input Power Rating Per Port	300W Max.
Operating Temperature	-40 °C ~ +70 °C
Waterproof (Protection Class)	IP67
Humidity	95%
Port	4 Port



# RF Connectivity - Wireless Infrastructure

## Passive Components

### Junction, 3-Way Power Splitters 3350~3900MHz, 4.3-10 Female

#### 3350~3900MHz

UBCS' power splitter evenly distributes signal received in one input unit to two, three or four output units. Designed for the needs of South Korea's 5G telecommunications industry.

#### FEATURES / BENEFITS

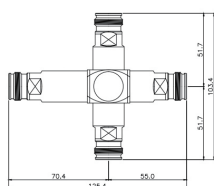
- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Suitable for in-building (DAS) applications
- 4 Very low insertion loss

#### APPLICATIONS

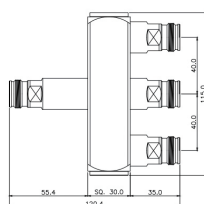
- 1 5G Networks
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- 3 Antenna Systems
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- 5 Indoor



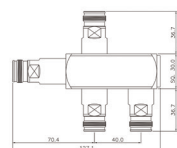
#### BLOCK DIAGRAM / LINE UP



3-Way Power Splitter [Type T],  
4.3-10 Female, 500W 3350-3900MHz  
[1:1:1 Split Ratio]



3-Way Power Splitter [Type U],  
4.3-10 Female, 500W 3350-3900MHz  
[1:1:1 Split Ratio]



3-Way Power Splitter [Type F],  
4.3-10 Female, 500W 3350-3900MHz  
[1:1:1 Split Ratio]

#### SPECIFICATIONS

Impedance	50Ω
Frequency Range Up To	3350~3900MHz
VSWR	1.2:1 Max.
PIMD	-155dBc @ 3th (CW 20W 2tone)
Connector Type	4.3-10 (F)
Input Power Rating Per Port	500W Max.
Operating Temperature	-40 °C ~ +70 °C
Waterproof (Protection Class)	IP67
Humidity	95%
Port	4 Port



# Test & Measurement

UBCS supports our customers with the most high performing measurement solutions for RF tests.

Our solutions can be designed and customized for our customers' current needs.



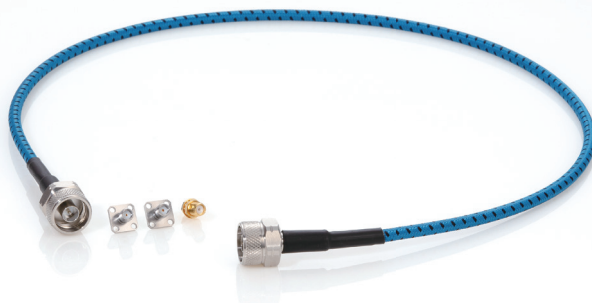


# RF Connectors & Cable Assemblies

## DC ~ 40GHz

With a maximum frequency of 40 GHz, UBCS' Connectors & Cable Assemblies offer low loss, low VSWR and outstanding performance. Also, they are highly durable.

They can be customized and produced to meet individual requirements. We provide the most high performing measurement and testing solutions for our customers.



### FEATURES / BENEFITS

- 1 Robust mechanical design
- 2 Outstanding system characteristics
- 3 Low loss and high frequency

### APPLICATIONS

- 1 Test & Measurement

\* Cable Assemblies : Custom Made

CONNECTOR	FREQUENCY RANGE (GHz)						
	3 GHz	7.5 GHz	11 GHz	14 GHz	18 GHz	26.5 GHz	40 GHz
7-16 DIN							
4.3-10							
N							
SMA							
3.5mm							
2.92mm							

## DC ~ 6GHz

### SPECIFICATIONS

Connector	SMA	3.5mm	2.92mm	N TYPE	7-16 DIN	4.3-10
Impedance	50Ω					
VSWR (Max.)	1.2:1					
Insertion loss	0.06 √F	0.05 √F	0.03 √F	0.05 √F	0.05 √F	0.05 √F
Insulation resistance	DC500V 5,000MΩ Min.					
Contact resistance	Outer conductor : 2mΩ Max.	Outer conductor : 2mΩ Max.	Outer conductor : 2mΩ Max.	Outer conductor : 1mΩ Max.	Outer conductor : 1.5mΩ Max.	Outer conductor : 1.5mΩ Max.
	Inner conductor : 3mΩ Max.	Inner conductor : 3mΩ Max.	Inner conductor : 3mΩ Max.	Inner conductor : 1mΩ Max.	Inner conductor : 0.4mΩ Max.	Inner conductor : 1.0mΩ Max.
Durability	500matings MIL-C-39012					100matings
Coupling nut retention force	65Kgf Min	65Kgf Min	65Kgf Min	450N	1000N	450N
Recommended coupling nut torque	12Kgf.Cm (Proof Torque : 16.5Kgf. Cm)	12Kgf.Cm (Proof Torque : 16.5Kgf. Cm)	12Kgf.Cm (Proof Torque : 16.5Kgf. Cm)	70Kgf.Cm (Proof Torque : 16.5Kgf. Cm)	200Kgf.Cm (Proof Torque : 354Kgf. Cm)	200Kgf.Cm (Proof Torque : 354Kgf. Cm)
Center contact retention force	Engage : 1.35Kgf. Cm Max, Disengage : 0.03Kgf.Cm Min	Engage : 1.35Kgf. Cm Max, Disengage : 0.03Kgf.Cm Min	Engage : 1.35Kgf. Cm Max, Disengage : 0.03Kgf.Cm Min	Engage : 0.9Kgf. Cm Max, Disengage : 0.06Kgf.Cm Min	Engage : 3.5Kgf. Cm Max, Disengage : 0.4Kgf.Cm Min	Engage : 0.9Kgf. Cm Max, Disengage : 0.8Kgf.Cm Min



## DC ~ 18GHz


SPECIFICATIONS				
Connector	SMA	3.5mm	2.92mm	N TYPE
Impedance	50Ω			
VSWR (Max.)	1.2:1			
Insertion loss	0.06 √F	0.05 √F	0.03 √F	0.05 √F
Insulation resistance	DC500V 5,000MΩ Min.			
Contact resistance	Outer conductor : 2mΩ Max.	Outer conductor : 2mΩ Max.	Outer conductor : 2mΩ Max.	Outer conductor : 1mΩ Max.
	Inner conductor : 3mΩ Max.	Inner conductor : 3mΩ Max.	Inner conductor : 3mΩ Max.	Inner conductor : 1mΩ Max.
Durability	500matings MIL-C-39012			
Coupling nut retention force	65Kgf Min	65Kgf Min	65Kgf Min	450N
Recommended coupling nut torque	12Kgf.Cm (Proof Torque : 16.5Kgf.Cm)	12Kgf.Cm (Proof Torque : 16.5Kgf.Cm)	12Kgf.Cm (Proof Torque : 16.5Kgf.Cm)	70Kgf.Cm (Proof Torque : 16.5Kgf.Cm)
Center contact retention force	Engage : 1.35Kgf.Cm Max , Disengage : 0.03Kgf.Cm Min	Engage : 1.35Kgf.Cm Max , Disengage : 0.03Kgf.Cm Min	Engage : 1.35Kgf.Cm Max , Disengage : 0.03Kgf.Cm Min	Engage : 0.9Kgf.Cm Max , Disengage : 0.06Kgf.Cm Min

## DC ~ 28GHz

SPECIFICATIONS		
Connector	3.5mm	2.92mm
Impedance	50Ω	
VSWR (Max.)	1.2:1	
Insertion loss	0.05 √F	0.03 √F
Insulation resistance	DC500V 5,000MΩ Min.	
Contact resistance	Outer conductor : 2mΩ Max.	Outer conductor : 2mΩ Max.
	Inner conductor : 3mΩ Max.	Inner conductor : 3mΩ Max.
Durability	500matings MIL-C-39012	
Coupling nut retention force	65Kgf Min	65Kgf Min
Recommended coupling nut torque	12Kgf.Cm (Proof Torque : 16.5Kgf.Cm)	12Kgf.Cm (Proof Torque : 16.5Kgf.Cm)
Center contact retention force	Engage : 1.35Kgf.Cm Max , Disengage : 0.03Kgf.Cm Min	Engage : 1.35Kgf.Cm Max , Disengage : 0.03Kgf.Cm Min

## DC ~ 40GHz

SPECIFICATIONS	
Connector	2.92mm
Impedance	50Ω
VSWR (Max.)	1.2:1
Insertion loss	0.03 √F
Insulation resistance	DC500V 5,000MΩ Min.
Contact resistance	Outer conductor : 2mΩ Max.
	Inner conductor : 3mΩ Max.
Durability	500matings MIL-C-39012
Coupling nut retention force	65Kgf Min
Recommended coupling nut torque	12Kgf.Cm (Proof Torque : 16.5Kgf.Cm)
Center contact retention force	Engage : 1.35Kgf.Cm Max , Disengage : 0.03Kgf.Cm Min



We're building the  
end-to-end solutions  
between people,  
places and networks



**UBCS CO., LTD.**  
Connecting Systems

**Address** 96, Chungjang-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, Republic of Korea

**H.** [www.ubcs.co.kr](http://www.ubcs.co.kr) **E.** [sales@ubcs.co.kr](mailto:sales@ubcs.co.kr)