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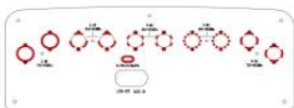
1. 8090 series

2. 6090 series

703-803MHz*2/824-884MHz/905-960MHz*2 Antenna (Integrated RCU)



Electrical Specification			
Frequency (MHz)	(703-803)*2	824-884	(905-960)*2
Polarization	±45°		
Gain (dBi)	15.7	16	16.7
Tilt (°)	0-8°		
HBW (°)	72±6	68±6	65±6
VBW (°)	8.5±1	7.5±1	6.5±1
XPD (dB)	Main Direction ≥15		
Upper Sidelobe Suppression (dB)	≤-15		
F/B Ratio (dB)	≥25		
Intra band Isolation (dB)	≥26		
Inter band Isolation (dB)	≥80(824-884) ≥80(905-960)	≥80(703-803) ≥90(905-960)	≥80(703-803) ≥90(824-884)
VSWR	≤1.5		
IMD @2×43dBm（dBm）	≤-107		
Impedance (Ω)	50		
Max. Power (W)	300		
RET	Integrated RCU（AISG 2.0）		
Lightning Protection	DC Ground		
Mechanical Specification			
Antenna Size (mm)	2500×500×196		
Packing Size (mm)	2755×605×295		
Connectors	10×4.3/10 DIN Female		
Antenna Weight (Kg)	50.5		
Installation Kit Weight (Kg)	5.5		
Packing Weight (Kg)	65.8		
Radome Material	FRP		
Radome Color	gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~10		
Operation Temperature (°C)	-40~70		
Last Update 2021-03-16			



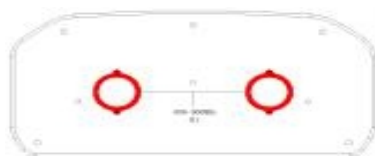
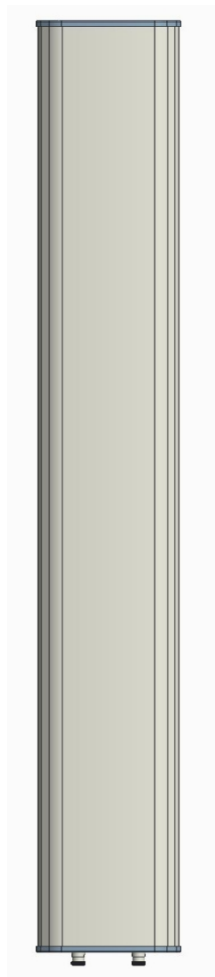
703-803MHz*4/824-884MHz/905-960MHz*2 Antenna (Integrated RCU)

Electrical Specification				
Frequency (MHz)	(703-768)*2	(738-803)*2	824-884	(905-960)*2
Polarization	±45°			
Gain (dBi)	15.7	15.8	16	16.7
Tilt (°)	0-8°			
HBW (°)	72±6	72±6	68±6	65±6
VBW (°)	8.5±1	8.5±1	7.5±1	6.5±1
XPD (dB)	Main Direction ≥15			
Upper Sidelobe Suppression (dB)	≤-15			
F/B Ratio (dB)	≥25			
Intra band Isolation (dB)	≥26			
Inter band Isolation (dB)	≥80(824-884)	≥80(824-884)	≥80(703-803)	≥80(703-803)
	≥80(905-960)	≥80(905-960)	≥90(905-960)	≥90(824-884)
VSWR	≤1.5			
IMD @2×43dBm (dBm)	≤-107			
Impedance (Ω)	50			
Max. Power (W)	300			
RET	Integrated RCU (AISG 2.0)			
Lightning Protection	DC Ground			
Mechanical Specification				
Antenna Size (mm)	2640×630×175			
Packing Size (mm)	2835×735×310			
Connectors	14×4.3/10 DIN Female			
Antenna Weight (Kg)	60.5			
Installation Kit Weight (Kg)	12			
Packing Weight (Kg)	83			
Radome Material	FRP			
Radome Color	gray			
Mounting Hardware (mm)	φ50~φ115			
Downtilt angle (degree)	0~10			
Operation Temperature (°C)	-40~70			
Last Update 2021-03-16				



698-960MHz 65° 17.5dBi 0° FET Antenna

Electrical Specification			
Frequency (MHz)	698-960		
	698-790	790-880	880-960
Polarization	±45°		
Gain (dBi)	16.8	17.2	17.5
Tilt (°)	0°		
HBW (°)	69	67	65
VBW (°)	7.5	7	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10		
1st Sidelobe Suppression (dB)	≤-15		
F/B Ratio (dB)	≥25		
Isolation (dB)	≥28		
VSWR	≤1.5		
IMD @2×43dBm（dBm）	≤-107		
Impedance (Ω)	50		
Max. Power (W)	300		
Lightning Protection	DC Ground		
Mechanical Specification			
Antenna Size (mm)	2565×295×145		
Packing Size (mm)	2845×360×210		
Connectors	2×7/16 DIN Female		
Antenna Weight (Kg)	20.7		
Installation Kit Weight (Kg)	5		
Packing Weight (Kg)	30.2		
Radome Material	FRP		
Radome Color	gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~10		
Operation Temperature (°C)	-40~70		
Last Update 2021-03-16			



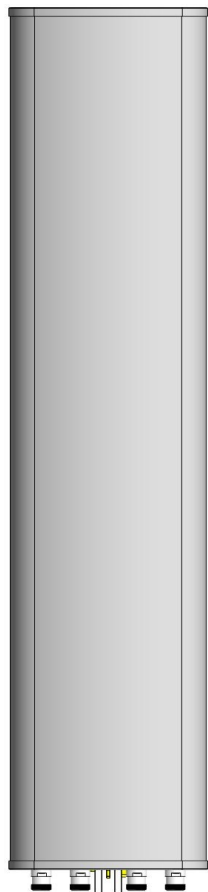
3. 1721 series

1710-2170MHz*2 65° 14.5dBi Antenna (Integrated RCU)

Electrical Specification	
Frequency (MHz)	(1710-2170) *2
Polarization	±45°
Gain (dBi)	14.5
Tilt (°)	0-14
HBW (°)	65
VBW (°)	13
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10
1st Sidelobe Suppression(dB)	≤-15
F/B Ratio (dB)	≥25
Isolation (dB)	≥28
VSWR	≤1.5
IMD @2×43dBm (dBm)	≤-107
Impedance (Ω)	50
Max. Power (W)	250
RET	Integrated RCU
Lightning Protection	DC Ground
Mechanical Specification	
Antenna Size (mm)	635×278×138
Packing Size (mm)	840×360×220
Connectors	4×7/16 DIN Female
Antenna Weight (Kg)	6.35
Installation Kit Weight (Kg)	2.8
Packing Weight (Kg)	10.5
Radome Material	UPVC
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~28
Operation Temperature (°C)	-40~70
Last Update 2021-03-16	



1710-2170MHz*2 65° 17dBi Antenna (Integrated RCU)



Electrical Specification	
Frequency (MHz)	(1710-2170) *2
Polarization	±45°
Gain (dBi)	17
Tilt (°)	0-10
HBW (°)	65
VBW (°)	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10
1st Sidelobe Suppression (dB)	≤-15
F/B Ratio (dB)	≥25
Isolation (dB)	≥28
VSWR	≤1.5
IMD @2×43dBm (dBm)	≤-107
Impedance (Ω)	50
Max. Power (W)	250
RET	Integrated RCU
Lightning Protection	DC Ground
Mechanical Specification	
Antenna Size (mm)	1165×278×138
Packing Size (mm)	1375×360×220
Connectors	4×7/16 DIN Female
Antenna Weight (Kg)	10.2
Installation Kit Weight (Kg)	2.8
Packing Weight (Kg)	16.3
Radome Material	UPVC
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~25
Operation Temperature (°C)	-40~70
Last Update 2021-03-16	

1710-2170MHz*3 65° 17dBi Antenna (Integrated RCU)

Electrical Specification	
Frequency (MHz)	(1710-2170) *3
Polarization	±45°
Gain (dBi)	17
Tilt (°)	0-10
HBW (°)	65
VBW (°)	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10
1st Sidelobe Suppression(dB)	≤-15
F/B Ratio (dB)	≥25
Isolation (dB)	≥28
VSWR	≤1.5
IMD @2×43dBm (dBm)	≤-107
Impedance (Ω)	50
Max. Power (W)	250
RET	Integrated RCU
Lightning Protection	DC Ground
Mechanical Specification	
Antenna Size (mm)	1295×398×141
Packing Size (mm)	1555×505×245
Connectors	6×7/16 DIN Female
Antenna Weight (Kg)	14.5
Installation Kit Weight (Kg)	5
Packing Weight (Kg)	22
Radome Material	UPVC
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~16
Operation Temperature (°C)	-40~70
Last Update 2021-03-16	



1710-2170MHz*4 65° 14.5dBi Antenna (Integrated RCU)



Electrical Specification	
Frequency (MHz)	(1710-2170) *4
Polarization	±45°
Gain (dBi)	14.5
Tilt (°)	0-14
HBW (°)	65
VBW (°)	13
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8
1st Sidelobe Suppression (dB)	≤-15
F/B Ratio (dB)	≥25
Isolation (dB)	≥28
VSWR	≤1.5
IMD @2×43dBm (dBm)	≤-107
Impedance (Ω)	50
Max. Power (W)	250
RET	Integrated RCU
Lightning Protection	DC Ground
Mechanical Specification	
Antenna Size (mm)	800×500×115
Packing Size (mm)	1045×620×230
Connectors	8×7/16 DIN Female
Antenna Weight (Kg)	11.7
Installation Kit Weight (Kg)	5
Packing Weight (Kg)	19.3
Radome Material	FRP
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~20
Operation Temperature (°C)	-40~70
Last Update 2021-03-16	

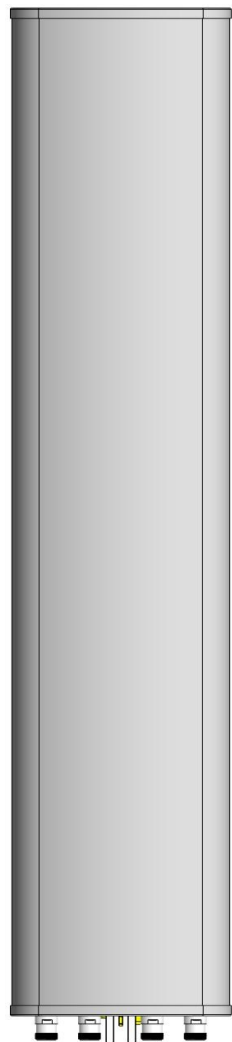
1710-2170MHz*4 65° 17dBi Antenna (Integrated RCU)

Electrical Specification	
Frequency (MHz)	(1710-2170) *4
Polarization	±45°
Gain (dBi)	17
Tilt (°)	0-10
HBW (°)	65
VBW (°)	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8
1st Sidelobe Suppression (dB)	≤-15
F/B Ratio (dB)	≥25
Isolation (dB)	≥28
VSWR	≤1.5
IMD @2×43dBm (dBm)	≤-107
Impedance (Ω)	50
Max. Power (W)	250
RET	Integrated RCU
Lightning Protection	DC Ground
Mechanical Specification	
Antenna Size (mm)	1350×500×115
Packing Size (mm)	1615×620×230
Connectors	8×7/16 DIN Female
Antenna Weight (Kg)	18.2
Installation Kit Weight (Kg)	5
Packing Weight (Kg)	27
Radome Material	FRP
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~16
Operation Temperature (°C)	-40~70
Last Update 2021-03-16	



4. 1727 series

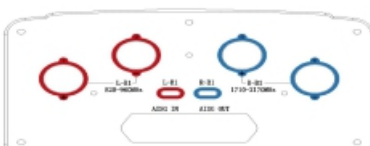
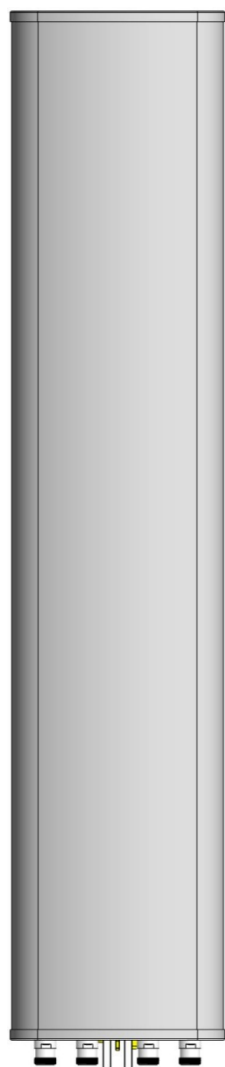
1710-2690MHz*2 65° 17dBi Antenna (Integrated RCU)



Electrical Specification			
Frequency (MHz)	(1710-2690) *2		
	1710-1920	1920-2200	2300-2690
Polarization	±45°		
Gain (dBi)	16.5	16.8	17.1
Tilt (°)	2-12		
HBW (°)	69	66	65
VBW (°)	5.7	5	4.2
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10		
1st Sidelobe Suppression(dB)	≤-15		
F/B Ratio (dB)	≥25		
Isolation (dB)	≥28		
VSWR	≤1.5		
IMD @2×43dBm (dBm)	≤-107		
Impedance (Ω)	50		
Max. Power (W)	250		
RET	Integrated RCU		
Lightning Protection	DC Ground		
Mechanical Specification			
Antenna Size (mm)	1350×320×110		
Packing Size (mm)	1565×410×300		
Connectors	4×4.3/10 Female		
Antenna Weight (Kg)	13		
Installation Kit Weight (Kg)	2.8		
Packing Weight (Kg)	18.5		
Radome Material	FRP		
Radome Color	gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~16		
Operation Temperature (°C)	-40~70		
Last Update 2021-3-16			

5. 8090-1721 series

820-960/1710-2170MHz 65° 14.5/17dBi Antenna (Integrated RCU)

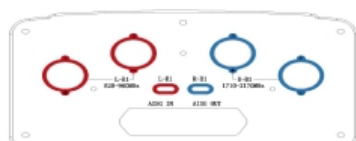


Electrical Specification		
Frequency (MHz)	820-960	1710-2170
Polarization	±45°	
Gain (dBi)	14.5	17
Tilt (°)	0-14	0-10
HBW (°)	65	65
VBW (°)	13	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10	
1st Sidelobe Suppression(dB)	≤-15	
F/B Ratio (dB)	≥ 25	≥ 25
Isolation (dB)	≥28	
VSWR	≤1.5	
IMD @2×43dBm (dBm)	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1465×274×148	
Packing Size (mm)	1710×355×225	
Connectors	4×7/16 DIN Female	
Antenna Weight (Kg)	13.4	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	21.7	
Radome Material	UPVC	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~18	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-16		

820-960/1710-2170MHz 65° 16/17dBi Antenna (Integrated RCU)

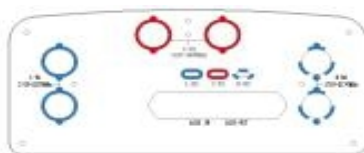


Electrical Specification		
Frequency (MHz)	820-960	1710-2170
Polarization	±45°	
Gain (dBi)	16	17
Tilt (°)	0-10	0-10
HBW (°)	65	65
VBW (°)	8.5	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10	
1st Sidelobe Suppression(dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥28	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1955×274×148	
Packing Size (mm)	2200×355×225	
Connectors	4×7/16 DIN Female	
Antenna Weight (Kg)	18.2	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	26.8	
Radome Material	UPVC	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~14	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-17		



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820-960/1710-2170MHz*2 65° 16/17dBi Antenna (Integrated RCU)



Electrical Specification		
Frequency (MHz)	820-960	1710-2170 *2
Polarization	±45°	
Gain (dBi)	16	17
Tilt (°)	0-10	0-10
HBW (°)	65	65
VBW (°)	8.5	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥28	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1670×355×165	
Packing Size (mm)	1910×440×250	
Connectors	6×7/16 Din Female	
Antenna Weight (Kg)	19.8	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	27.8	
Radome Material	UPVC	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~12	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-18		

820-960/1710-2170MHz*3 65° 14.5/17dBi Antenna (Integrated RCU)

Electrical Specification		
Frequency (MHz)	820-960	1710-2170 *3
Polarization	±45°	
Gain (dBi)	14.5	17
Tilt (°)	0-14	0-10
HBW (°)	65	65
VBW (°)	13	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥28	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1555×398×141	
Packing Size (mm)	1800×505×245	
Connectors	8×7/16 Din Female	
Antenna Weight (Kg)	18.7	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	26.6	
Radome Material	UPVC	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-16		



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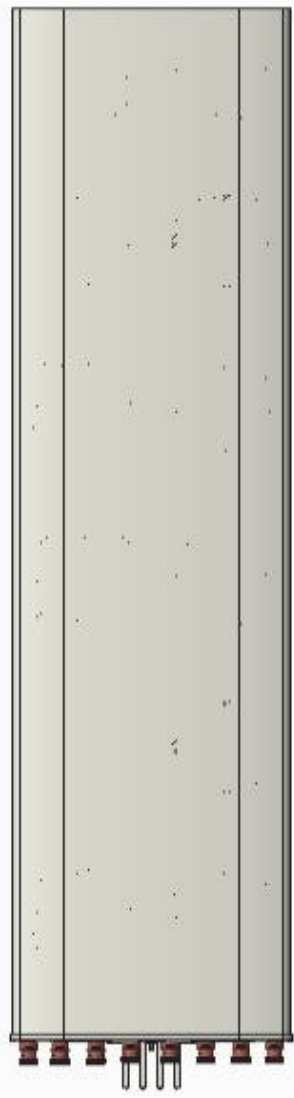
820-960*2/1710-2170MHz*2 65° 14.5/17dBi Antenna (Integrated RCU)



Electrical Specification		
Frequency (MHz)	820-960*2	1710-2170*2
Polarization	±45°	
Gain (dBi)	14.5	17
Tilt (°)	0-14	0-10
HBW (°)	65	65
VBW (°)	13	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥26	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1255×398×141	
Packing Size (mm)	1500×505×245	
Connectors	8×7/16 DIN Female	
Antenna Weight (Kg)	15.7	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	23.4	
Radome Material	UPVC	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-16		

820-960*2/1710-2170MHz*2 65° 16/17dBi Antenna (Integrated RCU)

Electrical Specification		
Frequency (MHz)	820-960*2	1710-2170*2
Polarization	±45°	
Gain (dBi)	16	17
Tilt (°)	0-10	0-10
HBW (°)	65	65
VBW (°)	8.5	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥26	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1675×398×141	
Packing Size (mm)	1910×505×245	
Connectors	8×7/16 DIN Female	
Antenna Weight (Kg)	19.8	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	27.8	
Radome Material	UPVC	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-16		

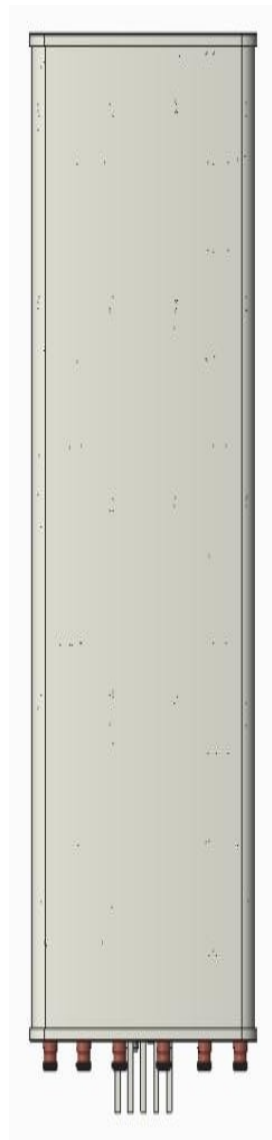


820-960*2/1710-2170MHz*3 65° 14.5/17dBi Antenna (Integrated RCU)

Electrical Specification		
Frequency (MHz)	820-960*2	1710-2170*3
Polarization	±45°	
Gain (dBi)	14.5	17
Tilt (°)	0-14	0-10
HBW (°)	65	65
VBW (°)	13	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥26	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1325×450×145	
Packing Size (mm)	1570×555×250	
Connectors	10×7/16 DIN Female	
Antenna Weight (Kg)	23	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	31	
Radome Material	FRP	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-17		



820-960*2/1710-2170MHz*3 65° 16/17dBi Antenna (Integrated RCU)

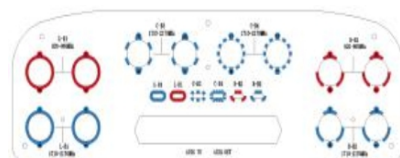


Electrical Specification		
Frequency (MHz)	820-960*2	1710-2170*3
Polarization	±45°	
Gain (dBi)	16	17
Tilt (°)	0-10	0-10
HBW (°)	65	65
VBW (°)	8.5	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥26	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1700×450×145	
Packing Size (mm)	1945×555×250	
Connectors	10×7/16 DIN Female	
Antenna Weight (Kg)	27	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	35.3	
Radome Material	FRP	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-17		

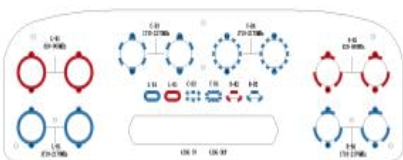
820-960*2/1710-2170MHz*4 65° 14.5/17dBi Antenna (Integrated RCU)



Electrical Specification		
Frequency (MHz)	820-960*2	1710-2170*4
Polarization	±45°	
Gain (dBi)	14.5	17
Tilt (°)	0-14	0-10
HBW (°)	65	65
VBW (°)	13	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥26	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1495×500×158	
Packing Size (mm)	1745×605×260	
Connectors	12×7/16 DIN Female	
Antenna Weight (Kg)	25.8	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	35.5	
Radome Material	FRP	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-16		



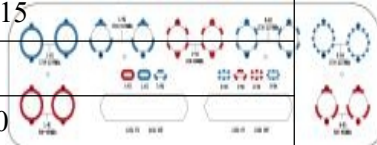
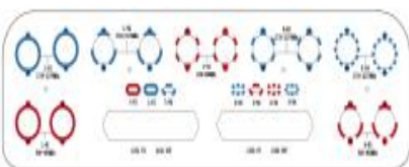
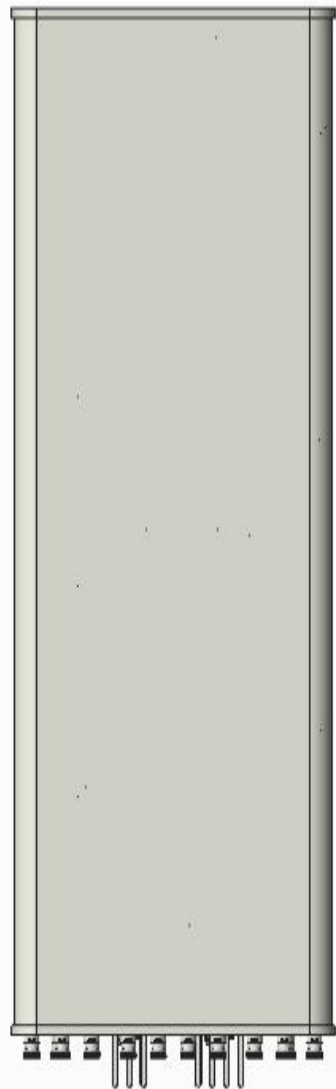
820-960*2/1710-2170MHz*4 65° 16/17dBi Antenna (Integrated RCU)



Electrical Specification		
Frequency (MHz)	820-960*2	1710-2170*4
Polarization	±45°	
Gain (dBi)	16	17
Tilt (°)	0-10	0-10
HBW (°)	65	65
VBW (°)	8.5	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	
F/B Ratio (dB)	≥25	≥25
Isolation (dB)	≥26	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specification		
Antenna Size (mm)	1695×500×158	
Packing Size (mm)	1940×605×260	
Connectors	12×7/16 DIN Female	
Antenna Weight (Kg)	28	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	38.5	
Radome Material	FRP	
Radome Color	gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~16	
Operation Temperature (°C)	-40~70	
Last Update 2021-3-16		

820-880*2/900-960/1710-2170MHz*4 65° 14.5/14.7/17dBi Antenna (Integrated RCU)

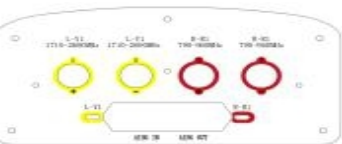
Electrical Specification			
Frequency (MHz)	820-880*2	900-960	1710-2170*4
Polarization	±45°		
Gain (dBi)	14.5	14.7	17
Tilt (°)	0-14	0-14	0-10
HBW (°)	65	65	65
VBW (°)	13.5	13	6
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8		
1st Sidelobe Suppression (dB)	≤-15		
F/B Ratio (dB)	≥25		
Isolation (dB)	≥25		
VSWR	≤1.5		
IMD @2×43dBm（dBm）	≤-107		
Impedance (Ω)	50		
Max. Power (W)	250		
RET	Integrated RCU		
Lightning Protection	DC Ground		
Mechanical Specification			
Antenna Size (mm)	1535×585×155		
Packing Size (mm)	1725×690×260		
Connectors	14×7/16 DIN Female		
Antenna Weight (Kg)	41		
Installation Kit Weight (Kg)	8.5		
Packing Weight (Kg)	54		
Radome Material	FRP		
Radome Color	gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~10		
Operation Temperature (°C)	-40~70		
Last Update 2021-3-16			



6. 7090-1727 series

790-960/1710-2690MHz 65° 16/17dBi Antenna (Integrated RCU)

Electrical Specification					
Frequency (MHz)	790-960		1710-2690		
	790-880	880-960	1710-1920	1920-2200	2300-2690
Polarization	±45°				
Gain (dBi)	15.7	16	16.5	16.8	17.1
Tilt (°)	0-10		0-10		
HBW (°)	67	65	69	66	65
VBW (°)	11	10	5.7	5	4.2
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10				
1st Sidelobe Suppression (dB)	≤-15				
F/B Ratio (dB)	≥25				
Isolation (dB)	≥28		≥28		
VSWR	≤1.5				
IMD @2×43dBm (dBm)	≤-107				
Impedance (Ω)	50				
Max. Power (W)	250				
RET	Integrated RCU				
Lightning Protection	DC Ground				
Mechanical Specification					
Antenna Size (mm)	1690×270×140				
Packing Size (mm)	1900×355×225				
Connectors	4×4.3-10 Female				
Antenna Weight (Kg)	18.5				
Installation Kit Weight (Kg)	5				
Packing Weight (Kg)	27				
Radome Material	FRP				
Radome Color	gray				
Mounting Hardware (mm)	φ50~φ115				
Downtilt angle (degree)	0~12				
Operation Temperature (°C)	-40~70				
Last Update 2021-3-16					



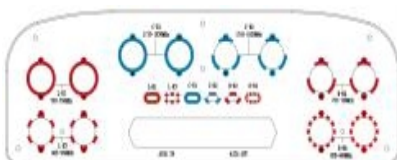
7. 6090-1721 series

703-798MHz*2/885-960MHz*2/1710-1830MHz*2 65°

14.5/15.5/17dBi Antenna (Integrated RCU)



Electrical Specification			
Frequency (MHz)	(703-798)*2	(885-960)*2	(1710-1830)*2
Polarization	±45°		
Gain (dBi)	14.5	15.5	17
Tilt (°)	2-12	2-12	2-12
HBW (°)	70	65	65
VBW (°)	8.5	8	7
XPD (dB)	Main Direction ≥15, Sector ±60° ≥10		
1st Sidelobe Suppression (dB)	≤-15		
F/B Ratio (dB)	≥23	≥25	≥25
Isolation (dB)	≥25		
VSWR	≤1.5		
IMD @2×43dBm (dBm)	≤-107		
Impedance (Ω)	50		
Max. Power (W)	250		
RET	Integrated RCU		
Lightning Protection	DC Ground		
Mechanical Specification			
Antenna Size (mm)	1660×480×170		
Packing Size (mm)	1915×585×275		
Connectors	12×7/16 Din Female		
Antenna Weight (Kg)	30.3		
Installation Kit Weight (Kg)	5		
Packing Weight (Kg)	39.8		
Radome Material	FRP		
Radome Color	gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~12		
Operation Temperature (°C)	-40~70		
Last Update 2021-3-16			



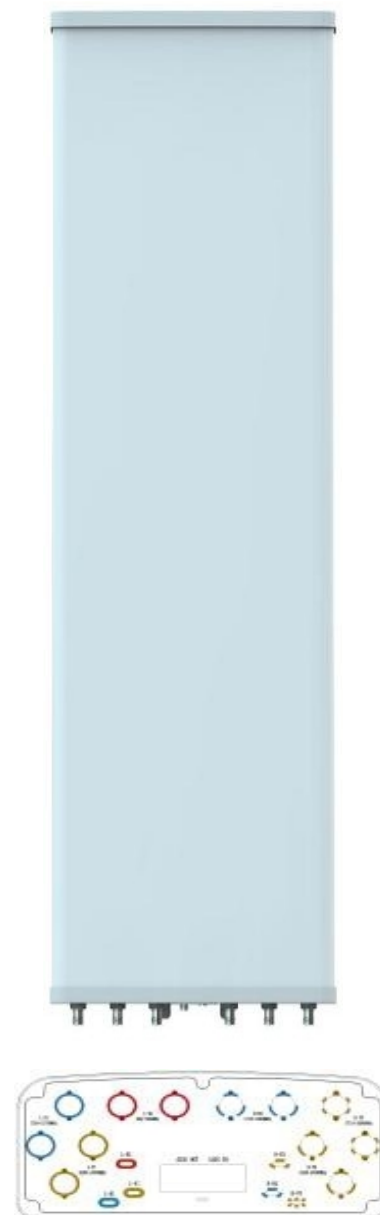
8. 6090-1727 series

694-960/1710-2690/1710-2170/2490-2690/1710-1880/1920-2690MHz

65° 15.6/17.5/16.7/17/16.5/17dBi 2-12° Antenna (Integrated RCU)

Electrical Specification														
Frequency (MHz)	694-960 R1			1710-2690 Y3				1710-2170 B1		2490-2690 Y1	1710-1880 B2	1920-2690 Y2		
	694-790	790-880	880-960	1710-1920	1920-2200	2200-2500	2500-2690	1710-1920	1920-2170	2490-2690	1710-1880	1920-2200	2200-2500	2500-2690
Polarization	±45°			±45°				±45°		±45°	±45°	±45°		
Gain (dBi)	14.8	15	15.6	16.8	17.1	17.3	17.5	16.5	16.7	17	16.5	16.7	16.8	17
Tilt (°)	2-12			2-12				2-12		2-12	2-12	2-12		
HBW (°)	69	67	64	69	64	60	58	68	64	57	69	63	60	58
VBW (°)	11.2	9.5	8.5	6	5.3	4.7	4.2	5.5	4.8	4	5.6	4.8	4.3	4
XPD (dB)	Main Direction ≥17			Main Direction ≥17				Main Direction ≥17		Main Direction ≥17				
1st Sidelobe Suppression (dB)	≤-15													
F/B Ratio (dB)	≥23	≥24	≥24	≥25				≥25		≥25				
Inter band Isolation (dB)	≥28							≥28						
Intra band Isolation (dB)	≥25							≥25						
VSWR	≤1.5													
IMD @2×43dBm (dBm)	≤107													
Impedance (Ω)	50													
Max. Power (W)	500			250										
RET	Integrated RCU													
Lightning Protection	DC Ground													

Mechanical Specification	
Antenna Size (mm)	2190×380×177
Packing Size (mm)	2460×485×285
Connectors	12×4.3-10 Female
Antenna Weight (Kg)	38
Installation Kit Weight (Kg)	5.5
Packing Weight (Kg)	48.2
Radome Material	FRP
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (°)	0~14
Operation Temperature (°C)	-40~70
Last Update 2021-4-10 (Pre-Release)	

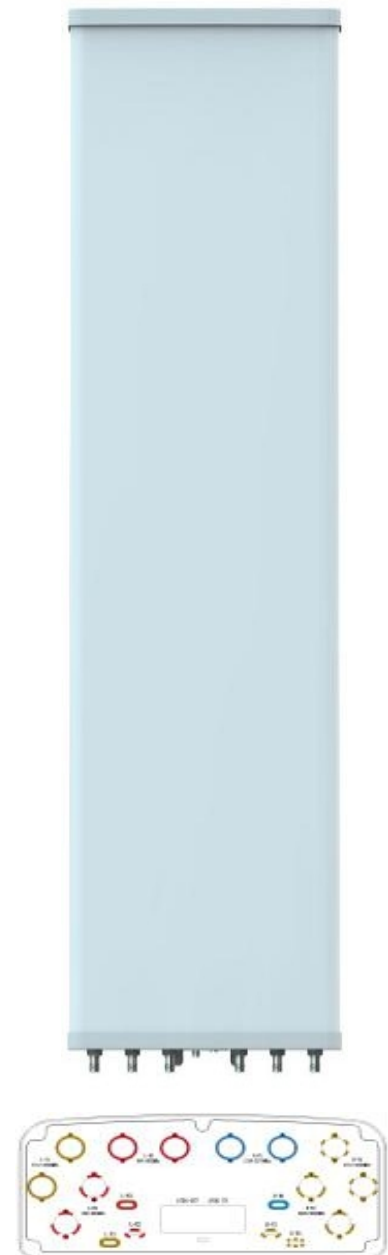


694-862MHz/880-960MHz/1710-2170MHz/1710-2690MHz*2/2490-2690MHz

65° 14.5/15/16.7/17.5/17dBi 2-12° Antenna (Integrated RCU)

Electrical Specification										
Frequency (MHz)	694-862 R1		880-960 R2	1710-2170 B1		1710-2690*2 Y1/Y3				2490-2690 Y2
	694-803	790-862	880-960	1710-1920	1920-2170	1710-1920	1920-2200	2200-2500	2500-2690	2490-2690
Polarization	±45°			±45°		±45°				±45°
Gain (dBi)	14.2	14.5	15	16.5	16.7	16.8	17.1	17.3	17.5	17
Tilt (°)	2-12			2-12		2-12				2-12
HBW (°)	69	67	64	68	64	69	64	60	58	58
VBW (°)	11.2	9.5	8.5	5.5	4.8	6	5.3	4.7	4.2	4
XPD (dB)	Main Direction ≥17			Main Direction ≥17		Main Direction ≥17				Main Direction ≥17
1st Sidelobe Suppression (dB)	≤-15									
F/B Ratio (dB)	≥22	≥24	≥24	≥25		≥25				≥25
Inter band Isolation (dB)	≥25(R1/R2) Other ports≥28			≥25(R1/R2) Other ports≥28						
Intra band Isolation (dB)	≥25			≥25						
VSWR	≤1.5									
IMD @2×43dBm (dBm)	≤-107									
Impedance (Ω)	50									
Max. Power (W)	500			250						
RET	Integrated RCU									
Lightning Protection	DC Ground									

Mechanical Specification	
Antenna Size (mm)	2190×380×177
Packing Size (mm)	2460×485×285
Connectors	12×4.3-10 Female
Antenna Weight (Kg)	39
Installation Kit Weight (Kg)	5.5
Packing Weight (Kg)	49.5
Radome Material	FRP
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (°)	0~14
Operation Temperature (°C)	-40~70
Last Update 2021-4-10 (Pre-Release)	



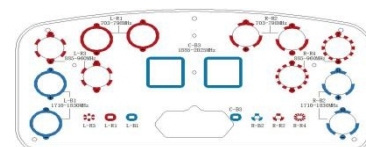
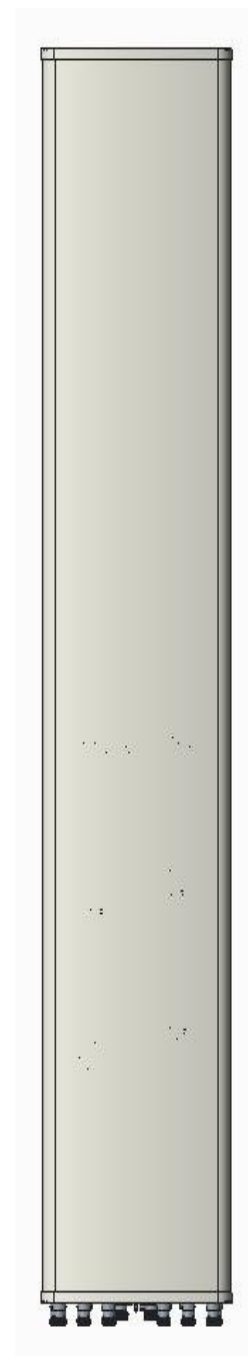
9. 4G&5G TDD series

TDD: 1885-1915/2010-2025 13.5/14.5dBi

FDD: 703-798*2/885-960*2/1710-1830MHz*2 14.5/15.5/17dBi Antenna (Integrated RCU)

TDD Electrical Specification			
Frequency(Mhz)		1885-1915	2010-2025
Polarization		$\pm 45^\circ$	
Coupling factor between calibration port and each antenna port(dB)		-26 ± 2	
Max.amplitude tolerance from calibration port to input ports(dB)		≤ 0.7	
Max.phase tolerance from calibration port to input ports($^\circ$)		≤ 5	
Co-polarization isolation between ports(dB)		≥ 25	
Cross-polarization isolation between ports(dB)		≥ 25	
Electrical down tilt ($^\circ$)		$2-12^\circ$	
VSWR		≤ 1.5	
Single column beam	Horizontal 3dB beam width ($^\circ$)	100 ± 15	90 ± 15
	Gain(dBi)	≥ 13.5	≥ 14.5
	0° Cross polar ratio (dB)	≥ 15	
	$\pm 60^\circ$ Cross polar ratio (dB)	≥ 8	
	Front to back ratio (dB)	≥ 23	≥ 23
65° Broadcast beam	Horizontal 3dB beam width ($^\circ$)	/	65 ± 5
	Gain(dBi)	≥ 15	≥ 14.5
	Vertical 3dB beam width ($^\circ$)	≥ 7	≥ 6.5
	0° Cross polar ratio (dB)	≥ 18	≥ 18
	$\pm 60^\circ$ Cross polar ratio (dB)	≥ 8	≥ 8
	Front to back ratio (dB)	≥ 25	≥ 25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤ -14	≤ -14
Service beam	Steered 0° Gain, dBi	≥ 19.5	≥ 20.5
	Steered 0° Beamwidth, Horizontal, degrees	≤ 29	≤ 26
	Steered 0° Horizontal Sidelobe, dB	≤ -12	
	Steered 60° Gain, dBi	≥ 17	≥ 17
	Steered 60° Beamwidth, Horizontal,degrees	≤ 32	
	Steered 60° Horizontal Sidelobe, dB	≤ -5	
	Steered 0° Beam Front to back ratio (dB)	≥ 28	
	Steered 0° Beam Cross polar ratio (dB)	≥ 18	

FDD Electrical Specification			
Frequency (MHz)	(703-798)*2	(885-960)*2	(1710-1830)*2
Polarization	±45°		
Gain (dBi)	14.5	15.5	17
Tilt (°)	0-14°	0-14°	2-12°
HBW (°)	70±6	65±6	65±6
VBW (°)	14	12	6.5
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8		
1st Sidelobe Suppression (dB)	≤-15	≤-15	≤-15
F/B Ratio (dB)	≥23	≥25	≥25
Inter band Isolation (dB)	≥25		
Intra band Isolation (dB)	≥25		
VSWR	≤1.5		
IMD @2×43dBm (dBm)	≤-107		
Impedance (Ω)	50		
Max. Power (W)	250		
Lightning Protection	DC Ground		
Mechanical Specifications			
Connectors	FDD: (12×7/16 DIN Female)+TDD: (1×MQ4 Male+1×MQ5 Male)		
Antenna Size (mm)	1995×396×190		
Packing Size (mm)	2295×525×320		
Antenna Weight (Kg)	34.1		
Installation Kit Weight (Kg)	5.5		
Packing Weight (Kg)	43.5		
Radom material	UPVC		
Radome Color	Gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~14		
Temperature range (°C)	-40 ~ 70		
Last Update 2021-3-16			

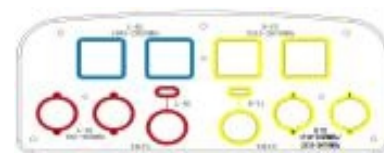


TDD: 1885-1920/2010-2025/2515-2675MHz 100° /90° /65° 11/12/13.5dBi

FDD: 885-960/1710-1880/2515-2675MHz 65° /65° /65° 13/14/14dBi

TDD Electrical Specification				
Frequency(Mhz)		1885-1920	2010-2025	2515-2675
Polarization		±45°		
Coupling factor between calibration port and each antenna port(dB)		-26±2		
Max.amplitude tolerance from calibration port to input ports(dB)		<0.7		
Max.phase tolerance from calibration port to input ports(°)		≤5		
Co-polarization isolation between ports(dB)		≥22		
Cross-polarization isolation between ports(dB)		≥25		
Electrical down tilt (°)		6		
VSWR		≤1.5		
Single column beam	Horizontal 3dB beam width (°)	100±15	90±15	65±15
	Gain(dBi)	11	12	13.5
	Vertical 3dB beam width (°)	12	10	8
	0° Cross polar ratio (dB)	≥15		
	±60° Cross polar ratio (dB)	≥10		
	Front to back ratio (dB)	≥23	≥23	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	/	/	≤-15
65° Broadcast beam	Horizontal 3dB beam width (°)	65±5		
	Gain(dBi)	11.5	12	12
	Vertical 3dB beam width (°)	11	10	8
	0° Cross polar ratio (dB)	≥16		
	±60° Cross polar ratio (dB)	≥10		≥6
	Front to back ratio (dB)	≥28	≥28	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-14		
Service beam	Steered 0° Gain, dBi	≥17.5	≥18	≥19.5
	Steered 0° Beamwidth, Horizontal, degrees	≤34		≤30
	Steered 0° Horizontal Sidelobe, dB	≤-12		
	Steered 60° Gain, dBi	≥15	≥16	≥17.5
	Steered 60° Beamwidth, Horizontal, degrees	≤34		≤25
	Steered 60° Horizontal Sidelobe, dB	≤-5		≤-5
	Steered 0° Beam Front to back ratio (dB)	≥28		
	Steered 0° Beam Cross polar ratio (dB)	≥21		

FDD Electrical Specification		
Frequency (MHz)	885-960	1710-1880/2515-2675
Polarization	±45°	
Gain (dBi)	13	14
Tilt (°)	2-16°	2-16°
HBW (°)	65±6	65±8
VBW (°)	16	10
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	≤-15
F/B Ratio (dB)	≥25	
Isolation (dB)	≥25	
VSWR	≤1.5	
IMD @2×43dBm (dBm)	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
Lightning Protection	DC Ground	
Mechanical Specification		
Connectors	FDD: 4×7/16 DIN Female + TDD: 2×MQ4 Male+2×MQ5 Male	
Antenna Size (mm)	1550×320×140	
Packing Size (mm)	1805×395×215	
Antenna Weight (Kg)	17.3	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	25	
Radom material	FRP	
Radome Color	Gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~18	
Temperature range (°C)	-40 ~ 70	
Last Update 2021-3-16		

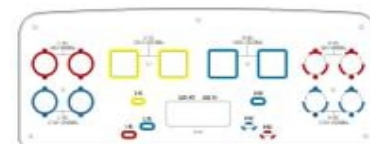


TDD: 1885-1920/2010-2025/2515-2675MHz 100° /90° /65° 12.5/13.5/14.5dBi

FDD: 885-960*2/1710-1830MHz*2 65° /65° 12/15dBi Antenna (Integrated RCU)

TDD Electrical Specification				
Frequency(MHz)		1885-1920	2010-2025	2515-2675
Polarization		±45°		
Coupling factor between calibration port and each antenna port(dB)		-26±2		
Max.amplitude tolerance from calibration port to input ports(dB)		<0.7		
Max.phase tolerance from calibration port to input ports(°)		≤5		
Co-polarization isolation between ports(dB)		≥25		
Cross-polarization isolation between ports(dB)		≥25		
Electrical down tilt (°)		2-12°		
VSWR		≤1.5		
Single column beam	Horizontal 3dB beam width (°)	100±15	90±15	65±15
	Gain(dBi)	≥12.5	≥13.5	≥14.5
	Vertical 3dB beam width (°)	≥12.5	≥12	≥9
	0° Cross polar ratio (dB)	≥15		
	±60° Cross polar ratio (dB)	≥8		
	Front to back ratio (dB)	≥23	≥23	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	/	/	≤-13
65° Broadcast beam	Horizontal 3dB beam width (°)	/	65±5	/
	Gain(dBi)	≥14	≥13.5	≥14
	Vertical 3dB beam width (°)	≥12.5	≥12	≥9
	0° Cross polar ratio (dB)	≥18	≥18	/
	±60° Cross polar ratio (dB)	≥8	≥8	/
	Front to back ratio (dB)	≥25	≥25	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-14	≤-14	≤-13
Service beam	Steered 0° Gain, dBi	≥17.5	≥18.5	≥19
	Steered 0° Beamwidth, Horizontal, degrees	≤29	≤26	≤25
	Steered 0° Horizontal Sidelobe, dB	≤-12		
	Steered 0° Beam Front to back ratio (dB)	≥28		
	Steered 0° Beam Cross polar ratio (dB)	≥18		

FDD Electrical Specification		
Frequency (MHz)	885-960*2	1710-1830*2
Polarization	±45°	
Gain (dBi)	12	15
Tilt (°)	2-12°	2-12°
HBW (°)	65±8	65±6
VBW (°)	18	13
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression(dB)	≤-15	≤-15
F/B Ratio (dB)	≥25	
Isolation (dB)	≥25	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
Lightning Protection	DC Ground	
Mechanical Specification		
Connectors	FDD: 8×7/16 DIN Female + TDD: 2×MQ4 Male+2×MQ5 Male	
Antenna Size (mm)	995×500×196	
Packing Size (mm)	1240×605×295	
Antenna Weight (Kg)	19	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	27.5	
Radom material	FRP	
Radome Color	Gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~20	
Temperature range (°C)	-40 ~ 70	
Last Update 2021-3-16		

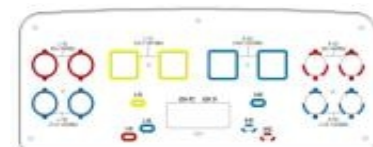


TDD: 1885-1920/2010-2025/2515-2675MHz 100° /90° /65° 13/13.5/15dBi

FDD: 885-960MHz*2/1710-1830MHz*2 65° /65° 13.5/16dBi Antenna (Integrated RCU)

TDD Electrical Specification				
Frequency(MHz)		1885-1920	2010-2025	2515-2675
Polarization		±45°		
Coupling factor between calibration port and each antenna port(dB)		-26±2		
Max.amplitude tolerance from calibration port to input ports(dB)		<0.7		
Max.phase tolerance from calibration port to input ports(°)		≤5		
Co-polarization isolation between ports(dB)		≥25		
Cross-polarization isolation between ports(dB)		≥25		
Electrical down tilt (°)		2-12		
VSWR		≤1.5		
Single column beam	Horizontal 3dB beam width (°)	100±15	90±15	65±15
	Gain(dBi)	≥13	≥13.5	≥15
	Vertical 3dB beam width (°)	/	/	≥6
	0° Cross polar ratio (dB)	≥15		
	±60° Cross polar ratio (dB)	≥8		
	Front to back ratio (dB)	≥23	≥23	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	/	/	≤-13
65° Broadcast beam	Horizontal 3dB beam width (°)	/	65±5	/
	Gain(dBi)	≥15	≥14	≥14.5
	Vertical 3dB beam width (°)	≥8	≥7.5	≥6
	0° Cross polar ratio (dB)	≥18	≥18	/
	±60° Cross polar ratio (dB)	≥8	≥8	/
	Front to back ratio (dB)	≥25	≥25	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-14	≤-14	≤-13
Service beam	Steered 0° Gain, dBi	≥19	≥20	≥20.5
	Steered 0° Beamwidth, Horizontal, degrees	≤29	≤26	≤25
	Steered 0° Horizontal Side lobe, dB	≤-12		
	Steered 60° Gain, dBi	≥16.5	≥16.5	≥16.5
	Steered 60° Beamwidth, Horizontal, degrees	≤32		≤23
	Steered 60° Horizontal Sidelobe, dB	≤-5		≤0
	Steered 0° Beam Front to back ratio (dB)	≥28		
	Steered 0° Beam Cross polar ratio (dB)	≥18		

FDD Electrical Specification		
Frequency (MHz)	885-960*2	1710-1830*2
Polarization	±45°	
Gain (dBi)	13.5	16
Tilt (°)	0-14°	2-12°
HBW (°)	65±8	65±6
VBW (°)	14	7
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8	
1st Sidelobe Suppression (dB)	≤-15	≤-15
F/B Ratio (dB)	≥25	
Isolation (dB)	≥25	
VSWR	≤1.5	
IMD @2×43dBm（dBm）	≤-107	
Impedance (Ω)	50	
Max. Power (W)	250	
Lightning Protection	DC Ground	
Mechanical Specification		
Connectors	FDD: 8×7/16 DIN Female + TDD 2×MQ4 Male+2×MQ5 Male	
Antenna Size (mm)	1595×500×196	
Packing Size (mm)	1845×605×295	
Antenna Weight (Kg)	31.2	
Installation Kit Weight (Kg)	5	
Packing Weight (Kg)	39.9	
Radom material	FRP	
Radome Color	Gray	
Mounting Hardware (mm)	φ50~φ115	
Downtilt angle (degree)	0~18	
Temperature range (°C)	-40 ~ 70	
Last Update 2021-3-16		



3300-3600MHz*4 65° 16.5dBi 2-12° Antenna (Integrated RCU)

Electrical Specification		
Frequency(MHz)		3300-3600
Polarization		±45°
Coupling factor between calibration port and each antenna port(dB)		-26±2
Max.amplitude tolerance from calibration port to input ports(dB)		<0.9
Max.phase tolerance from calibration port to input ports(°)		≤7
Co-polarization isolation between ports(dB)		≥25
Cross-polarization isolation between ports(dB)		≥25
Electrical down tilt (°)		2 ~12
VSWR		≤1.5
Single column beam	Horizontal 3dB beam width (°)	65±15
	Gain(dBi)	≥16.5
	Vertical 3dB beam width (°)	≥5
	0° Cross polar ratio (dB)	≥15
	±60° Cross polar ratio (dB)	≥8
	Front to back ratio (dB)	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-15
65° Broadcast beam	Horizontal 3dB beam width (°)	/
	Gain(dBi)	≥16.5
	Vertical 3dB beam width (°)	≥5
	Front to back ratio (dB)	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-15
Service beam	Steered 0° Gain, dBi	≥20.5
	Steered 0° Beamwidth, Horizontal, degrees	≤25
	Steered 0° Horizontal Sidelobe, dB	≤-12
	Steered ±60° Gain, dBi	≥17
	Steered ±60° Beamwidth, Horizontal, degrees	≤25
	Steered ±60° Horizontal Sidelobe, dB	≤3
	Steered 0° Beam Front to back ratio (dB)	≥28
	Steered 0° Beam Cross polar ratio (dB)	≥18

Mechanical Specification	
Connectors	9×N Female
Antenna Size (mm)	955×290×118
Packing Size (mm)	1170×370×205
Antenna Weight (Kg)	8.8
Installation Kit Weight (Kg)	2.8
Packing Weight (Kg)	14.3
Radom material	Gray
Radome Color	UPVC
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~25
Temperature range (°C)	-40 ~ 70
Last Update 2021-3-16	



3300-3600MHz*4 85° 15.5dBi 2-12° Antenna (Integrated RCU)

Electrical Specifications		
Frequency(MHz)		3300-3600
Polarization		±45°
Coupling factor between calibration port and each antenna port(dB)		-26±2
Max.amplitude tolerance from calibration port to input ports(dB)		<0.9
Max.phase tolerance from calibration port to input ports(°)		≤7
Co-polarization isolation between ports(dB)		≥25
Cross-polarization isolation between ports(dB)		≥25
Electrical down tilt (°)		2 ~12
VSWR		≤1.5
Single column beam	Horizontal 3dB beam width (°)	85±15
	Gain(dBi)	≥15.5
	Vertical 3dB beam width (°)	≥5
	0° Cross polar ratio (dB)	≥17
	±60° Cross polar ratio (dB)	≥8
	Front to back ratio (dB)	≥23
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-15
65° Broadcast beam	Horizontal 3dB beam width (°)	/
	Gain(dBi)	≥15.5
	Vertical 3dB beam width (°)	≥5
	Front to back ratio (dB)	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-14
Service beam	Steered 0° Gain, dBi	≥20
	Steered 0° Beamwidth, Horizontal, degrees	≤26
	Steered 0° Horizontal Sidelobe, dB	≤-12
	Steered ±60° Gain, dBi	≥15.5
	Steered ±60° Beamwidth, Horizontal, degrees	≤34
	Steered ±60° Horizontal Sidelobe, dB	≤0
	Steered 0° Beam Front to back ratio (dB)	≥28
	Steered 0° Beam Cross polar ratio (dB)	≥22

Mechanical Specification	
Connectors	9×N Female
Antenna Size (mm)	920×290×118
Packing Size (mm)	1135×370×205
Antenna Weight (Kg)	8.5
Installation Kit Weight (Kg)	2.8
Packing Weight (Kg)	13.8
Radom material	Gray
Radome Color	UPVC
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~25
Temperature range (°C)	-40 ~ 70
Last Update 2021-3-16	

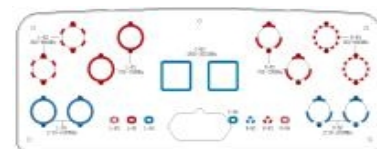
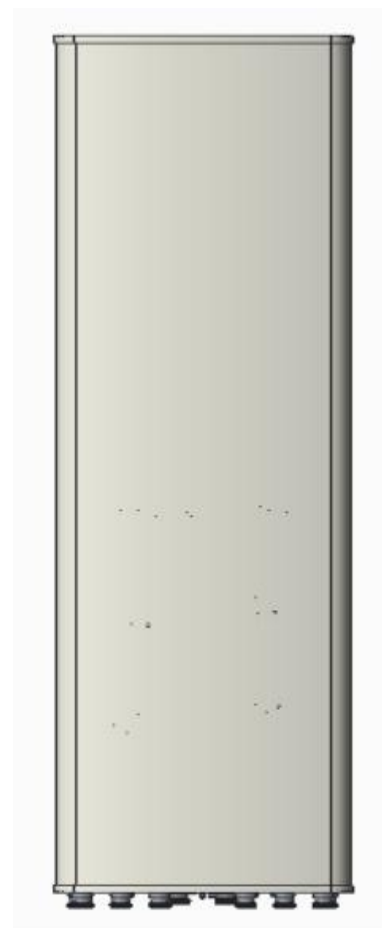


TDD: 1885-1915/2010-2025 100/90° 13.5/14.5dBi

FDD: 703-798*2/885-960*2/1710-1830MHz*2 65°/65°/65° 13/14/16.5dBi Antenna (Integrated RCU)

TDD: Electrical Specifications			
Frequency(MHz)		1885-1915	2010-2025
Polarization		±45°	
Coupling factor between calibration port and each antenna port(dB)		-26±2	
Max.amplitude tolerance from calibration port to input ports(dB)		≤0.7	
Max.phase tolerance from calibration port to input ports(°)		≤5	
Co-polarization isolation between ports(dB)		≥25	
Cross-polarization isolation between ports(dB)		≥25	
Isolation between 1800/FA		≥30	
Electrical down tilt (°)		2-12°	
VSWR		≤1.5	
Single column beam	Horizontal 3dB beam width (°)	100±15	90±15
	Gain(dBi)	≥13.5	≥14.5
	0° Cross polar ratio (dB)	≥15	
	±60° Cross polar ratio (dB)	≥8	
	Front to back ratio (dB)	≥23	≥23
65° Broadcast beam	Horizontal 3dB beam width (°)	/	65±5
	Gain(dBi)	≥15	≥14.5
	±32.5° sector power ratio (%)	72±7	/
	±60° sector power ratio (%)	≥95	/
	Beam ±60° edge power drop (dB)	12±3	12±3
	Vertical 3dB beam width (°)	≥7	≥6.5
	0° Cross polar ratio (dB)	≥18	≥18
	±60° Cross polar ratio (dB)	≥8	≥8
	Front to back ratio (dB)	≥25	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-14	≤-14
Service beam	Steered 0° Gain, dBi	≥19.5	≥20.5
	Steered 0° Beamwidth, Horizontal, degrees	≤29	≤26
	Steered 0° Horizontal Sidelobe, dB	≤-12	
	Steered 60° Gain, dBi	≥17	≥17
	Steered 60° Beamwidth, Horizontal, degrees	≤32	
	Steered 60° Horizontal Sidelobe, dB	≤-5	
	Steered 0° Beam Front to back ratio (dB)	≥28	
	Steered 0° Beam Cross polar ratio (dB)	≥18	

FDD: Electrical Specification			
Frequency (MHz)	(703-788)*2	(885-960)*2	(1710-1830)*2
Polarization	±45°		
Gain (dBi)	≥13	≥14	≥16.5
Tilt (°)	0-14°	0-14°	2-12°
HBW (°)	70±6	65±6	65±6
VBW (°)	14	12	6.5
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8		
1st Sidelobe Suppression (dB)	≤-15	≤-15	≤-15
F/B Ratio (dB)	≥23	≥25	≥25
Inter band Isolation (dB)	≥25		
Intra band Isolation (dB)	≥25		
VSWR	≤1.5		
IMD @2×43dBm (dBm)	≤-107		
Impedance (Ω)	50		
Max. Power (W)	250		
Lightning Protection	DC Ground		
Mechanical Specification			
Connectors	FDD: 12×7/16 DIN Female + TDD: 1×MQ4 Male+1×MQ5 Male		
Antenna Size (mm)	1595×500×196		
Packing Size (mm)	1845×605×295		
Antenna Weight (Kg)	34.1		
Installation Kit Weight (Kg)	5.5		
Packing Weight (Kg)	43.5		
Radom material	FRP		
Radome Color	Gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~18		
Temperature range (°C)	-40 ~ 70		
Last Update 2021-3-24			

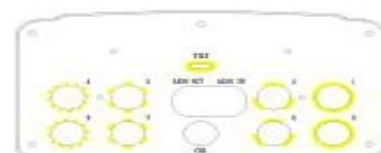


TDD: 2500-2690MHz*4 17dBi Antenna (Integrated RCU)

Electrical Specification			
General parameters	Frequency (MHz)		2500-2690
	Polarization		$\pm 45^\circ$
	Tilt ($^\circ$)		2~12
Calibration and electrical parameters	Coupling factor between calibration port and each antenna port(dB)		-26 $\pm$ 2
	Max.amplitude tolerance from calibration port to input ports(dB)		<0.7
	Max.phase tolerance from calibration port to input ports($^\circ$)		≤ 5
	Ports VSWR		≤ 1.5
	Co-polarization isolation between ports(dB)		2 $^\circ \geq 20$; 3 $^\circ$ -12 $^\circ \geq 25$
	Cross-polarization isolation between ports(dB)		≥ 25
	RET Model		Integrated and replaceable
	RET Protocol		AISG 2.0 remotely upgradeable
Radiation parameters	Single column beam	Horizontal 3dB beam width($^\circ$)	90 $\pm$ 20
		Gain(dBi)	17 $\pm$ 1
		Vertical 3dB beam width($^\circ$)	6 $\pm$ 1
		Cross polar ratio(0 $^\circ$)(dB)	≥ 15
		Front to back ratio(dB)	≥ 30
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤ -18
	65 $^\circ$ Broadcast beam	Horizontal 3dB beam width($^\circ$)	65 $\pm$ 5
		Gain(dBi)	18 $\pm$ 1
		Vertical 3dB beam width($^\circ$)	6 $\pm$ 1
		Cross polar ratio(0 $^\circ$)(dB)	≥ 22
		Front to back ratio(dB)	≥ 30
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤ -18
	Service beam	0 $^\circ$ direct beam gain(dBi)	22 $\pm$ 1
		0 $^\circ$ direct beam horizontal 3dB beam width($^\circ$)	23 $\pm$ 2
		0 $^\circ$ direct beam sidelobe suppression(dB)	≤ -12
		0 $^\circ$ direct beam cross polar ratio(axial)(dB)	≥ 18
		0 $^\circ$ direct beam front to back ratio(dB)	≥ 30
		$\pm 30^\circ$ direct beam gain(dBi)	22 $\pm$ 1

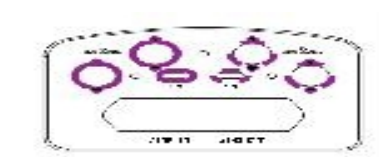
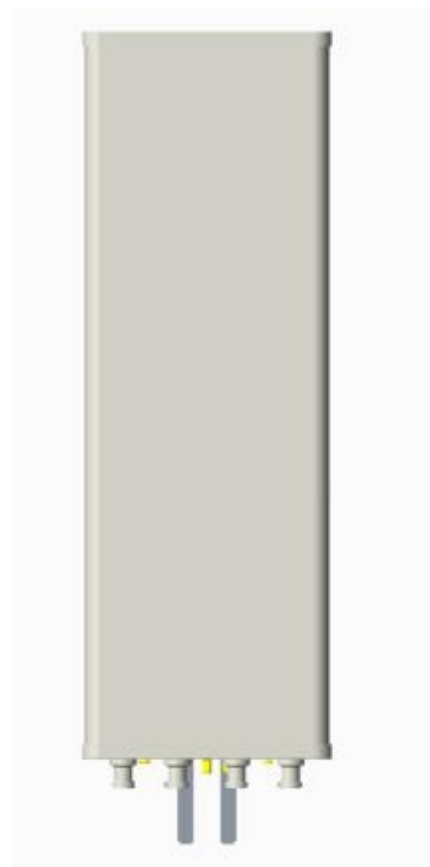
Mechanical Specification

Antenna dimensions(H×W×D)(mm)	1400×274×148
Packing size(mm)	1655×355×225
Antenna net weight(kg)	15.9
Installation kit weight(kg)	5
Packing weight(kg)	23.5
Mechanical downtilt(°)	0~20
Mast diameter(mm)	φ50~ φ115
Radome material	UPVC
Radome colour	Gray
Operating temperature(°C)	-40~60
Wind load(N,at 150km/h) Frontal/Lateral/Rearside	394/286/440
Max. operational wind speed(km/h)	216
Connector type	9×4.3-10 Female
Connector position	Bottom
Connector distance(mm)	≥50

Last Update 2021-4-06

3300-3600MHz*2 65° 14.5dBi Antenna (Integrated RCU)

Electrical Specification	
Frequency (MHz)	(3300-3600) *2
Polarization	±45°
Gain (dBi)	14.5
Tilt (°)	2-12
HBW (°)	65
VBW (°)	10
XPD (dB)	Main Direction ≥15, Sector ±60° ≥8
1st Sidelobe Suppression (dB)	≤-15
F/B Ratio (dB)	≥25
Isolation (dB)	≥26
VSWR	≤1.5
Impedance (Ω)	50
Max. Power (W)	250
RET	Integrated RCU
Lightning Protection	DC Ground
Mechanical Specification	
Antenna Size (mm)	735×160×110
Packing Size (mm)	950×275×205
Connectors	4×N Female
Antenna Weight (Kg)	4.5
Installation Kit Weight (Kg)	2.8
Packing Weight (Kg)	9
Radome Material	PVC
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~16
Operation Temperature (°C)	-40~70
Last Update 2021-4-8	



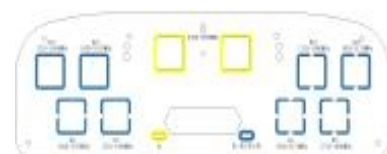
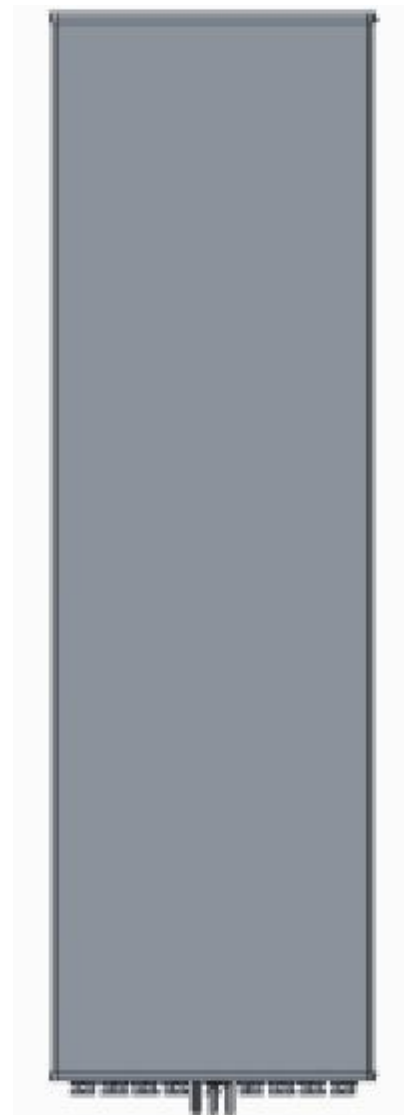
10. TDD+FDD series

TDD+FDD: 1710-1880MHz*2 & 1920-2170MHz*2 65° & 2300-2690Mhz*4 90° Antenna

(Integrated RCU)

TDD: 2300-2690Mhz*4 90°±20°		
Electrical Specifications		
Frequency(Mhz)	2300-2690	
Polarization	±45°	
Coupling factor between calibration port and each antenna port(dB)	-26±2	
Max.amplitude tolerance from calibration port to input ports(dB)	<0.9	
Max.phase tolerance from calibration port to input ports(°)	≤7	
Co-polarization isolation between ports(dB)	2°~ 3°≥20, 4°~12°≥25	
Cross-polarization isolation between ports(dB)	2°~6°≥25, 7°~12°≥28	
Electrical down tilt (°)	2 ~12	
VSWR	≤1.5	
Single column beam	Horizontal 3dB beam width (°)	90±20
	Gain(dBi)	17±1
	Vertical 3dB beam width (°)	6±1
	Cross polar ratio (dB)	≥15
	Front to back ratio (dB)	≥23
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-16
65° Broadcast beam	Horizontal 3dB beam width (°)	65±5
	Gain(dBi)	18±1
	Vertical 3dB beam width (°)	6±1
	Cross polar ratio (dB)	≥22
	Front to back ratio (dB)	≥25
	Vertical sidelobe suppression for first sidelobe above main beam(dB)	≤-18
Service beam	0° direct beam gain(dBi)	22±1
	0° direct beam horizontal 3dB beam width(°)	23±2
	0° direct beam sidelobe suppression(dB)	≤-12
	0° direct beam cross polar ratio(axial)(dB)	≥18
	0° direct beam front to back ratio(dB)	≥30
	±30° direct beam gain(dBi)	22±1

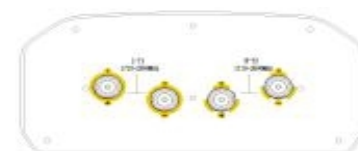
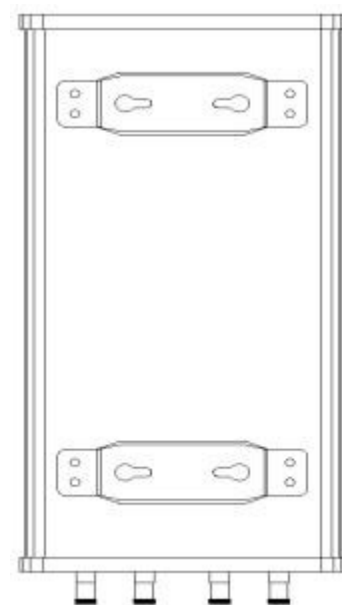
FDD: 1710-1880MHz*2 &1920-2170MHz *2 65°		
Electrical Specification		
Frequency (MHz)	(1710-2170) *2	
	(1710-1880) *2	(1920-2170) *2
Polarization	±45°	
Gain (dBi)	16.8	17.2
Tilt (°)	2-12°	
HBW (°)	65±6	
VBW (°)	6±1	5.7±1
XPD (dB)	Main Direction ≥15	
1st Sidelobe Suppression (dB)	≤-16	
F/B Ratio (dB)	≥25	
Isolation (dB)	≥28	
VSWR	≤1.5	
IMD @2×43dBm (dBm)	≤-107	
Impedance (Ω)	50	
Max. Power (W)	300	
RET	Integrated RCU	
Lightning Protection	DC Ground	
Mechanical Specifications		
Input connector	FDD:(8×4.3-10 Female)+TDD:(MQ4 Male+MQ5 Male)	
Dimensions of antenna(mm)	1650x500x158	
Packing size(mm)	1903x605x260	
Weight of antenna (Kg)	33	
Mechanical tilt (°)	0-16°	
Installation Kit Weight(Kg)	5.7	
Packing Weight(Kg)	42.5	
Diameter of installation pole (mm)	Φ50-φ115	
Temperature range (°C)	-40 ~ 60 °C	
Radom material	Gray	
Radom material	FRP	
Wind load(N, at 150km/h) Front/Lateral/Rearside	848/360/948	
Max. operational wind speed(km/h)	216	
Last Update 2021-4-6		



11. Small Cell series

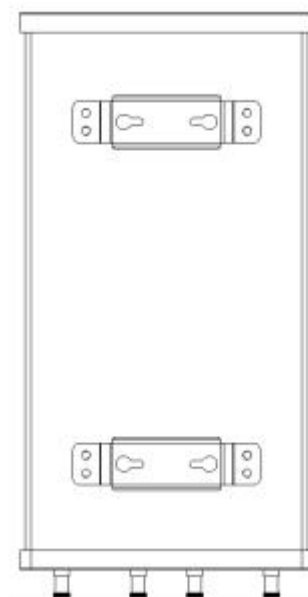
1710-2690MHz*2 85° 13dBi FET Antenna

Electrical Specification				
Frequency (MHz)	(1710-2690)*2			
	1710-1880	1920-2170	2200-2400	2500-2690
Polarization	±45°			
Gain (dBi)	12.5±0.5	12.7±0.5	12.8±0.5	13±0.5
Tilt (°)	0			
HBW (°)	89±5	87±5	85±5	84±5
VBW (°)	9.5±3	8.5±3	7.5±3	6.5±3
XPD (dB)	Main Direction ≥15			
1st Sidelobe Suppression (dB)	≤-15			
F/B Ratio (dB)	≥25			
Intra band Isolation(dB)	≥28			
Inter band Isolation(dB)	≥28			
VSWR	≤1.5			
IMD @2×43dBm（dBm）	≤-107			
Impedance (Ω)	50			
Max. Power (W)	200			
Lightning Protection	DC Ground			
Mechanical Specification				
Antenna Size (mm)	500×295×145			
Packing Size (mm)	715×360×210			
Connectors	4×4.3-10 Female			
Wind load(N,at 150km/h) Frontal/Lateral/Rearside	151/101/169			
Antenna Weight (Kg)	5.2			
Installation Kit Weight (Kg)	2.8			
Packing Weight (Kg)	9			
Radome Material	FRP			
Radome Color	gray			
Mounting Hardware (mm)	φ50~φ115			
Downtilt angle (degree)	0~28			
Operation Temperature (°C)	-45~65			
Last Update 2021-04-19				



690-960MHz*2 65°12dBi FET Antenna

Electrical Specification			
Frequency (MHz)	(690-960)*2		
	690-790	790-880	880-960
Polarization	±45°		
Gain (dBi)	11.2±0.2	11.5±0.3	12±0.3
Tilt (°)	0		
HBW (°)	70±5	68±5	65±5
VBW (°)	30±4	27±4	24±4
XPD (dB)	Main Direction ≥15		
1st Sidelobe Suppression (dB)	≤-15		
F/B Ratio (dB)	≥25		
Intra band Isolation(dB)	≥28		
Inter band Isolation(dB)	≥25		
VSWR	≤1.5		
IMD @2×43dBm (dBm)	≤-107		
Impedance (Ω)	50		
Max. Power (W)	200		
Lightning Protection	DC Ground		
Mechanical Specification			
Antenna Size (mm)	500×355×165		
Packing Size (mm)	715×440×250		
Connectors	4×4.3-10 Female		
Wind load(N,at 150km/h) Frontal/Lateral/Rearside	182/114/204		
Antenna Weight (Kg)	8.8		
Installation Kit Weight (Kg)	2.8		
Packing Weight (Kg)	12.6		
Radome Material	FRP		
Radome Color	gray		
Mounting Hardware (mm)	φ50~φ115		
Downtilt angle (degree)	0~28		
Operation Temperature (°C)	-45~65		
Last Update 2021-04-19			



690-960*2 & 1710-2690MHz*2 65° 12/14dBi FET Antenna

Electrical Specification							
Frequency (MHz)	(690-960)*2			(1710-2690)*2			
	690-790	790-880	880-960	1710-1880	1920-2170	2200-2400	2500-2690
Polarization	±45°			±45°			
Gain (dBi)	11.2±0.2	11.5±0.3	12±0.3	13.5±0.3	13.7±0.3	13.8±0.3	14±0.3
Tilt (°)	0			0			
HBW (°)	69±6	67±6	65±6	67±6	66±6	64±6	62±6
VBW (°)	38±4	33±4	30±4	17±3	15±3	13±3	11±3
XPD (dB)	Main Direction ≥15			Main Direction ≥15			
1st Sidelobe Suppression (dB)	≤-15			≤-15			
F/B Ratio (dB)	≥25			≥25			
Intra band Isolation(dB)	≥28			≥28			
Inter band Isolation(dB)	≥28			≥28			
VSWR	≤1.5						
IMD @2×43dBm (dBm)	≤-107						
Impedance (Ω)	50						
Max. Power (W)	200						
Lightning Protection	DC Ground						

Mechanical Specification	
Antenna Size (mm)	500×450×145
Packing Size (mm)	715×550×250
Connectors	8×4.3-10 Female
Wind load(N,at 150km/h) Frontal/Lateral/Rearside	231/101/259
Antenna Weight (Kg)	8.9
Installation Kit Weight (Kg)	2.8
Packing Weight (Kg)	13.1
Radome Material	FRP
Radome Color	gray
Mounting Hardware (mm)	φ50~φ115
Downtilt angle (degree)	0~28
Operation Temperature (°C)	-45~65
Last Update 2021-04-19	

