

MT-242020/NV/K

865 – 870 MHz 9.5 dBi Reader Antenna

Electrical

Frequency	865 – 870 MHz
Gain	9 dBi min 9.5 dBi max
VSWR	1.3:1 max
3 dB Beam Width	Azimuth: 62° typ Elevation: 58° typ
Polarization	Linear Vertical
Side Lobes Level Azimuth	-23 dB @ ± 110 to ± 180
Side Lobes Level Elevation	-22 dB @ ± 110 to ± 180
Cross Polarization Azimuth	-17 dB max
Cross Polarization Elevation	-25 dB max
F/B Ratio	-21 dB max
Input Impedance	50 ohm
Input Power	6 W max
Lightning Protection	DC Grounded

Mechanical

Dimensions LxWxD	305 x 305 x 25 mm max
Weight	1.2 Kg max
Connector	N – type Female
Radome	Plastic
Base Plate	Aluminum with chemical conversion coating

Environmental

Test	Standard	Duration	Temperature	Notes
Low Temperature	IEC 68-2-1	72 h	-55 °C	
High Temperature	IEC 68-2-2	72 h	+71 °C	
Temp. Cycling	IEC 68-2-14	1 h	-45°C to +70°C	3 Cycles
Thermal Shock Non-Operating			-30°C to +70°C	Ramp 30°C/min
Humidity	ETSI EN300-2-4 T4.1E	144 h		95%
Water Tightness	IEC 529			IP67*
Dust Resistance				IP67*
Solar Radiation	ASTM G53	1000 h		
Ozone Resistance	ETSI 300			
Flammability	UL 94			Class HB
Quasi Random Vibration				20 g rms for 4 hours
Vehicle Vibration Operating	1g rms, 10-500 Hz, in 3 axis	6 hours total, 2 h in each axis. Accelerated wear – an additional 50 h in worst case axis.		
Mechanical Shock Operating	10g, 11 msec, half sine pulse			

*For outdoor installations that require mounting the antenna horizontally facing ground, please contact MTI representative for the dedicated P/N

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