

RF패시브 및 안테나 제품 소개

RF 패시브 제품

| | |
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1-1. Power Divider 옥내용 2-way 700 ~ 2700MHz

3

General Specifications

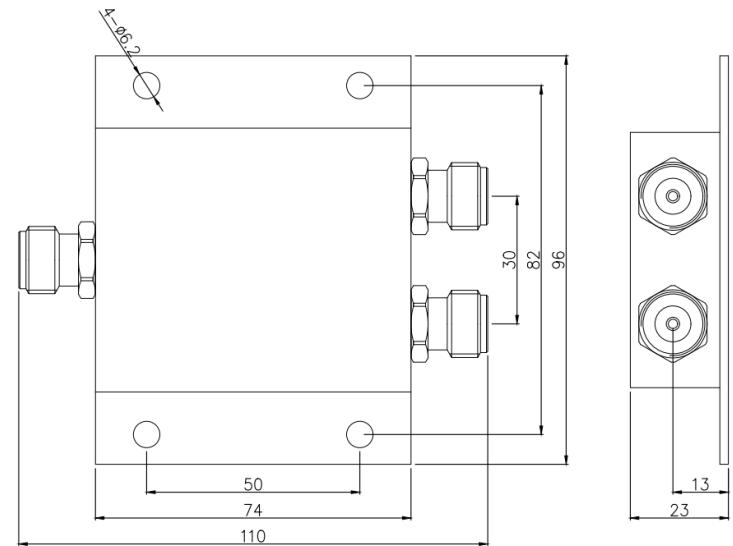
| | |
|-------------|---------------|
| Device Type | Divider |
| Interface | N-Female |
| Part Number | DIV-2-NF-0727 |

Electrical Specifications

| | |
|--|----------------------------|
| Operating Frequency Bands (MHz) | 700 ~ 2700 |
| Impedance (s11, s22), (Max) | 50Ω |
| VSWR (s11, s22), (Max) | 1.25 : 1 |
| Insertion Loss (Max) | 3.4dB |
| Isolation (Max) | 20dB |
| Distribution Ratio | 1 : 1 |
| Input Power, as divider (Max) | 20W |
| Output Power, as combiner (Max per port) | 1W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|-------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 96x74x23 (exclude connectors) |
| Weight | 300g |



1-2. Power Divider 옥내용 3-way 700 ~ 2700MHz

4

General Specifications

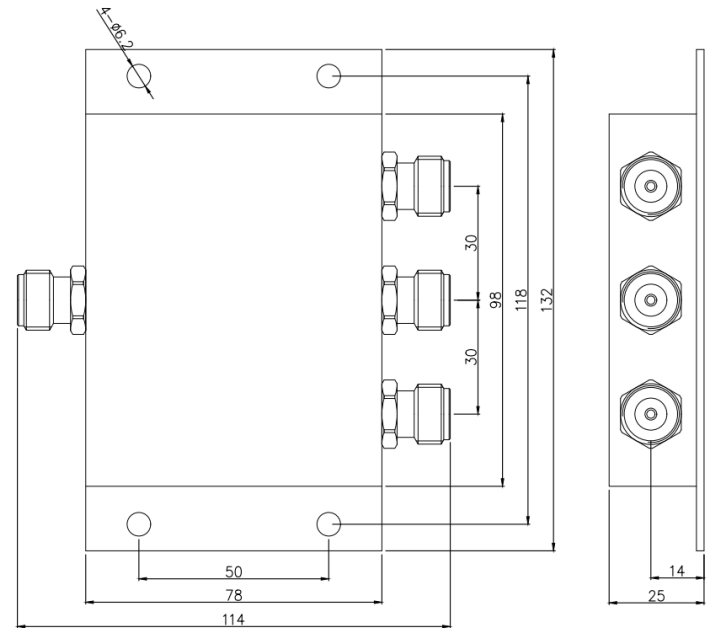
| | |
|-------------|---------------|
| Device Type | Divider |
| Interface | N-Female |
| Part Number | DIV-3-NF-0727 |

Electrical Specifications

| | |
|--|----------------------------|
| Operating Frequency Bands (MHz) | 700 ~ 2700 |
| Impedance (s11, s22), (Max) | 50Ω |
| VSWR (s11, s22), (Max) | 1.25 : 1 |
| Insertion Loss (Max) | 5.4dB |
| Isolation (Max) | 20dB |
| Distribution Ratio | 1 : 1 : 1 |
| Input Power, as divider (Max) | 20W |
| Output Power, as combiner (Max per port) | 1W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|--------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 132*78*25 (exclude connectors) |
| Weight | 540g |



1-3. Power Divider 옥내용 4-way 700 ~ 2700MHz

5

General Specifications

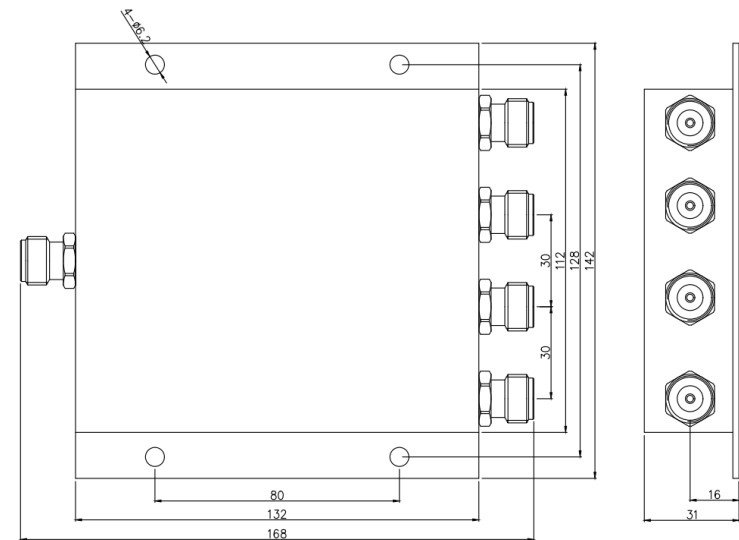
| | |
|-------------|---------------|
| Device Type | Divider |
| Interface | N-Female |
| Part Number | DIV-4-NF-0727 |

Electrical Specifications

| | |
|--|----------------------------|
| Operating Frequency Bands (MHz) | 700 ~ 2700 |
| Impedance (s11, s22), (Max) | 50Ω |
| VSWR (s11, s22), (Max) | 1.25 : 1 |
| Insertion Loss (Max) | 6.6dB |
| Isolation (Max) | 18dB |
| Distribution Ratio | 1 : 1 : 1 : 1 |
| Input Power, as divider (Max) | 20W |
| Output Power, as combiner (Max per port) | 1W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|---------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 142*132*31 (exclude connectors) |
| Weight | 700g |



2-1. Power Divider 옥내용 2-way 700 ~ 6000MHz

6

General Specifications

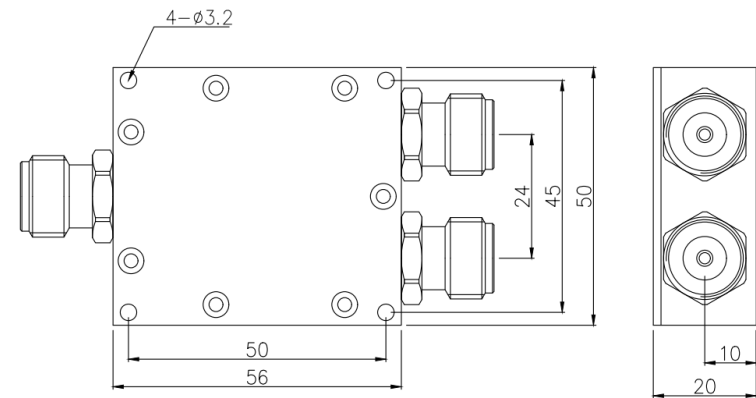
| | |
|-------------|---------------|
| Device Type | Divider |
| Interface | N-Female |
| Part Number | DIV-2-NF-0760 |

Electrical Specifications

| | |
|--|----------------------------|
| Operating Frequency Bands (MHz) | 700 ~ 6000 |
| Impedance (s11, s22), (Max) | 50Ω |
| VSWR (s11, s22), (Max) | Input ≤1.5 , Output ≤1.4 |
| Insertion Loss (Max) | 4.2dB |
| Isolation (Max) | 18dB |
| Distribution Ratio | 1 : 1 |
| Input Power, as divider (Max) | 20W |
| Output Power, as combiner (Max per port) | 1W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|-------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 50*56*20 (exclude connectors) |
| Weight | 400g |



2-2. Power Divider 옥내용 3-way 700 ~ 6000MHz

7

General Specifications

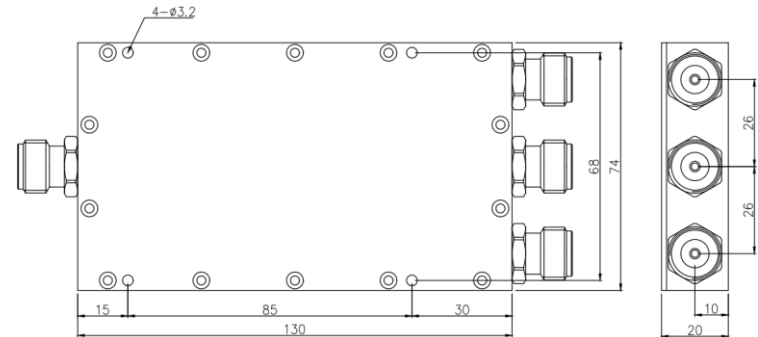
| | |
|-------------|---------------|
| Device Type | Divider |
| Interface | N-Female |
| Part Number | DIV-3-NF-0760 |

Electrical Specifications

| | |
|--|----------------------------|
| Operating Frequency Bands (MHz) | 700 ~ 6000 |
| Impedance (s11, s22), (Max) | 50Ω |
| VSWR (s11, s22), (Max) | Input ≤1.5 , Output ≤1.4 |
| Insertion Loss (Max) | 7.6dB |
| Isolation (Max) | 18dB |
| Distribution Ratio | 1 : 1 : 1 |
| Input Power, as divider (Max) | 20W |
| Output Power, as combiner (Max per port) | 1W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|--------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 74*130*20 (exclude connectors) |
| Weight | 700g |



2-3. Power Divider 옥내용 4-way 700 ~ 6000MHz

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General Specifications

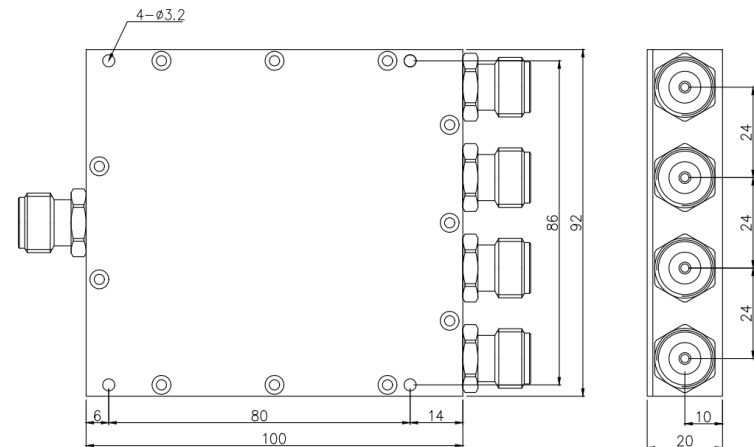
| | |
|-------------|------------------|
| Device Type | Divider |
| Interface | N-Female |
| Part Number | DIV-4-10-NF-0760 |

Electrical Specifications

| | |
|--|----------------------------|
| Operating Frequency Bands (MHz) | 700 ~ 6000 |
| Impedance (s11, s22), (Max) | 50Ω |
| VSWR (s11, s22), (Max) | Input ≤1.5 , Output ≤1.4 |
| Insertion Loss (Max) | 7.8dB |
| Isolation (Max) | 18dB |
| Distribution Ratio | 1 : 1 : 1 : 1 |
| Input Power, as divider (Max) | 20W |
| Output Power, as combiner (Max per port) | 1W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|--------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 92*100*20 (exclude connectors) |
| Weight | 950g |



3. 2*2 Hybrid Combiner 718 ~ 4600MHz

General Specifications

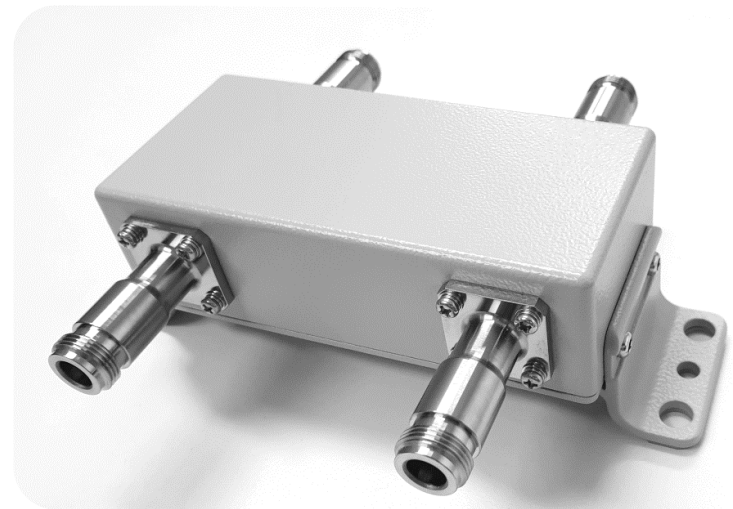
| | |
|-------------|----------------|
| Device Type | Combiner |
| Interface | N-Female |
| Part Number | COM-22-NF-0746 |

Electrical Specifications

| | |
|----------------------------------|------------------------------------|
| Operating Frequency Bands (MHz) | 718 ~ 4600 |
| Insertion Loss | $3 \pm 0.7\text{dB}$ |
| Return Loss | 19.1dB (Min) |
| In/Out Isolation | 20dB (Min) |
| Impedance | 50Ω |
| PIMD (43dBm*2) | -155 dBc (Min), -158 dBc (Typical) |
| Input Power | 150Watt/Total (Average Power) |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|-----------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IP67 |
| Dimension (mm) | 177*60.1*56.9 (including bracket) |
| Weight | < 1.2kg |



4. 4*4 Hybrid Coupler 600 ~ 6000MHz

General Specifications

| | |
|-------------|------------------|
| Device Type | Combiner |
| Interface | 4.3-10-Female |
| Part Number | COM-44-4310-0660 |

Electrical Specifications

| | |
|----------------------------------|--------------------------------------|
| Operating Frequency Bands (MHz) | 600 ~ 6000 |
| Impedance | 50Ω |
| VSWR | ≤1.35 (600~2700) , ≤1.40 (2700~6000) |
| Insertion Loss (Max) | 6.2dB±2.0 |
| Isolation | ≥ 20dB |
| PIMD (43dBm*2) | -155 dBc (Min) |
| Average Power | 200W |
| Operating Temperature / Humidity | -35°C to +75°C / up to 95% |

Mechanical Specifications

| | |
|--------------------------------|--------------------------------|
| Inner Contact Plating | Silver Plated |
| Interface | Alloy Plated |
| Ingress Protection Test Method | IEC 60529:2001, IP65 |
| Dimension (mm) | 225*78*59 (exclude connectors) |
| Weight | 1.8kg |



5. 5G Modular POI 698~6000MHz

11

Key Features

- Future Proof to New Spectrum
- Modular Slots
- Expandable with more Ports
- 19" Rack Type or Stand-alone Type

Expandable with more Ports

13 Input Ports

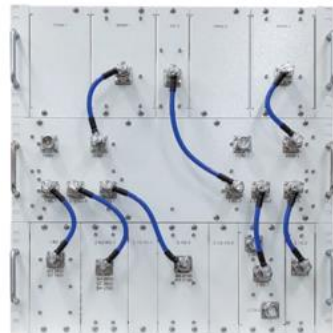


20 Input Ports



19" Rack Type or Stand-alone Type

Rack Type



Stand-alone Type



6. 5G Add-on POI 698~6000MHz

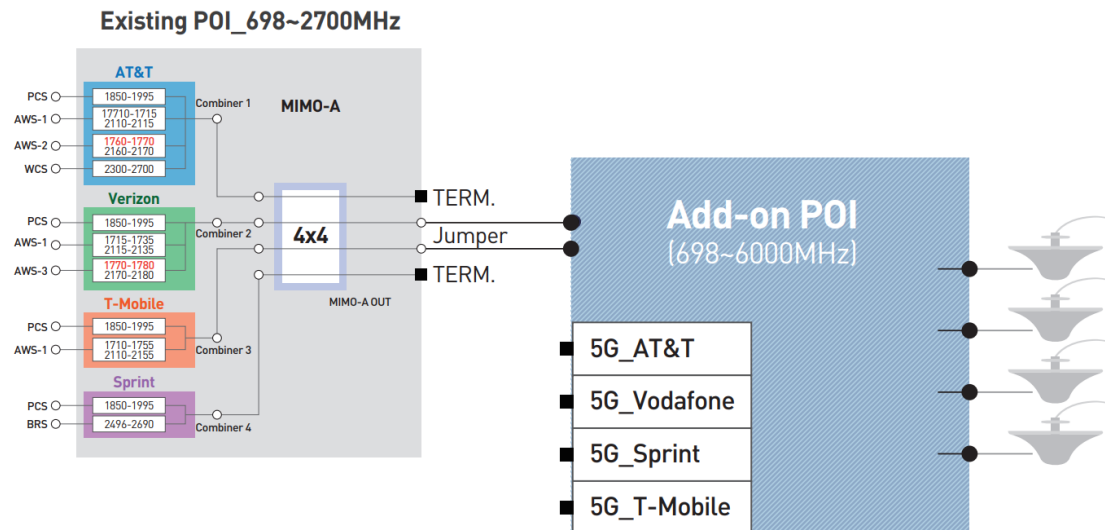
12

Advantages

- Utilizing existing antenna feeder network (cables)
- Less new 5G antenna feeder network installation
- Less cost – Labor & Materials



Configuration



안테나 제품

| | | | |
|--|----|--|----|
| 1. Flat Antenna | 14 | 10. Multi-Band Yagi Antenna | 26 |
| 2. Flat MIMO Antenna | 15 | 11. Multi-Band MIMO Yagi Antenna | 29 |
| 3. Multi-Band Omni Antenna | 16 | 12. Single Band Dual Polarization Horizontal 63° | 30 |
| 4. Multi-Band Omni(Pole) Antenna | 18 | 13. Quad Band Dual Polarization Horizontal 63° | 31 |
| 5. Multi-Band Patch Antenna | 19 | 14. Tilt Max Sector Dual Polarization Horizontal 63° | 33 |
| 6. Quad-Band Patch Antenna | 21 | 15. Tilt Max Cylindrical Dual Polarization Horizontal 65° | 34 |
| 7. Multi-Band MIMO Patch Antenna | 22 | 16. Cylinder Type Sector Antenna | 35 |
| 8. Single-Band MIMO Omni Antenna | 24 | 17. 4G Patch Antenna | 39 |
| 9. Multi-Band MIMO Omni Antenna | 25 | 18. 4G 4T4R Patch Antenna | 40 |

1. Flat Antenna

819~960, 1710~2690MHz / 3, 3.5dBi

14

General Specifications

| | |
|----------------|-------------------|
| Device Type | RF Antenna |
| Connector Type | N-Female |
| Part Number | Omni-3.5dBi _Flat |

Electrical Specifications

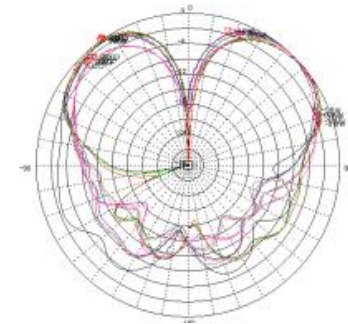
| | |
|---------------------------------|-------------------------|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | 3 ~ 3.5 |
| VSWR | 1.6 : 1 |

| | |
|------------|---|
| Beam Width | Horizontal 360° Vertical $\geq 30^\circ \sim 90^\circ$ |
|------------|---|

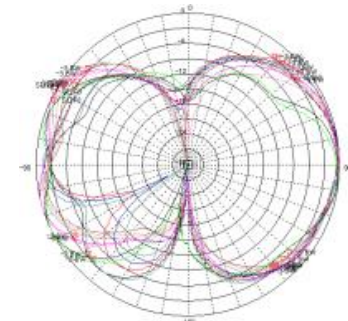
| | |
|-------------------|---|
| Polarization | - |
| Isolation | - |
| IMD (3rd) | $\leq -150\text{dBc} @ 2 \times 40\text{dBm}$ |
| Input Power (Max) | $\leq 20 \text{ W}$ |
| Impedance | 50 Ω |

Mechanical Specifications

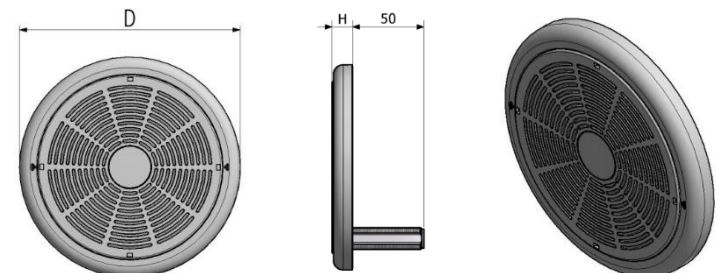
| | |
|----------------------------------|---|
| Radom Dimension (D x H) | $\varnothing 147 \times 15 \text{ mm}$ |
| Weight (exclude bracket) | $\leq 0.2 \text{ kg}$ |
| Radom Material (color) | ABS (White) |
| Operating Temperature / Humidity | $-40^\circ \text{C} \sim 70^\circ \text{C}$ |



Vertical Pattern
(High Band)



Vertical Pattern
(Low Band)



2. Flat MIMO Antenna

819~960, 1710~2690MHz / 3, 3.5dBi

15

General Specifications

| | |
|----------------|-----------------------|
| Device Type | RF Antenna |
| Connector Type | N-Female x 2 |
| Part Number | Omni-3.5dBi_Flat_MIMO |

Electrical Specifications

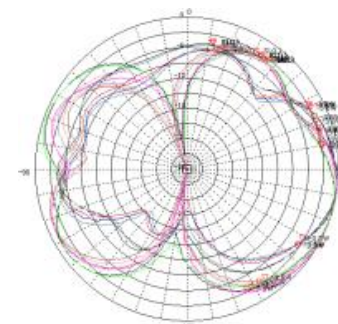
| | |
|---------------------------------|-------------------------|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | 3 ~ 3.5 |
| VSWR | 1.8 : 1 |

| | |
|------------|---|
| Beam Width | Horizontal 360° Vertical $\geq 30^\circ \sim 90^\circ$ |
|------------|---|

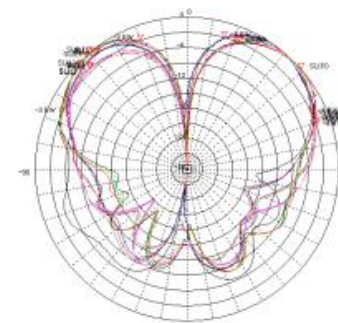
| | |
|-------------------|---|
| Polarization | - |
| Isolation | $\geq 20 \text{ dB} \sim \geq 25 \text{ dB}$ |
| IMD (3rd) | $\leq -150\text{dBc} @ 2 \times 40\text{dBm}$ |
| Input Power (Max) | $\leq 20 \text{ W}$ |
| Impedance | 50 Ω |

Mechanical Specifications

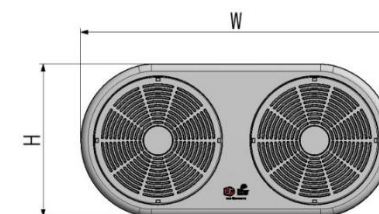
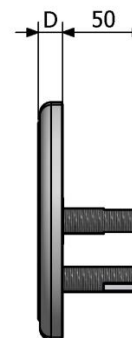
| | |
|----------------------------------|-----------------------|
| Radom Dimension (W x D) | 299 x 15 mm |
| Weight (exclude bracket) | $\leq 0.5 \text{ kg}$ |
| Radom Material (color) | ABS (White) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |



Vertical Pattern
(High Band)



Vertical Pattern
(Low Band)



3-1. Multi-Band Omni Antenna

819~960, 1710~2690, 3400~3700MHz / 2, 3, 4dBi

16

General Specifications

| | |
|----------------|---------------|
| Device Type | RF Antenna |
| Connector Type | N-Female x 1 |
| Part Number | CPWWM-WDT-234 |

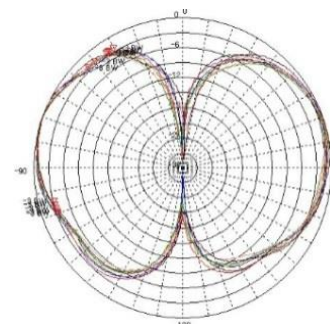
Electrical Specifications

| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 / 3400 ~ 3700 |
| Gain (dBi) | 2 ~ 4 |
| VSWR | 1.7 : 1 |
| Beam Width | Horizontal 360° Vertical 30° ~ 140° |

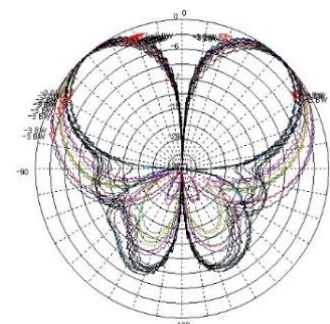
| | |
|-------------------|---------------------------------|
| Polarization | - |
| Isolation | - |
| IMD (3rd) | $\leq -140\text{dBc}$ @ 2x40dBm |
| Input Power (Max) | $\leq 10\text{ W}$ |
| Impedance | 50 Ω |

Mechanical Specifications

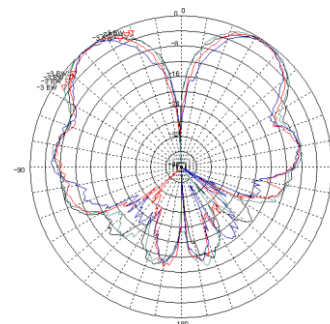
| | |
|----------------------------------|----------------------------|
| Radom Dimension (D x H) | 180 \varnothing x 109 mm |
| Weight (exclude bracket) | $\leq 0.5\text{ kg}$ |
| Radom Material (color) | ABS (White) |
| Operating Temperature / Humidity | -30 °C ~ 60 °C |



Vertical Pattern
(Low Band)



Vertical Pattern
(High Band)



Vertical Pattern
(3.5 Band)



3-2. Multi-Band Omni Antenna

819~960, 1710~2690MHz / 2, 3dBi

17

General Specifications

| | |
|----------------|--------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) |
| Part Number | CPWW-IDT-23 |

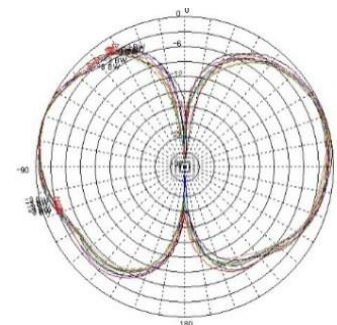
Electrical Specifications

| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | 2 ~ 3 |
| VSWR | 1.8 : 1 |
| Beam Width | Horizontal 360° Vertical $\geq 30^\circ \sim 90^\circ$ |

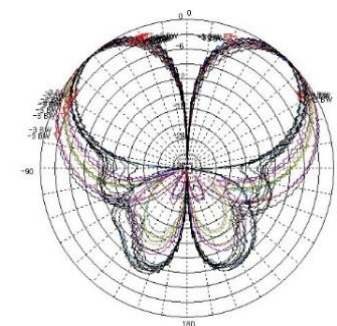
| | |
|-------------------|---|
| Polarization | - |
| Isolation | - |
| IMD (3rd) | $\leq -140\text{dBc} @ 2 \times 40\text{dBm}$ |
| Input Power (Max) | $\leq 10 \text{ W}$ |
| Impedance | 50 Ω |

Mechanical Specifications

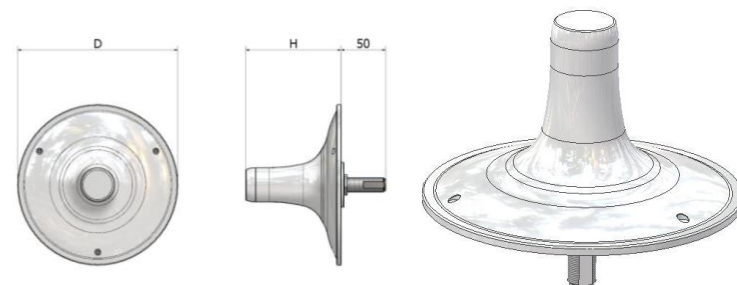
| | |
|----------------------------------|---|
| Radom Dimension (D x H) | $\varnothing 180 \times 110 \text{ mm}$ |
| Weight (exclude bracket) | $\leq 0.4 \text{ kg}$ |
| Radom Material (color) | ASA (Gray) |
| Operating Temperature / Humidity | $-30^\circ \text{C} \sim 60^\circ \text{C}$ |



Vertical Pattern
(High Band)



Vertical Pattern
(Low Band)



4. Multi-Band Omni(Pole) Antenna

824~894, 1710~2170MHz / 2dBi, 2dBi

18

General Specifications

| | |
|----------------|--------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) |
| Part Number | CP-ST-22 |

Electrical Specifications

| | |
|---------------------------------|-------------------------|
| Operating Frequency Bands (MHz) | 824 ~ 894 / 1710 ~ 2170 |
| Gain (dBi) | 2 |
| VSWR | 1 : 1.8 |

| | |
|------------|---|
| Beam Width | Horizontal 360° Vertical $\geq 30^\circ$ |
|------------|---|

Polarization

-

Isolation

-

IMD (3rd)

$\leq -140\text{dBc}$ @ 2x40dBm

Input Power (Max)

$\leq 50\text{ W}$

Impedance

50 Ω

Mechanical Specifications

Radom Dimension (D x H)

$\varnothing 20 \times 215\text{ mm}$

Weight (exclude bracket)

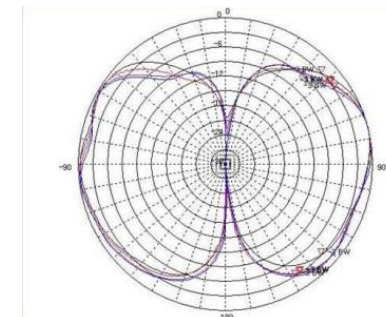
$\leq 0.2\text{ kg}$

Radom Material (color)

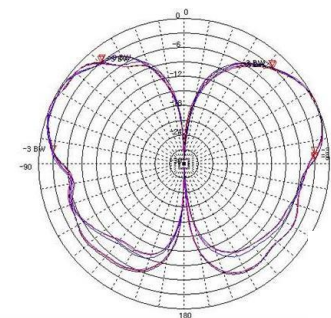
FRP (Gray)

Operating Temperature / Humidity

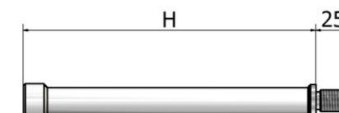
$-40^\circ\text{C} \sim 70^\circ\text{C}$



Vertical Pattern
(High Band)



Vertical Pattern
(Low Band)



5-1. Multi-Band Patch Antenna

819~960, 1710~2690, 3400~3700MHz / 4, 6, 7dBi

19

General Specifications

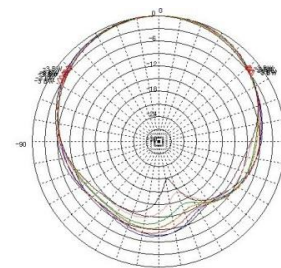
| | |
|----------------|---------------|
| Device Type | RF Antenna |
| Connector Type | N-Female X 1 |
| Part Number | CPWWM-CPB-467 |

Electrical Specifications

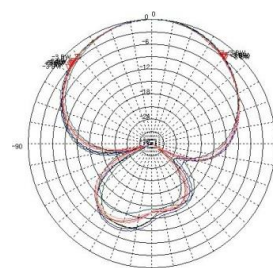
| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 / 3400 ~ 3700 |
| Gain (dBi) | 4 ~ 7 |
| VSWR | 1 : 1.8 |
| Beam Width | Horizontal 90° ~ 150° / 40° ~ 80° / 40° ~ 70° Vertical 30° ~ 95° / 40° ~ 80° / 20° ~ 50° |
| Polarization | V / V |
| Isolation | - |
| IMD (3rd) | ≤ -140dBc @ 2x37dBm |
| Input Power (Max) | ≤ 10 W |
| Impedance | 50 Ω |

Mechanical Specifications

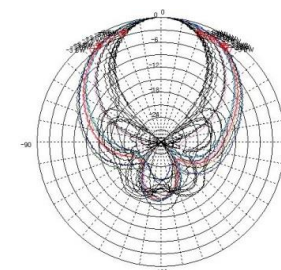
| | |
|----------------------------------|-------------------|
| Radom Dimension (W x D x H) | 111 x 45 x 145 mm |
| Weight (exclude bracket) | ≤ 0.4 kg |
| Radom Material (color) | ASA (Gray) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | ± 30° |



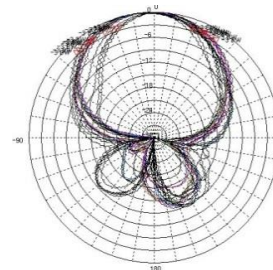
Horizontal Pattern
(Low Band)



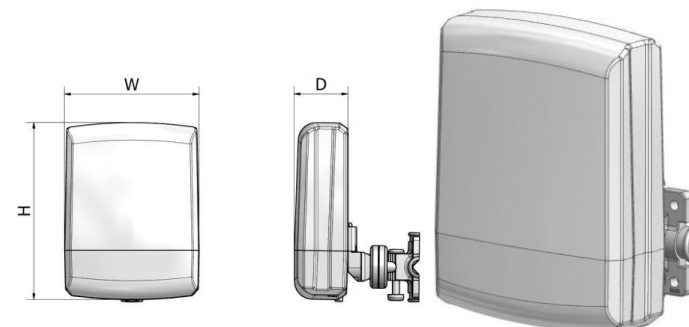
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



5-2. Multi-Band Patch Antenna

839~894, 1710~2120, 2520~2660, 3400~3700MHz / 5, 7, 7, 8dBi

20

General Specifications

| | |
|----------------|----------------|
| Device Type | RF Antenna |
| Connector Type | SMA-Female x 1 |
| Part Number | CPWWM-CPB-578 |

Electrical Specifications

| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2120 / 2520 ~ 2660 / 3400 ~ 3700 |
| Gain (dBi) | 5 ~ 8 |
| VSWR | 1 : 1.6 |

| | |
|------------|---|
| Beam Width | Horizontal 70° ~ 110° / 40° ~ 100° / 30° ~ 90° / 20° ~ 80° Vertical 60° ~ 100° / 40° ~ 90° / 20° ~ 80° / 20° ~ 80° |
|------------|---|

| | |
|--------------|-------|
| Polarization | V / V |
|--------------|-------|

| | |
|-----------|---|
| Isolation | - |
|-----------|---|

| | |
|-----------|---------------------|
| IMD (3rd) | ≤ -140dBc @ 2x37dBm |
|-----------|---------------------|

| | |
|-------------------|--------|
| Input Power (Max) | ≤ 10 W |
|-------------------|--------|

| | |
|-----------|------|
| Impedance | 50 Ω |
|-----------|------|

Mechanical Specifications

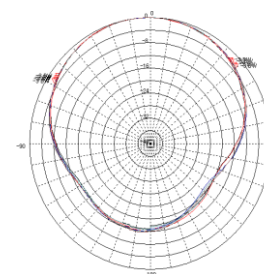
| | |
|-----------------------------|-------------------|
| Radom Dimension (W x D x H) | 172 x 182 x 54 mm |
|-----------------------------|-------------------|

| | |
|--------------------------|----------|
| Weight (exclude bracket) | ≤ 0.8 kg |
|--------------------------|----------|

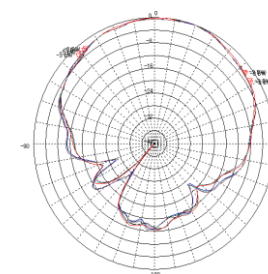
| | |
|------------------------|------------|
| Radom Material (color) | ASA (Gray) |
|------------------------|------------|

| | |
|----------------------------------|----------------|
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
|----------------------------------|----------------|

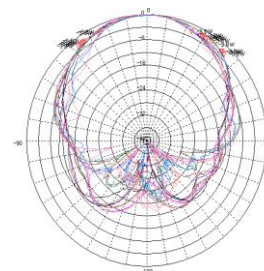
| | |
|-----------------|-------|
| Mechanical Tilt | ± 30° |
|-----------------|-------|



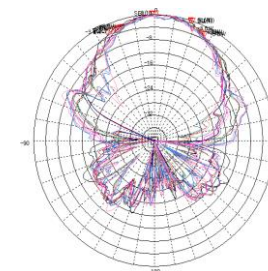
Horizontal Pattern
(Low Band)



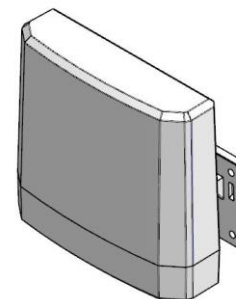
Vertical Pattern
(Low Band)



Horizontal Pattern
(2.6 High Band)



Vertical Pattern
(2.6 High Band)



6. Quad-Band Patch Antenna

839~894, 1710~2120, 2520~2660MHz / 6, 8, 8dBi

21

General Specifications

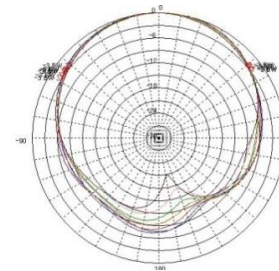
| | |
|----------------|----------------|
| Device Type | RF Antenna |
| Connector Type | SMA-J (Female) |
| Part Number | CPWW-CPB-688 |

Electrical Specifications

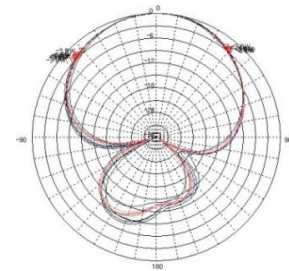
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 839 ~ 894 / 1710 ~ 2120 / 2520 ~ 2690 |
| Gain (dBi) | 6 ~ 8 |
| VSWR | 1 : 1.5 |
| Beam Width | Horizontal 70° ~ 90° / 40° ~ 80° / 40° ~ 80° Vertical 70° ~ 90° / 40° ~ 80° / 40° ~ 80° |
| Polarization | V / V / V |
| Isolation | - |
| F-B ratio (-180 ± 30°) | 13 dB ~ 15 dB |
| Input Power (Max) | ≤ 10 W |
| Impedance | 50 Ω |

Mechanical Specifications

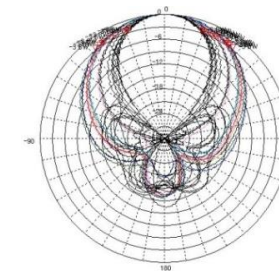
| | |
|----------------------------------|-------------------|
| Radom Dimension (W x D x H) | 169 x 44 x 155 mm |
| Weight (exclude bracket) | ≤ 0.4 kg |
| Radom Material (color) | ASA (Gray) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | ± 30° |



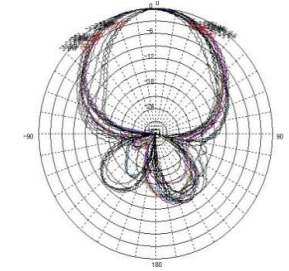
Horizontal Pattern
(Low Band)



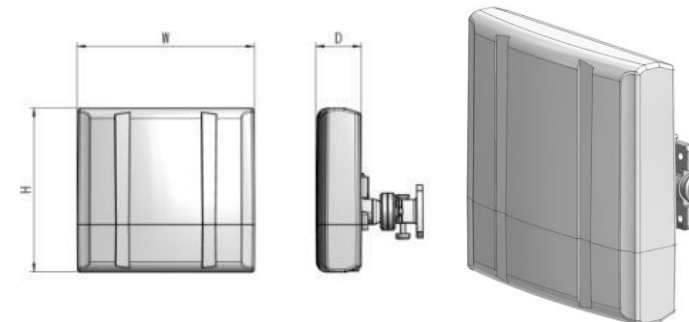
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



7-1. Multi-Band MIMO Patch Antenna

819~960, 1710~2690, 3400~3700MHz / 4, 6, 7dBi

22

General Specifications

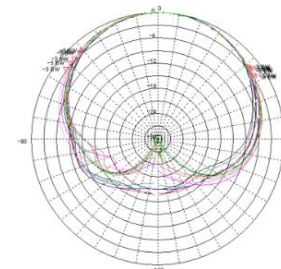
| | |
|----------------|----------------|
| Device Type | RF Antenna |
| Connector Type | N-Female x 2 |
| Part Number | CPWWM-CPBM-467 |

Electrical Specifications

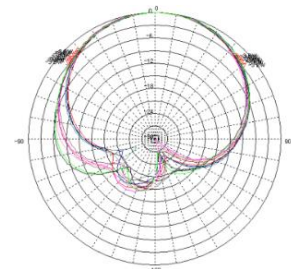
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 / 3400 ~ 3700 |
| Gain (dBi) | 4 ~ 7 |
| VSWR | 1 : 1.9 |
| Beam Width | Horizontal 90° ~ 180° / 40° ~ 90° / 20° ~ 60° Vertical 90° ~ 160° / 40° ~ 90° / 20° ~ 60° |
| Polarization | ±45° |
| Isolation | 17 dB |
| F-B ratio (-180 ± 30°) | 15 dB ~ 18 dB |
| Input Power (Max) | ≤ 10 W |
| Impedance | 50 Ω |

Mechanical Specifications

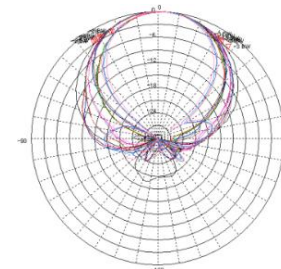
| | |
|----------------------------------|-------------------|
| Radom Dimension (W x D x H) | 198 x 198 x 68 mm |
| Weight (exclude bracket) | ≤ 2 kg |
| Radom Material (color) | ASA (White) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | ± 30° |



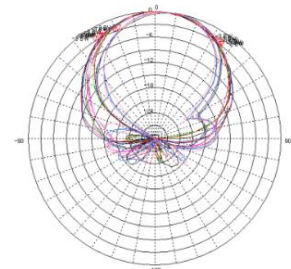
Horizontal Pattern
(Low Band)



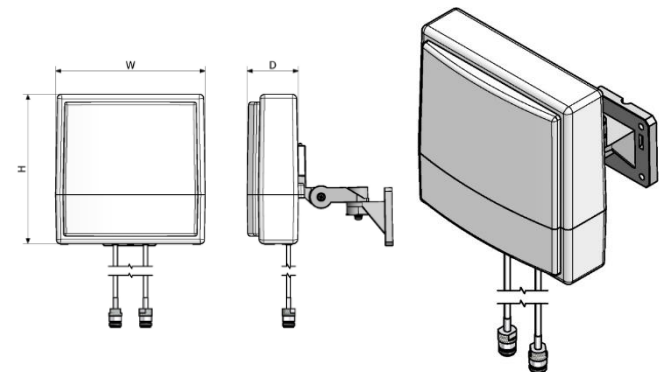
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



7-2. Multi-Band MIMO Patch Antenna

814~960, 1710~2170, 2300~2690MHz / 5, 8, 9dBi

23

General Specifications

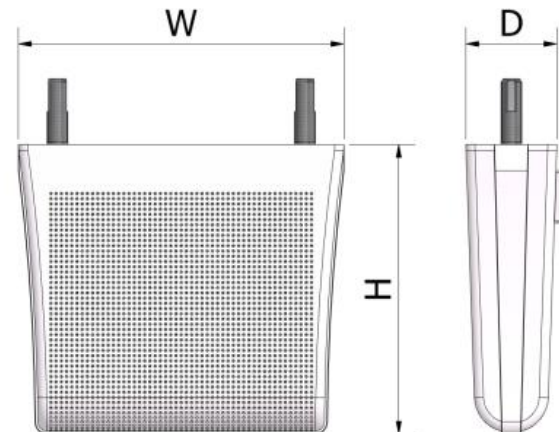
| | |
|----------------|-----------------|
| Device Type | RF Antenna |
| Connector Type | N-Female x 2 |
| Part Number | Patch-9dBi_MIMO |

Electrical Specifications

| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 814 ~ 960 / 1710 ~ 2170 / 2300 ~ 2690 |
| Gain (dBi) | 5 ~ 9 |
| VSWR | 1 : 1.9 |
| Beam Width | Horizontal 90° ~ 130° / 35° ~ 75° / 35° ~ 75° Vertical 90° ~ 130° / 35° ~ 75° / 35° ~ 75° |
| Polarization | ±45° |
| Isolation | - |
| IMD (3rd) | ≤ -140 dBc @ 2x37dBm |
| Input Power (Max) | ≤ 150 W |
| Impedance | 50 Ω |

Mechanical Specifications

| | |
|----------------------------------|-------------------|
| Radom Dimension (W x D x H) | 250 x 75 x 250 mm |
| Weight (exclude bracket) | ≤ 2 kg |
| Radom Material (color) | ABS (White) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |



8. Single-Band MIMO Omni Antenna

3600~4100MHz / 4dBi

24

General Specifications

| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) × 2 |
| Part Number | O-0T04XT-0004-K |

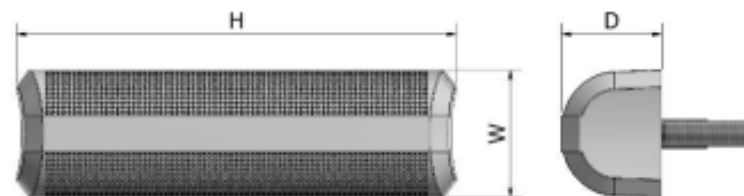
Electrical Specifications

| | |
|---------------------------------|---------------------------------|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | ≥ 4 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 360° Vertical 10° |
| Polarization | V / V |
| F-B Ratio | - |

| | |
|-------------------|---------|
| Isolation | ≥ 15 dB |
| Input Power (Max) | 50 W |
| Impedance | 50 Ω |

Mechanical Specifications

| | |
|----------------------------------|------------------|
| Radom Dimension (W x D x H) | 72 x 58 x 246 mm |
| Weight (exclude bracket) | ≤ 1.5 kg |
| Radom Material (color) | White / Gray |
| Operating Temperature / Humidity | -30 °C ~ 60 °C |



9. Multi-Band MIMO Omni Antenna

819~960, 1710~2690, 3400~3700MHz / 3, 3, 4dBi

25

General Specifications

| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) × 2 |
| Part Number | CPWWM-MDT-334 |

Electrical Specifications

| | |
|---------------------------------|---------------------------------------|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 / 3400 ~ 3700 |
| Gain (dBi) | 3 ~ 4 |
| VSWR | 1.9 : 1 |

| | |
|------------|--------------------------------------|
| Beam Width | Horizontal 360° Vertical 20° ~ 8° |
|------------|--------------------------------------|

| | |
|--------------|---|
| Polarization | - |
|--------------|---|

| | |
|-----------|---------|
| Isolation | ≥ 15 dB |
|-----------|---------|

| | |
|-----------|---------------------|
| IMD (3rd) | ≤ -140dBc @ 2x40dBm |
|-----------|---------------------|

| | |
|-------------------|--------|
| Input Power (Max) | ≤ 50 W |
|-------------------|--------|

| | |
|-----------|------|
| Impedance | 50 Ω |
|-----------|------|

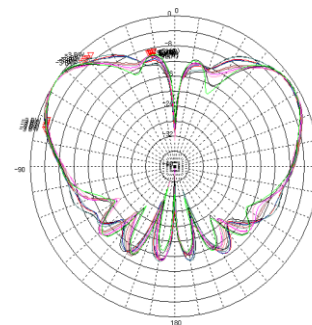
Mechanical Specifications

| | |
|-----------------------------|------------------|
| Radom Dimension (W x D x H) | 73 x 57 x 246 mm |
|-----------------------------|------------------|

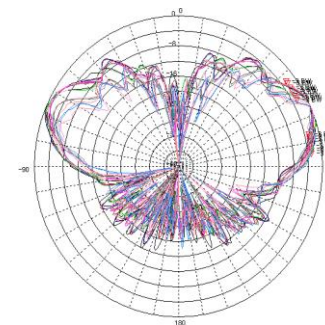
| | |
|--------------------------|----------|
| Weight (exclude bracket) | ≤ 1.5 kg |
|--------------------------|----------|

| | |
|------------------------|-------------|
| Radom Material (color) | ABS (White) |
|------------------------|-------------|

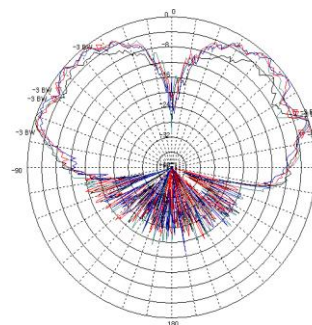
| | |
|----------------------------------|----------------|
| Operating Temperature / Humidity | -30 °C ~ 60 °C |
|----------------------------------|----------------|



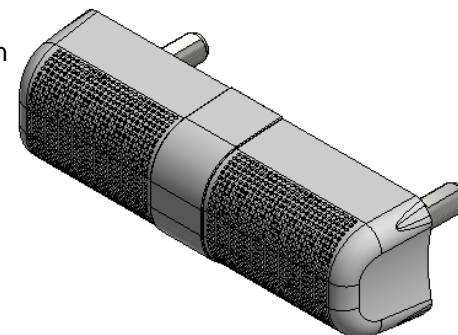
Vertical Pattern
(Low Band)



Vertical Pattern
(High Band)



Vertical Pattern
(3.5 Band)



10-1. Multi-Band Yagi Antenna

819~960, 1710~2690, 3400~3700MHz / 5, 11, 12dBi

26

General Specifications

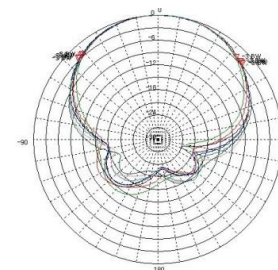
| | |
|----------------|--------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) |
| Part Number | CPWWM-YG-512 |

Electrical Specifications

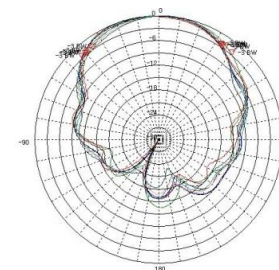
| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 / 3400 ~ 3700 |
| Gain (dBi) | 5 ~ 12 |
| VSWR | 1 : 1.5 |
| Beam Width | Horizontal 70° ~ 130° / 35° ~ 60° / 30° ~ 70° Vertical 50° ~ 90° / 30° ~ 55° / 30° ~ 60° |
| Polarization | V / V |
| IMD (3rd) | ≤ -140dBc @ 2x40dBm |
| F-B ratio (-180 ± 30°) | 10 dB ~ 15 dB |
| Input Power (Max) | ≤ 100 W |
| Impedance | 50 Ω |

Mechanical Specifications

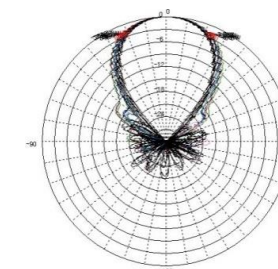
| | |
|----------------------------------|------------------------------------|
| Radom Dimension (W x D x H) | 40 x 620 x 100 mm |
| Weight (exclude bracket) | ≤ 0.9 kg |
| Radom Material (color) | ASA (White) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | Up/Down ± 30° / Right/Left 0°~ 30° |



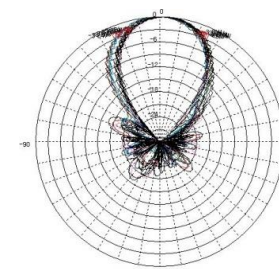
Horizontal Pattern
(Low Band)



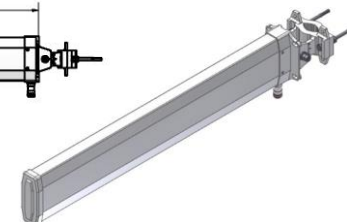
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



10-2. Multi-Band Yagi Antenna

819~960, 1710~2690MHz / 8, 14dBi

27

General Specifications

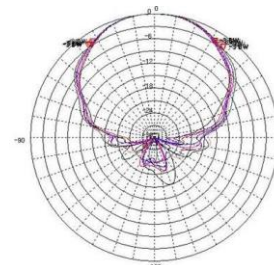
| | |
|----------------|------------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) |
| Part Number | CPWW-YG-814 (Variable) |

Electrical Specifications

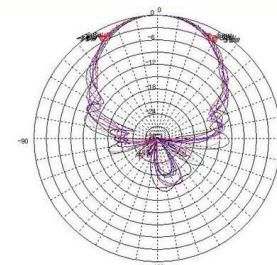
| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | 8 ~ 14 |
| VSWR | 1 : 1.6 |
| Beam Width | Horizontal 60° ~ 130° / 25° ~ 60° Vertical 40° ~ 90° / 20° ~ 55° |
| Polarization | Vertical @ 0° , Horizontal @ 90° |
| IMD (3rd) | ≤ -140dBc @ 2x40dBm |
| Isolation between two antennas | ≥ 30 dB (Pol. Angle 90°, Distance 1m) |
| Input Power (Max) | ≤ 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

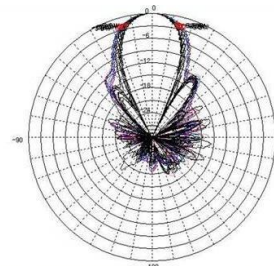
| | |
|----------------------------------|------------------------------------|
| Radom Dimension (W x D x H) | 100 x 36 x 1080 mm |
| Weight (exclude bracket) | ≤ 3 kg |
| Radom Material (color) | ASA (Gray) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | Up/Down ± 30° / Right/Left 0°~ 30° |



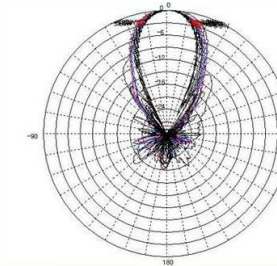
Horizontal Pattern
(Low Band)



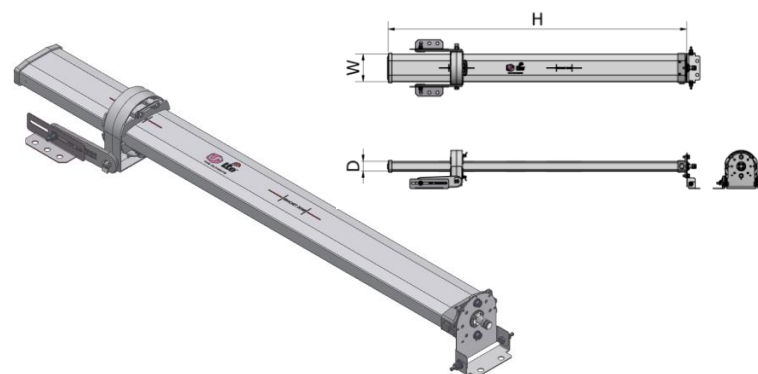
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



10-3. Multi-Band Yagi Antenna

819~960, 1710~2690MHz / 12dBi

28

General Specifications

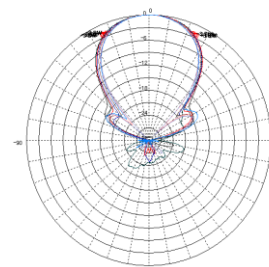
| | |
|----------------|-------------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) |
| Part Number | CPWW-YG-1212 (Variable) |

Electrical Specifications

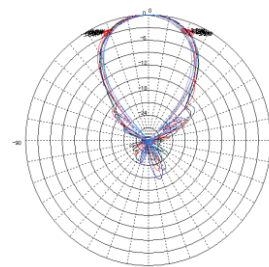
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | 12~ 12 |
| VSWR | 1 : 1.6 |
| Beam Width | Horizontal 20° ~ 70° / 20° ~ 70° Vertical 20° ~ 70° / 20° ~ 70° |
| Polarization | V / V |
| IMD (3rd) | ≤ -140dBc @ 2x40dBm |
| F-B ratio (-180 ± 30°) | 10 dB ~ 15 dB |
| Input Power (Max) | ≤ 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

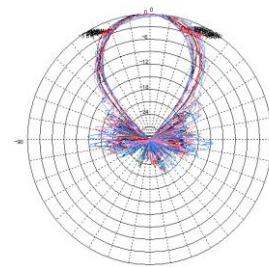
| | |
|----------------------------------|------------------------------------|
| Radom Dimension (W x D x H) | 100 x 36 X 1251 mm |
| Weight (exclude bracket) | ≤ 3 kg |
| Radom Material (color) | ASA (Gray) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | Up/Down ± 30° / Right/Left 0°~ 30° |



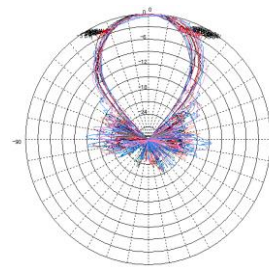
Horizontal Pattern
(Low Band)



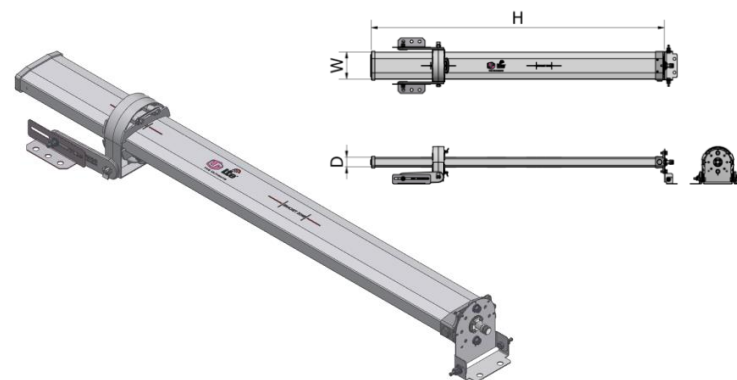
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



11. Multi-Band MIMO Yagi Antenna

819~960, 1710~2690, 3400~3700MHz / 8, 14, 14dBi

29

General Specifications

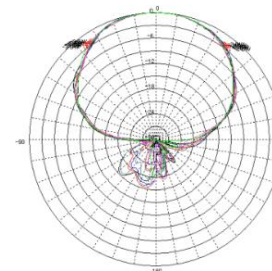
| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) x 2 |
| Part Number | CPWW-MYG-814 |

Electrical Specifications

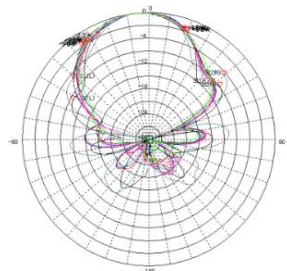
| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 819 ~ 960 / 1710 ~ 2690 / 3400 ~ 3700 |
| Gain (dBi) | 8~ 14 |
| VSWR | 1 : 1.6 |
| Beam Width | Horizontal 40° ~ 120° / 20° ~ 60° / 20° ~ 60° Vertical 30° ~ 90° / 20° ~ 60° / 20° ~ 60° |
| Polarization | VH |
| IMD (3rd) | ≤ -140dBc @ 2x40dBm |
| F-B ratio (-180 ± 30°) | 15 dB |
| Input Power (Max) | ≤ 100 W |
| Impedance | 50 Ω |

Mechanical Specifications

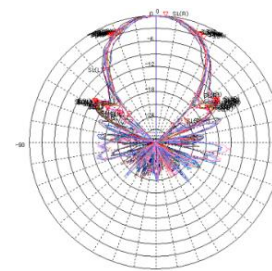
| | |
|----------------------------------|------------------------------------|
| Radom Dimension (W x D x H) | 1300 x 100 x 160 mm |
| Weight (exclude bracket) | ≤ 5 kg |
| Radom Material (color) | ASA (Gray) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | Up/Down ± 30° / Right/Left 0°~ 30° |



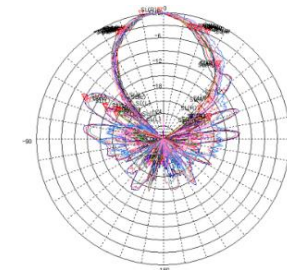
Horizontal Pattern
(Low Band)



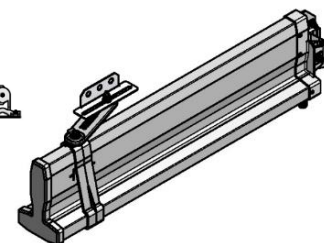
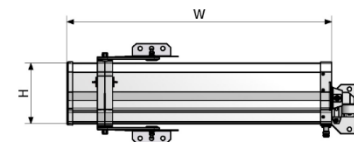
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



12. Single Band Dual Polarization Horizontal 63° 17dBi

Adjust. Electrical Down tilt

30

General Specifications

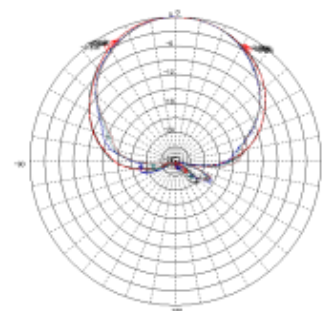
| | |
|----------------|----------------------------|
| Device Type | RF Antenna |
| Connector Type | Mini DIN-Female x 4 |
| Part Number | ESBDP_H65_17dBi_4x4_3.5GHz |

Electrical Specifications

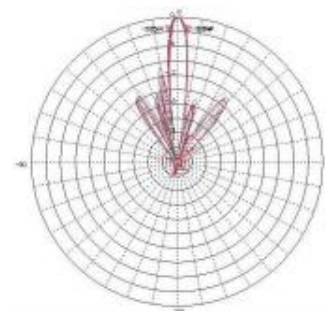
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | 16 ~ 17 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 63° ± 9° Vertical ≥ 4.5° |
| Polarization | ± 45° SLANT |
| Isolation | ≥ 27 dB |
| IMD (3rd) | ≤ -150 dBc @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

| | |
|----------------------------------|-----------------------|
| Radom Dimension (W x D x H) | ≤ 262 x 140 x 1000 mm |
| Weight (exclude bracket) | ≤ 12 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |
| Mechanical Tilt | ± 30° |



Horizontal Pattern



Vertical Pattern



13-1. Quad Band Dual Polarization Horizontal 63° 15dBi

Adjust. Electrical Down tilt

31

General Specifications

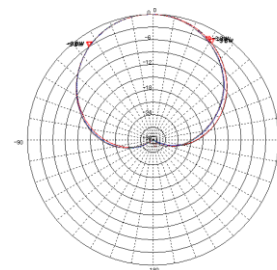
| | |
|----------------|---------------------|
| Device Type | RF Antenna |
| Connector Type | 7/16"DIN-Female x 6 |
| Part Number | 2.6G_EQBDP_63_15dBi |

Electrical Specifications

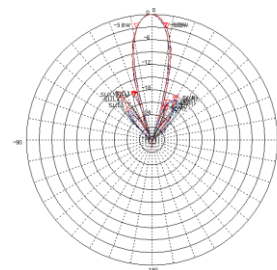
| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 839~894 / 1755~2130 / 2500~2660 |
| Gain (dBi) | $\geq 13 \sim \geq 14$ |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal $65^\circ \pm 5^\circ / 63^\circ \pm 9^\circ / 63^\circ \pm 9^\circ$ Vertical $13^\circ \pm 3^\circ / 12^\circ \pm 3^\circ / 9^\circ \pm 3^\circ$ |
| Polarization | $\pm 45^\circ$ SLANT |
| Isolation | ≥ 27 dB $\sim \geq 30$ dB |
| IMD (3rd) | ≤ -150 dBc @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

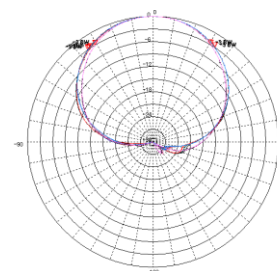
| | |
|----------------------------------|-------------------------------------|
| Radom Dimension (W x D x H) | 297 x 150 x 1599 mm |
| Weight (exclude bracket) | ≤ 13 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | -30 $^\circ$ C \sim 60 $^\circ$ C |
| Mechanical Tilt | $\pm 30^\circ$ |



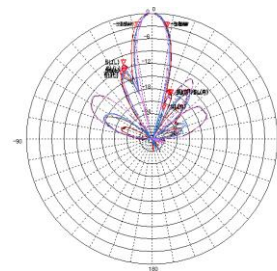
Horizontal Pattern
(Low Band)



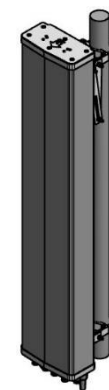
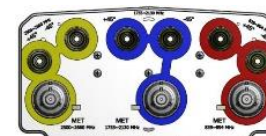
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



13-2. Quad Band Dual Polarization Horizontal 63° 12.5dBi

Adjust. Electrical Down tilt

32

General Specifications

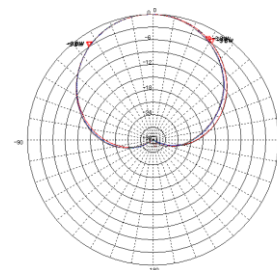
| | |
|----------------|-----------------------|
| Device Type | RF Antenna |
| Connector Type | 7/16"DIN-Female x 6 |
| Part Number | 2.6G_EQBDP_63_12.5dBi |

Electrical Specifications

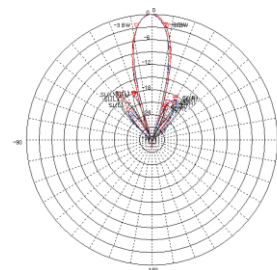
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 839~894 / 1755~2130 / 2500~2660 |
| Gain (dBi) | $\geq 11.5 \sim \geq 12.5$ |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal $65^\circ \pm 5^\circ / 63^\circ \pm 9^\circ / 63^\circ \pm 9^\circ$ Vertical $22^\circ \pm 3^\circ / 20^\circ \pm 3^\circ / 18^\circ \pm 3^\circ$ |
| Polarization | $\pm 45^\circ$ SLANT |
| Isolation | ≥ 27 dB $\sim \geq 30$ dB |
| IMD (3rd) | ≤ -150 dBc @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

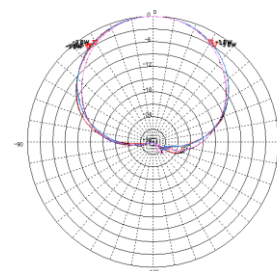
| | |
|----------------------------------|-------------------------------------|
| Radom Dimension (W x D x H) | 290 x 147 x 1096 mm |
| Weight (exclude bracket) | ≤ 10 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | -30 $^\circ$ C \sim 60 $^\circ$ C |
| Mechanical Tilt | $\pm 30^\circ$ |



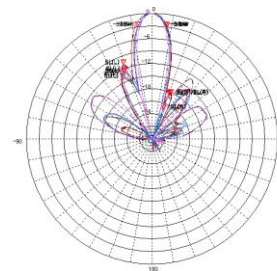
Horizontal Pattern
(Low Band)



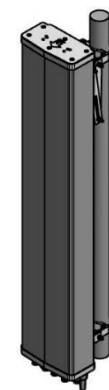
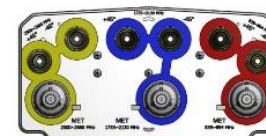
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



14. Tilt Max Sector Dual Polarization Horizontal 63° 14dBi

Adjust. Wide Range Electrical Down tilt

33

General Specifications

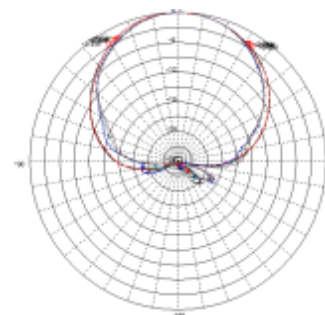
| | |
|----------------|-------------------|
| Device Type | RF Antenna |
| Connector Type | 4.3-10 Female x 4 |
| Part Number | B-0T04XV-0014 |

Electrical Specifications

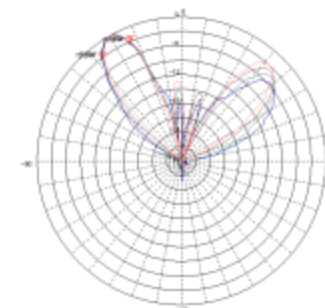
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | ≥ 14 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 63° ± 9° Vertical ≥ 14° ± 3° |
| Polarization | ± 45° SLANT |
| Isolation | ≥ 27 dB |
| IMD (3rd) | ≤ -150 dBc @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |
| Electrical tilt | 30° |

Mechanical Specifications

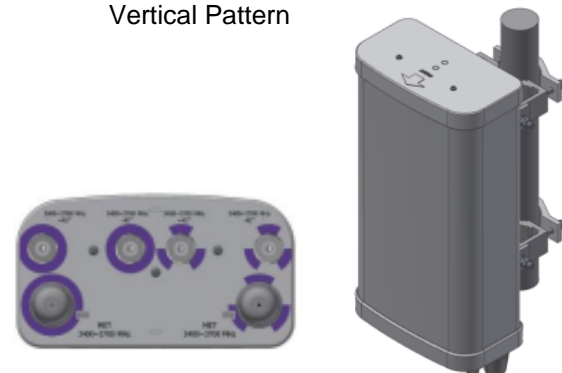
| | |
|----------------------------------|-----------------------|
| Radom Dimension (W x D x H) | ≤ 262 x 140 x 500 mm |
| Weight (exclude bracket) | ≤ 7 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | -30 °C ~ 60 °C |



Horizontal Pattern



Vertical Pattern



15. Tilt Max Cylindrical Dual Polarization Horizontal 65° 10dBi High Angle Electrical Up tilt

34

General Specifications

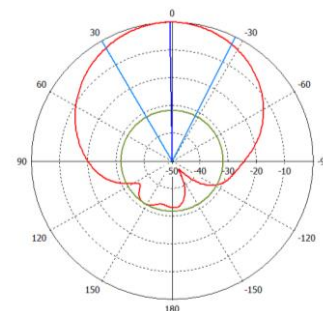
| | |
|----------------|-------------------|
| Device Type | RF Antenna |
| Connector Type | 4.3-10 Female x 4 |
| Part Number | C-0T04XV-0010 |

Electrical Specifications

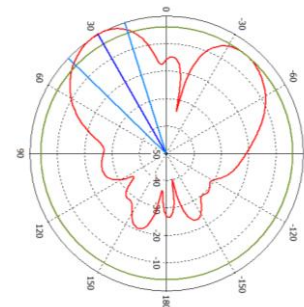
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | ≥ 10 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 65° ± 8° Vertical ≥ 30° ± 5° |
| Polarization | ± 45° SLANT |
| Isolation | ≥ 27 dB |
| IMD (3rd) | ≤ -150 dBc @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |
| Electrical tilt | 28° ~ 32° |

Mechanical Specifications

| | |
|----------------------------------|----------------|
| Radom Dimension (D x H) | ≤ 120 x 500 mm |
| Weight (exclude bracket) | ≤ 3 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | ASA FRP |
| Operating Temperature / Humidity | -30 °C ~ 60 °C |



Horizontal Pattern



Vertical Pattern



16-1. Cylinder Type Sector Antenna

814~960, 1710~2690MHz / 10dBi

35

General Specifications

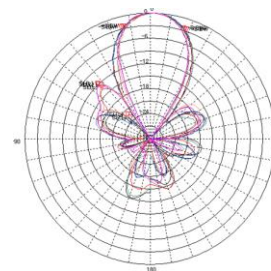
| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) x 2 |
| Part Number | MB2P-35-10dBi-T0 |

Electrical Specifications

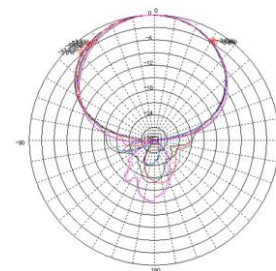
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 814 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | ≥ 10 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal $35^{\circ} \pm 10^{\circ} / 35^{\circ} \pm 10^{\circ}$ Vertical $65^{\circ} \pm 10^{\circ} / 35^{\circ} \pm 10^{\circ}$ |
| Polarization | $\pm 45^{\circ}$ SLANT |
| Isolation | ≥ 23 |
| IMD (3rd) | $\leq -150\text{dBc}$ @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

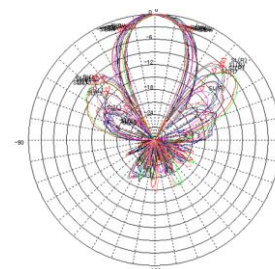
| | |
|----------------------------------|--|
| Radom Dimension (D x H) | $\varnothing 200 \times 670$ mm |
| Weight (exclude bracket) | ≤ 5 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | -30 $^{\circ}\text{C}$ ~ 60 $^{\circ}\text{C}$ |



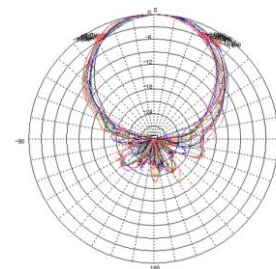
Horizontal Pattern
(Low Band)



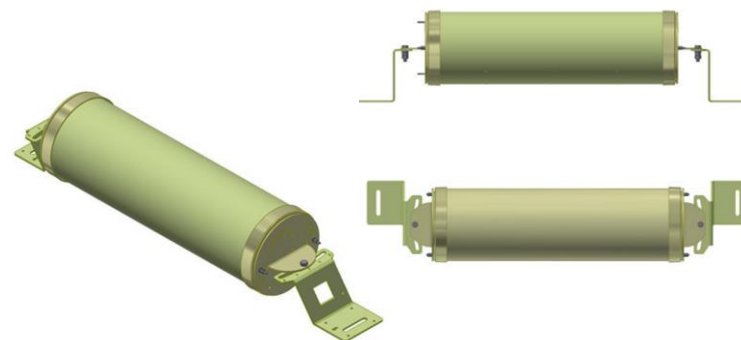
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



16-2. Cylinder Type Sector Antenna

814~960, 1710~2690MHz / 10dBi

36

General Specifications

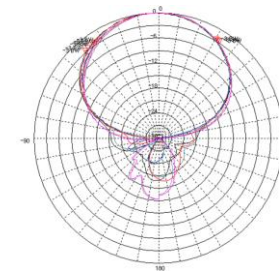
| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) x 2 |
| Part Number | MB2P-35-10dBi-T0 |

Electrical Specifications

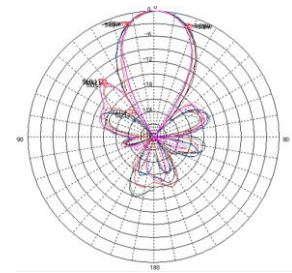
| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 814 ~ 960 / 1710 ~ 2690 |
| Gain (dBi) | ≥ 10 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal $65^{\circ} \pm 10^{\circ} / 65^{\circ} \pm 10^{\circ}$ Vertical $35^{\circ} \pm 10^{\circ} / 35^{\circ} \pm 10^{\circ}$ |
| Polarization | $\pm 45^{\circ}$ SLANT |
| Isolation | ≥ 23 |
| IMD (3rd) | $\leq -150\text{dBc} @ 2 \times 43\text{dBm}$ |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

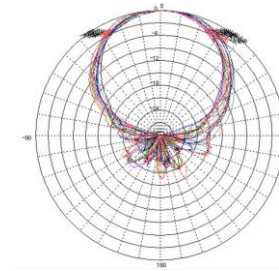
| | |
|----------------------------------|---|
| Radom Dimension (D x H) | $\varnothing 200 \times 670$ mm |
| Weight (exclude bracket) | ≤ 5 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | $-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$ |



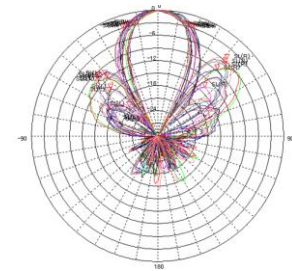
Horizontal Pattern
(Low Band)



Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



16-3. Cylinder Type Sector Antenna

814~960, 1710~2200MHz / 6.5dBi

37

General Specifications

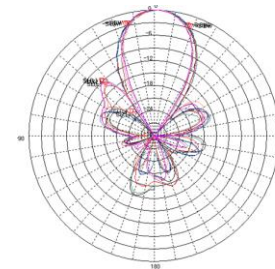
| | |
|----------------|-----------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) |
| Part Number | CPI-CQBDP-066DT |

Electrical Specifications

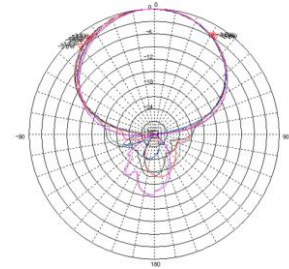
| | |
|---------------------------------|---|
| Operating Frequency Bands (MHz) | 814 ~ 960 / 1710 ~ 2200 |
| Gain (dBi) | ≥ 6.5 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 100° ± 30° / 75° ± 20° Vertical 50° ± 20° / 50° ± 20° |
| Polarization | ± 45° SLANT |
| Isolation | ≥ 20 / ≥ 25 |
| IMD (3rd) | ≤ -140dBc @ 2x43dBm |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

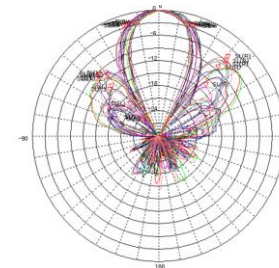
| | |
|----------------------------------|-----------------------|
| Radom Dimension (D x H) | Ø120 x 520 mm |
| Weight (exclude bracket) | ≤ 5 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | A.S.A. (Cool Gray 4C) |
| Operating Temperature / Humidity | -30 °C ~ 60 °C |



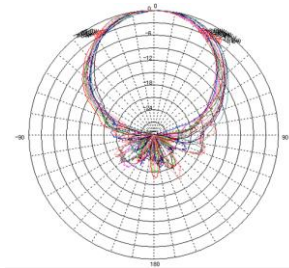
Horizontal Pattern
(Low Band)



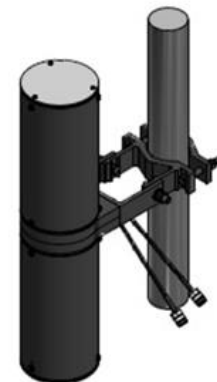
Vertical Pattern
(Low Band)



Horizontal Pattern
(High Band)



Vertical Pattern
(High Band)



16-4. Cylinder Type Sector Antenna

4T4R 3600~4100MHz / 6dBi

38

General Specifications

| | |
|----------------|----------------------|
| Device Type | RF Antenna |
| Connector Type | 7/16" DIN-Female × 4 |
| Part Number | TM-CQBBDP-06(4T4R) |

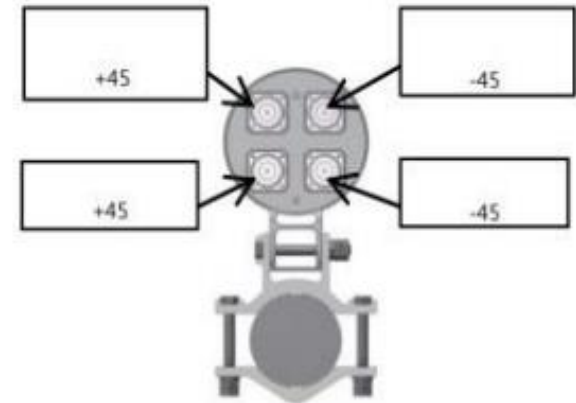
Electrical Specifications

| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | ≥ 6 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 70° ± 20° Vertical ≥ 50° ± 20° |
| Polarization | ± 45° SLANT |

| | |
|-------------------|---------|
| F-B Ratio | ≥ 13 dB |
| PIMD (3rd) | -140dBc |
| Input Power (Max) | 200 W |
| Impedance | 50 Ω |

Mechanical Specifications

| | |
|----------------------------------|----------------|
| Radom Dimension (D x H) | Ø120 × 400 mm |
| Weight (exclude bracket) | ≤ 3 kg |
| Withstand Wind Pressure | 60 m/sec |
| Radom Material (color) | ASA FRP |
| Operating Temperature / Humidity | -40 °C ~ 70 °C |



17. 4 GHz Patch Antenna

3600~4100MHz / 16dBi

39

General Specifications

| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) × 2 |
| Part Number | P-0T02XT-0016-K |

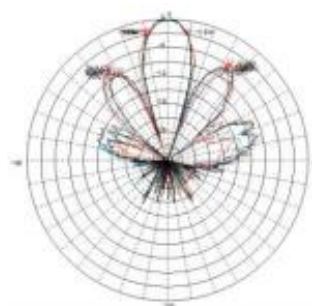
Electrical Specifications

| | |
|---------------------------------|--|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | ≥ 16 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal 20° ± 5° Vertical 20° ± 5° |

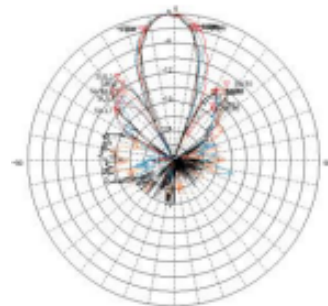
| | |
|-------------------|---------|
| Polarization | ± 45° |
| F-B Ratio | ≥ 13 dB |
| Isolation | ≥ 20 dB |
| Input Power (Max) | 100 W |
| Impedance | 50 Ω |

Mechanical Specifications

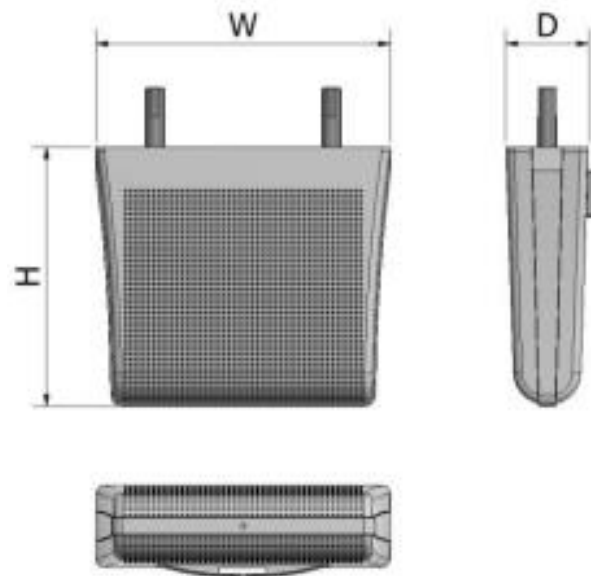
| | |
|----------------------------------|-------------------|
| Radom Dimension (W x D x H) | 222 x 250 x 70 mm |
| Weight (exclude bracket) | ≤ 1.5 kg |
| Radom Material (color) | White |
| Operating Temperature / Humidity | -30 ° C ~ 60 ° C |



Horizontal Pattern



Vertical Pattern



18. 4 GHz 4T4R Patch Antenna

3600~4100 MHz/ 10dBi

40

General Specifications

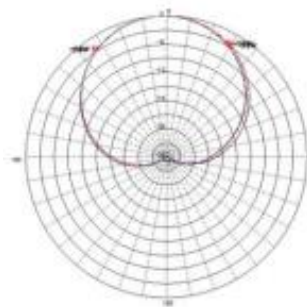
| | |
|----------------|------------------|
| Device Type | RF Antenna |
| Connector Type | N-J (Female) × 4 |
| Part Number | P-0T04XT-0010-K |

Electrical Specifications

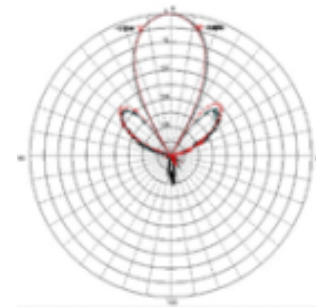
| | |
|---------------------------------|----------------------------------|
| Operating Frequency Bands (MHz) | 3600 ~ 4100 |
| Gain (dBi) | ≥ 10 |
| VSWR | 1.5 : 1 |
| Beam Width | Horizontal ≥ 60° Vertical 30° |
| Polarization | ± 45° |
| F-B Ratio | ≥ 15 dB |
| Isolation | ≥ 20 dB |
| Input Power (Max) | 100 W |
| Impedance | 50 Ω |

Mechanical Specifications

| | |
|----------------------------------|-------------------|
| Radom Dimension (W x D x H) | 195 x 195 x 45 mm |
| Weight (exclude bracket) | ≤ 800 g |
| Radom Material (color) | White |
| Operating Temperature / Humidity | -30 ° C ~ 60 ° C |
| Mechanical Tilt | ± 30° |



Horizontal Pattern



Vertical Pattern

