

# L-Band 4T4R / C-Band 8T8R 6Feet Antenna [MA-2M4C-65F6-12P]

## L-Band / C-Band 12+cal. port Macro Antenna

- L-band / C-band in one Antenna
- Fully internal replaceable RET (AISG 2.0)
- The L-band / C-band are controlled by the RET with electrical tilt.
- Optimized width for reduced wind loading
- Top level of PIM performance for network environments

1526-1680	3300-3700	3700-4000
4 ports	8 port + Cal.port	8 port + Cal.port
±45°	±45°	±45°
65°	92°,70°,26°	88°,65°,24°
0-10°	0-10°	0-10°

ELECTRICAL SPECIFICATIONS			
Frequency Range [MHz]	G1, G2	P1	
	1526-1680	3300-3700	3700-4000
Gain [dBi]	15.3	14.5	14.9
Max Gain [dBi]	15.0±0.3	14.0±0.6	14.5±0.7
Azimuth Beamwidth [°], 3dB	65±4.0	92±18	88±14
Elevation Beamwidth [°]	12.8±1.0	7.1±0.5	6.7±0.4
Electrical Downtilt [°]	0-10	0-10	0-10
	Support AISG 2.0		
First Upper Side Lobe Suppression [dB]	15	14	14
Front to Back Ratio, Co-Polar ±30° [dB]	25	25	25
Cross Polar Discrimination Over Boresight [dB]	18	13	13
Cross Polar Isolation ports [dB]	> 25	> 23	
Inter band Isolation [dB]	> 30	> 30	
Polarization [°]	±45		
Impedance [Ω]	50		
VSWR	< 1.5 : 1		
Passive Intermodulation (2x43 dBm Carrier) [dBc]	< -153	-	
Maximum input Power Per Port [W]	200	150	
Maximum Effective Power whole antenna [W]	700		

ELECTRICAL SPECIFICATIONS			
Frequency Range [MHz]		3300-3700	3700-4000
Broadcast beam	Gain [dBi]	16.2	16.4
	Azimuth Beamwidth [°], 3dB	70±5.0	65±4.0
	Elevation Beamwidth [°]	7.0±0.4	6.7±0.4
Service beam	Steered 0° Gain [dBi]	18.0±0.7	18.3±0.7
	Steered 0° Azimuth Beamwidth [°], 3dB	26	24
	Steered 30° Gain [dBi]	17.7	18.0
	Steered 30° Azimuth Beamwidth [°], 3dB	27	25
Soft split	Gain [dBi]	18.1	18.4
	Azimuth Beamwidth [°], 3dB	27	25
	Cross Polar Discrimination Over Boresight [dB]	13	13
	First Upper sidelobe suppression [dB]	14	14
Calibration parameters	Coupling between any port to Calibration port [dB]	26±2	
	Δ Amplitude of antenna port and Calibration port [dB]	0.9	
	Δ Phase of antenna port and Calibration port [deg]	7	
	Ports VSWR	< 1.5 : 1	

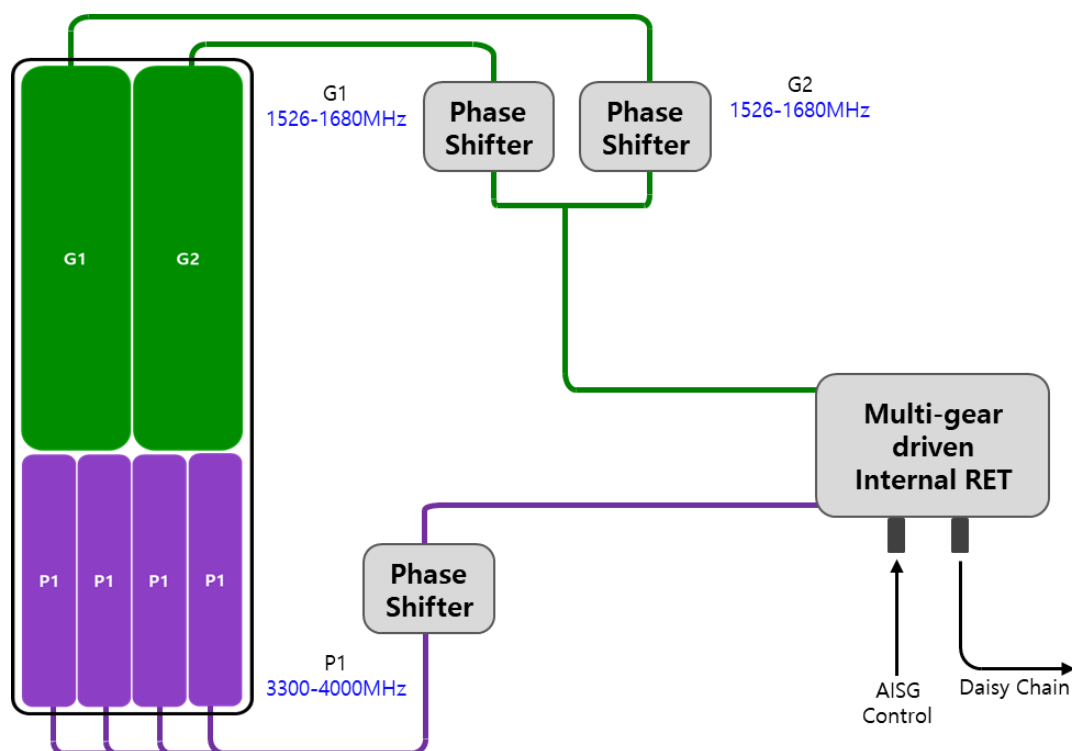
The specification follows NGMN recommendations on Base Station Antenna Standards. (BASTA)

# L-Band 4T4R / C-Band 8T8R 6Feet Antenna [MA-2M4C-65F6-12P]

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: H x W x D [inches]	72.0 x 11.7 x 7.0 (1828 x 298 x 178mm)
Net Weight (antenna) [lbs]	54(24.5kg)
Connector Type	4.3-10(F)
Connector Quantity [EA]	12 + Cal. port
Connector Position	Bottom
Windload, Calculation [km/h]	150
Windload, Frontal [N]	454
Windload, Lateral [N]	185
Survival Wind Speed [km/h]	241
Mechanical downtilt [°]	0-10
Radome Material	FRP, UV resistance
Radome Color	Light gray
Lightning Protection	DC ground

# L-Band 4T4R / C-Band 8T8R 6Foot Antenna [MA-2M4C-65F6-12P]

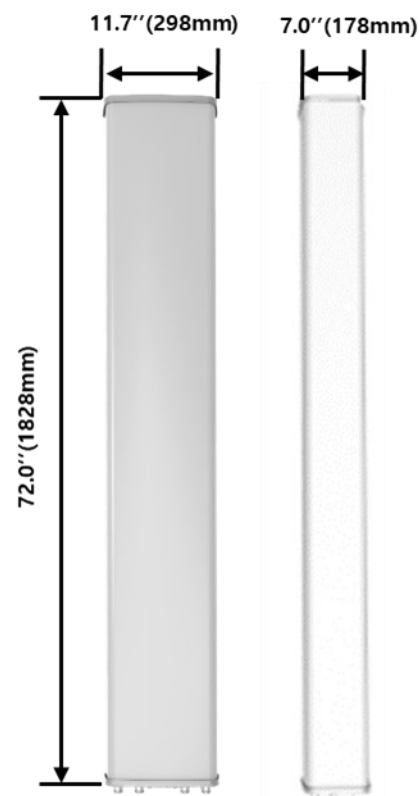
## RET CONTROL MECHANISM



## CORRELATION TABLE

Array ID	Frequency [MHz]	RF Port No.	AISG RET UID
<b>G1,G2</b>	1528 - 1680	1, 2, 3, 4	DxxxxxxxxxxxxG1
<b>P1</b>	3300 - 4000	5~12	DxxxxxxxxxxxxP1

## ANTENNA LAYOUT



## RET (Remote Electrical Tilt) unit with 3GPP/AISG2.0

Model	DuraRET-AISG
Protocols	Compliant to AISG 2.0 / 3GPP
Input voltage range	15 ~ 30VDC (pin 6)
Power consumption	< 1.5W (stand by); < 13W (motor activated)
Connectors	2 x 8 pin connector according to IEC 60130-9 According to AISG Daisy chain in: male; Daisy chain out: female
Hardware interface	RS 485A/B (pin 5 / pin 3) Power supply (pin 6) DC return (pin 7) According to AISG
Adjustment time(full range)	< 120 sec
Temperature range	-40~ +70℃
Protection class	IP55 (Installed)
Housing material	Body: Aluminum Cover: Aluminum
Weight	< 400g
Main dimensions ( $W_1 \times D_1 \times H$ ) (Max. dimensions ( $W_2 \times D_2 \times H$ ))	75.0 × 105.0 × 40.0 mm (105.0 × 143.5 × 40.0 mm)

