

NEAR-FIELD | MID-RANGE | LONG-RANGE



NearField Antenna UHF	Mid-Range Antenna UHF				Long-Range Antenna UHF		
NF A1030	MR A5020 CP	MR A5020 LX	MR A1313	LR A5010	LR A3314	LR A2222	

Mechanical | Enviromental Properties

Dimension in mm	300 × 300 × 7.1	150 × 150 × 14	150 × 150 × 14	130 × 130 × 18	250 × 250 × 14	335 x 134 x 17,5	218 × 218 × 23.8
Housing-Material	Fire Retardant ABS	UV-Resistant / Fire Retardant ABS	UV-Resistant / Fire Retardant ABS	UV-Resistant White ABS	UV-Resistant / Fire Retardant ABS	F4BTM high frequency sheet, aluminum, ABS	UV-Resistant White ABS
Interface type	SMA female side connector						
IP Protection Class	IP53	IP68	IP69K	IP65	IP67	IP67	IP67
Mounting	Integrated mounting guides on back	Flush or VESA mount using four mounting holes	Flush or VESA mount using four mounting holes	L-shaped pole mounting bracket	Flush or VESA mount	Installation through hanging holes on both sides	Two mounting holes on each side (self-tapping screw mounting)
Weigth	550g	250g	250g	210g	650 g	450 g	400 g
Work Temp	0 ° to +50 °C	-30 ° to +65 °C	-90 ° to +65 °C	-20 ° to +65 °C	-20° to +65 °C	-40° to +85°C	-40° to +85°C

Electrical Specifications

Work frequency	864 – 869 MHz (EU) 902 – 928 MHz (US)						
Operating Distance	-	Up to 4 m*	Up to 4 m*	Up to 4 m*	Up to 8 m*	Up to 8 m*	Up to 8 m*
Band width	-	105° in both planes	100° in XZ and 105° in YZ plane	Horizontal: 85° ±5 / Vertical: 108° ±10	68° in both planes	Horizontal: 40° / Vertical: 86°	70° in both planes
Antenna gain	-	5 dBiC	5 dBiC	5.5 dBiC	8.5 dBiC	≥8 dBiC	≥8 dBiC
VSWR	1.8 typical	1.4 typical	2.5 typical	1.3 typical	1.3 typical	≤1.5 typical	≤1.5 typical
Polarization mode	No Polarization	Right Hand Circular Polarization	Vertically Polarized (along the Y axis)	Right Hand Circular Polarization	Right Hand Circular Polarization	Right Hand Circular Polarization	Right Hand Circular Polarization
Axial ratio	Not Applicable	2 dB typical	Not Applicable	2.5 dB typical	1 dB typical	≤3 dB typical	≤3 dB typical
Impedance	50Ω	50Ω	0Ω	50Ω	50Ω	50Ω	50Ω
Accessories	-	Connector Protector Plate R-IN-UHF-A5020-CBP	Connector Protector Plate R-IN-UHF-A5020-CBP	-	Mounting Plate R-IN-AC-9935U	-	-
Order Codes	R-IN-UHF-A1030 R-IN-UHF-A1030-FCC	R-IN-UHF-A5020 R-IN-UHF-A5020-FCC	R-IN-UHF-A5020LX R-IN-UHF-A5020LX-FCC	R-IN-UHF-A1313 R-IN-UHF-A1313-FCC	R-IN-UHF-A5010 R-IN-UHF-A5010-FCC	R-IN-UHF-A3314 R-IN-UHF-A3314-FCC	R-IN-UHF-A2222 R-IN-UHF-A2222-FCC

SPECIAL APPLICATIONS



Cylindrical Antenna UHF	Portal Application Antenna UHF		Shelf Antenna UHF
Cylindrical M30	DOOR A8065	PORTAL A5060	SHELF A7030C

Mechanical Enviromental Properties				
Dimension in mm	M30 x 1,5 x 90,15	700 × 90 × 10.5	600 × 300 × 8.6	300 x 300 x 8,5
Housing-Material	Nickelled Brass + PC	Fire Retardant ABS		
Interface type	TNC female	SMA female side connector		
IP Protection Class	IP65	IP54		
Mounting	Screw Mount (M30 Standard)	Mounting guides / adhesive foam strips	Flush or VESA mount	Integrated mounting guides
Weigth	200g	600g	1500g	850 g
Work Temp	- 20 °C to +55 °C			
Electrical Specifications				
Work frequency	864 – 869 MHz (EU) 902 – 928 MHz (US)			
Operating Distance	Up to 20 cm*	Up to 2 m*	Up to 10 m*	Up to 2 m*
Band width	Horizontal: 100° Vertical: 170°	see data sheet	Horizontal: 25° Vertical: 60°	65° in both planes
Antenna gain	-10.5 dBiC max	see data sheet	10.5 dBiC	6 dBiC
VSWR	2.0 : 1 max	see data sheet	1.4 typical	
Polarization mode	Circular Polarization	Vertically / Horizontally Linear	Right Hand Circular Polarization	
Axial ratio	3 dB max	see data sheet	2 dB typical	
Impedance	50Ω	50Ω	50Ω	50Ω
Accessories	-	-	Mounting Plate R-IN-UHF-A5060-MP	-
Order Codes	R-IN-UHF-9131U R-IN-UHF-9133U (FCC)	R-IN-UHF-A8065 R-IN-UHF-A8065-FCC	R-IN-UHF-A5060 R-IN-UHF-A5060-FCC	R-IN-UHF-A7030C R-IN-UHF-A7030C-FCC