MT-141028/SV

20 – 1200 MHz Airborne DF Dipole Antenna

Wireless Edge Antenna Solutions
An MTI Company

Electrical

Frequency	20 – 1200 MHz						
Gain	MHz	20	30	40	60	80	108
	dBi	-40	-33	-28.5	-22	-18	-7
	MHz	136	174	225	400	500	500 – 1200
	dBi	-5	-2	-2	1	1	>0
VSWR & Return Loss	3:1 typ RL>6.02 dB 4:1 max @ 20 – 120 MHz 3.5:1 max @ 100 – 1200 MHz RL > 5.1						
Azimuth	Omni						
3 dB Beam width Elevation	±20° min @ 20 – 450 MHz ±15° min @ 450 – 1100 MHz ±8° min @ 1100 – 1200 MHz						
Polarization	Vertical						
Input Impedance	50 Ω						
Input Power	1 W CW max						
Lightning Protection	DC Grounded						
Phase Tracking @ bore sight and ±20° elevation relative to reference MTI antenna	±5° typ, ±8° max @ 20 – 450 MHz						
Phase Tracking @ bore sight and 8° elevation relative to reference MTI antenna	±7° typ, ±12° max @ 450 – 1200 MHz						

Mechanical

Dimensions LxWxD	650 x 210 x 25 mm
Weight	1.45 Kg max
Connector	SMA FemaleMIL-C-39012
Color	Polyurethane per MIL-C-83286 GRAY 36320 PER FED-STD-595
MTBF	50,000 hr @ 55° C

Environmental

Test	Standard	Duration	Temperature	Notes
Low Temperature	MIL-STD-810E Method 501.3 Proc. I & II	24 h	-54° C	
High Temperature	MIL-STD-810E Method 501.3 Proc. I & II	96 h	+71° C	
Temperature/Altitude	MIL-STD-810C Method 504.1 Proc. I	33 h	-54° to 55° C	30,000 ft
Temperature Cycling			-45° to 70° C	3 Cycles
Vibration	MIL-STD-810E Method 514.4 fig 514.4-7a L1=0.3g^2/Hz	3 X 0.5 h per axis		
Mechanical Shock	MIL-STD-810F Method 516.5 Proc. I	11±1 msec		3 impacts for 6 axis 15 g each
Humidity	MIL-STD-810F Method 507.4			100%
Side Pressure				55 Knots
Salt Spray	MIL-STD-810E Method 509.3 Proc. I	48 h	5% Nacl	
Sand	MIL-STD-810E Method 510.3 Proc. II			
Dust	MIL-STD-810E Method 510.3 Proc. I			
Wind Speed				55 Knots
Acceleration	MIL-STD-810F Method 513.5			
Rain	MIL-STD-810E Method 506.4 Proc. I			

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