

Specification for MT – 799009/WD/A 60 GHz Flat Antenna, Embedded 57-66 GHz, 38.5dBi

THIS DOCUMENT AND THE INFORMATION CONTAINED IN IT ARE PROPRIETARY AND CONFIDENTIAL TO MTI. NO PERSON IS ALLOWED TO COPY REPRINT REPRODUCE OR PUBLISH ANY PART OF THIS DOCUMENT NOR DISCLOSE ITS CONTENTS TO OTHERS NOR MAKE ANY USE OF IT NOR ALLOW OR ASSIST OTHERS TO MAKE ANY USE OF IT, UNLESS BY THE PRIOR WRITTEN EXPRESS AUTHORIZATION OF MTI AND THEN ONLY TO THE EXTENT AUTHORIZED.

(C) COPYRIGHT – MTI WIRELESS EDGE LTD.

MTI WIRELESS EDGE LTD.	MT – 799009/WD/A	REV-A
SCALE: NONE	DOC NO. RD43809900C	SHEET 1 OF 4

REVISION RECORD				
REV	ECO	DESCRIPTION	APVD	DATE
01	--	UPDATED SPEC	I.S.	2.2.15
02	--	Updated Spec	I.S	25.3.15
03	--	Update Weight	YAEL H.	13.1.16
04	--	Update spec	Yael h.	21.2.16
05	--	Add Flammability	YAEL H.	1.3.16
A	DH90	Released	Yael h.	15.3.16

SHEET	43	44	45	46	47	48	49	50	51	52	53	54	55	56
REV														
SHEET	29	30	31	32	33	34	35	36	37	38	39	40	41	42
REV														
SHEET	15	16	17	18	19	20	21	22	23	24	25	26	27	28
REV														
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14
REV	A	A	A	A										

PRODUCT STATUS:			
<input type="checkbox"/> PROPOSAL	<input type="checkbox"/> IN DEVELOPMENT	<input type="checkbox"/> PREPRODUCTION	<input checked="" type="checkbox"/> PRODUCTION

CONTRACT NO			
ACTION	NAME	SIGN	DATE
PREP	YAEL HRASH	YAEL	10.7.15
CHKD	DANIEL ZERAH	D.Z	10.3.16
CHKD			
CHKD	YEHUDA MILER	Y.M	7.2.16
DSGN	ISRAEL SARAF	I.S	2.2.16
PROJ	HAIM GILER	H.G	2.2.16
MFG			
QA	MICHA GADOT	M.G	3.2.16
MARK.	DOV FEINER	D.F	10.3.16

MTI WIRELESS EDGE LTD.	MT-799009/WD/A		
DOC NO. RD43809900C			
SCALE: NONE	CLASSIFICATION: NONE	REV-A	SHEET 2 OF 4

SPECIFICATION

Flat Panel 60 GHz Antenna, Embedded

MTI PART NUMBER	MT – 799009/WD/A	
1. ELECTRICAL		
Frequency Range	57-66 GHz	
Gain	38 dBi – 39 dBi	
VSWR	1.7 : 1	
3 dB Beam width	1.8°	
Polarization	Single Linear	
XPOL	30 dB	
Side lobe suppression	Mounting polarization	Side lobe suppression
	5° or 95° (V or H with 20 dB XPOL)	ETSI EN 302 217-4-2 V1 5.1 CLASS 2
	45° (Diamond)	ETSI EN 302 217-4-2 V1 5.1 CLASS 3
Radome, Recommendations	See table below	
Aperture size, free sight	128.3 x 125.5 mm (min)	
2. MECHANICAL		
Dimensions (LxWxH)	148 x 141.5 x 9.4	
Weight	180 gr	
Connector	WR-15 Waveguide	
Outline Drawing	RD43899800C	

3. ENVIRONMENTAL				
TEST	STANDARD	DURATION	TEMPERTURE	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 +70°C	3 Cycles
Vibration	IEC 60721-3-4	30min/axis	-	Random 4M3
Mechanical shock	IEC 60721-3-4	-	-	4M3
Flammability	RTCA DO-160E	-	-	Section 26, Category C

MTI WIRELESS EDGE LTD.		MT-799009/WD/A		
DOC NO. RD43809900C				
SCALE: NONE	CLASSIFICATION: NONE	REV-A	SHEET 3 OF 4	

4. Recommendations for Radome Installation

Material of Radome	Dielectric Constant	Thickness of Radome (mm)	Distance of Radome from Antenna (mm, min)
PP	2.25	1.63	2.5
PC	2.75	1.47	2.5
PTFE	2.1	1.68	2.5
HDPE	2.3	1.61	2.5
REXOLITE	2.5	1.54	2.5
NORYL	2.6	1.51	2.5

MTI WIRELESS EDGE LTD.		MT-799009/WD/A	
DOC NO. RD43809900C			
SCALE: NONE	CLASSIFICATION: NONE	REV-A	SHEET 4 OF 4