

FWX-614RSXXX-514 SPECIFICATIONS

MANUFACTURER: JOYMAX INDUSTRIES

T-2.4+5.xGHz		
FWX-614RSXXX-514	Impedance:	50Ω
Swivel Type, Replacement Antenna	SWR:	≤2.0
	Gain:	4 dBi

<http://www.joymax-antenna.com/antenna-wifi.asp?select=T-2.4%2B5.xGHz>

1/11/2010

Antenna

Page 8 of 12



Indoor



Radiation:	Omni-directional
Connector:	SMA Plug (Reverse Polarity)
Length:	136mm
Weight:	28g

Stock: 9000 ± 0.5 / ± 0.5
證:9000

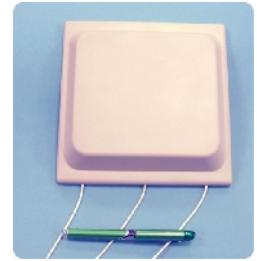
2.3-2.7 GHz & 4.9-6.1 GHz Dual Band MIMO Applications Sector Antenna, 120°

MA-WE2458 -3H

MARS Dual Band Sector antenna provides coverage of 2.3 to 2.7 GHz & 4.9 to 6.1 GHz in a single antenna radome.

Additional Features:

- simultaneous coverage of 802.11 a,b,e,g,n,WiMAX & 4.9 GHz Public Safety Bands
- light weight and durable construction.
- UV protected radome made of plastic



Specifications:

Electrical

Frequency range	2.3 - 2.7 GHz	4.9 - 6.1 GHz
Gain, typ.	5 dBi x3	5 dBi x3
VSWR, max.	2:1 (typ. 1.5:1)	2:1 (typ.1.5:1)
3 dB Beam-Width, H-Plane, typ.	120 °	120 °
3 dB Beam-Width, E-Plane, typ.	70 °	70 °
Polarization	Vertical and 2 x Dual Slant $\hat{A}\pm 45\hat{A}^\circ$	
Input power, max	20 Watt	
Input Impedance	50 Ohm	

Mechanical

Dimensions	200 x 200 x 33 mm (7.9" x7.9" x 1.25")	
Weight	260 gr.	
Connector	3 x Coaxial Cable RG 316 with RPSMA	
Back Plane	Aluminum; protected through chemical passivation	
Radome	UV Protected Plastic	
Mount	Wall Mountable or See Ordering Options Below	

Environmental

Operating Temperature Range	- 40°C to + 70°C	
Vibration	According to IEC 60721-3-4	
Flammability	UL94	
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)	
Service Life	>10 years	

Ordering Options

Antenna 3x Coaxial Cable RG 316 with RPSMA, wall mountable	MA-WE2458 -3H
Antenna 3x Coaxial Cable RG 316 with N-Type male with provision for Az/El adjustable mount MNT-22	MA-WE2458 -3H 2
Antenna with 3x N-Type Female connectors	MA-WE2458 -3H N

Specifications subject to change without notice

MT-484026/NVH



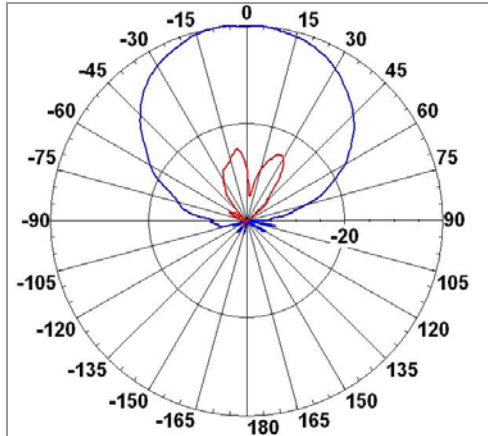
5.15-5.875GHz 16dBi 60deg Dual Pol. Null Filled Base Station Antenna

Specifications

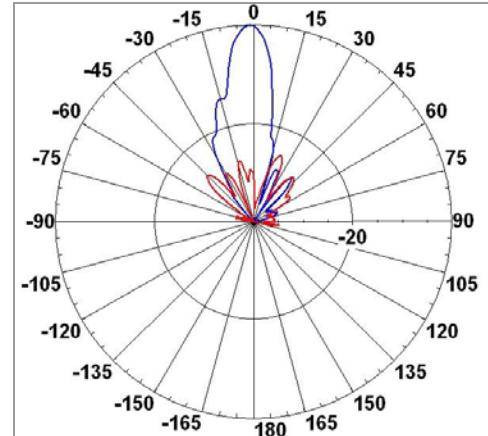
MTI PART NUMBER		MT - 484026/NVH		
ELECTRICAL				
REGULATORY COMPLIANCE	ETSI EN 302 085 V1.1.2 (2001-2002)			
FREQUENCY RANGE	5.15 - 5.875GHz			
GAIN	PORT V: 16 dBi (min) , PORT H: 15dBi			
VSWR	1.7 : 1 (max)			
AZIMUTH BEAMWIDTH	Port V: ETSI EN 302 085 V1.1.2 CS1-CS3 13 dBi 60° ± 4 Port H: ETSI EN 302 085 V1.1.2 CS1-CS3 12 dBi -4/ +7			
POLARIZATION	Dual Vertical & Horizontal			
ELEVATION BEAMWIDTH	10° ± 4°			
SIDELOBES LEVEL	-30 dB (max) @ ± 90°			
ELEVATION NULL FILL BELOW HORIZON	ETSI EN 302 085 V1.1.2 CS1-CS3			
	1 ST NULL	-15 dB (min) @ 10°		
	2 ND NULL	-25 dB (min) @ 20°		
CROSS POLARIZATION	ETSI EN 302 085 V1.1.2 CS1-CS3 -24 dB (max)			
PORT TO PORT ISOLATION	-35dB			
F/B RATIO	-30dB (max)			
INPUT IMPEDANCE	50 (ohm)			
INPUT POWER	6W (max)			
LIGHTNING PROTECTION	DC Grounded			
MECHANICAL				
DIMENSIONS (LxWxD)	436x250x10mm (max)			
WEIGHT	2.2 kg (max)			
CONNECTOR	2 x N-Type Female			
RADOME	Plastic			
BASE PLATE	Aluminum with chemical conversion coating			
OUTLINE DRAWING	See page 2			
MOUNTING KIT	MT-120019			
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 +70°C	3 Cycles
VIBRATION	IEC 60721-3-4	30 min/axis	-	Random 4M5
SHOCK MECHANICAL	IEC 60721-3-4	-	-	4M5
HUMIDITY	ETSI EN300-2-4 T4.1E	144 h	-	95%
WATER TIGHTNESS	IEC 529	-	-	IP54
SOLAR RADIATION	ASTAM G53	1000 h	-	-
FLAMMABILITY	UL 94	-	-	Class HB
SALT SPRAY	IEC 68-2-11 Ka	500 h	-	-
ICE AND SNOW	-	-	-	25mm Radial
WIND SPEED SURVIVAL	-	-	-	220 Km/h
OPERATION	-	-	-	160 Km/h
WIND LOAD SUR. FRONT TH.	-	-	-	31.4kg
SIDE TH.	-	-	-	1.3kg

5.15-5.875GHz 16dBi 60deg Dual Pol. Null Filled BTS Antenna

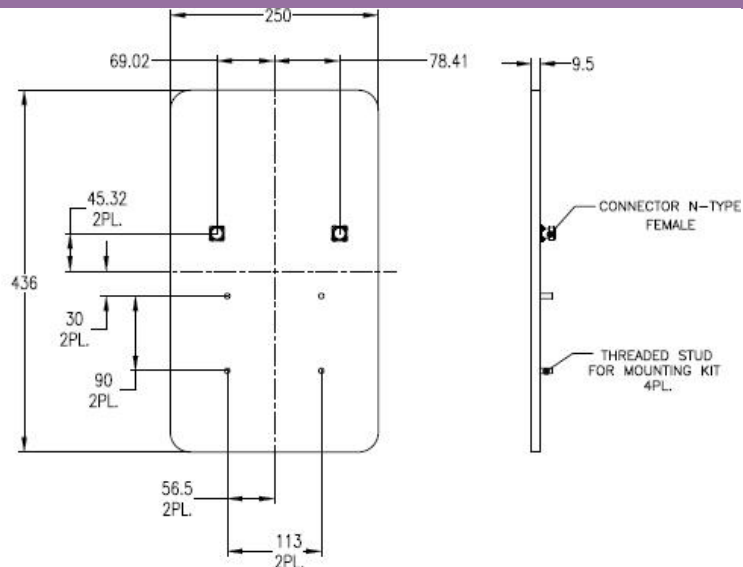
Azimuth Radiation Pattern
 Midband Freq. 5.35 GHz



Elevation Radiation Pattern
 Midband Freq. 5.35 GHz



Dimensions [mm]



Existing Antenna Versions

MTI Wireless Edge is certified according to ISO 9001 and ISO 14001.

WAIVER!

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MT-485025/NVH

5.15-5.875 GHz 23dBi Dual Polarization Subscriber Antenna



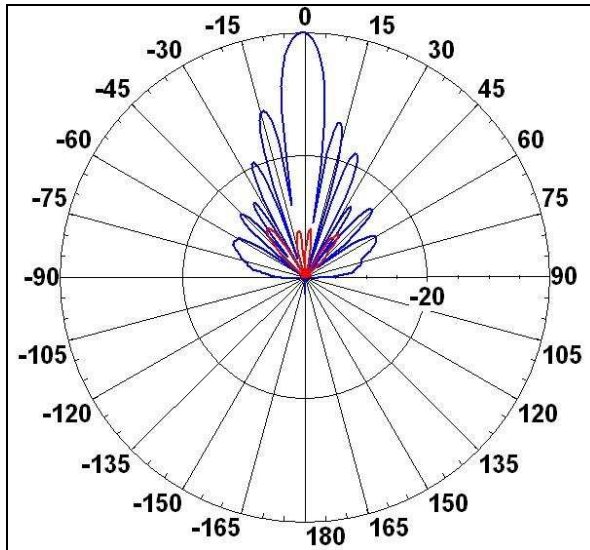
Specifications

MTI PART NUMBER		MT - 485025/NVH			
ELECTRICAL					
REGULATORY COMPLIANCE		ETSI EN 302 085 V.1.2.2 (2001-02) Range 1, RoHS, CE 0682			
FREQUENCY RANGE		5.15 - 5.875 GHz			
GAIN		22.5dBi ±0.5 @ 5.15-5.25GHz (port H) 23dBi ±0.5 @ 5.25-5.875GHz (port H) 23dBi min (port V)			
VSWR		1.7:1 (max) 1.5:1 (typ)			
3 dB BEAMWIDTH		9° (typ)			
POLARIZATION		Dual Linear Vertical & Horizontal			
SIDELOBES LEVEL		ETSI EN 302 085 V.1.1.2 TS1-TS3			
CROSS POLARIZATION		ETSI EN 302 085 V.1.1.2 TS1-TS3			
PORT TO PORT ISOLATION		40dB (min)			
F/B RATIO		-35 dB (min)			
INPUT IMPEDANCE		50 (ohm)			
INPUT POWER		6W (max)			
LIGHTNING PROTECTION		DC Grounded			
MECHANICAL					
DIMENSIONS (LxWxD)		371x371x40mm (max)			
WEIGHT		2.5 kg (max)			
CONNECTOR		2 N-Type Female			
RADOME		Plastic			
BASE PLATE		Aluminum with chemical conversion coating			
OUTLINE DRAWING		See page 2			
MOUNTING KIT		MT-120018			
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 +70° C	3 Cycles	
VIBRATION	IEC 60721-3-4	30 min/axis	-	Random 4M3	
SHOCK MECHANICAL	IEC 60721-3-4	-	-	4M3	
HUMIDITY	ETSI EN300-2-4 T4.1E	144 h	-	95%	
WATER TIGHTNESS	IEC 529	-	-	IP67	
SOLAR RADIATION	ASTAM G53	1000 h	-	-	
FLAMMABILITY	UL 94	-	-	Class HB	
SALT SPRAY	IEC 68-2-11 Ka	500 h	-	-	
ICE AND SNOW	-	-	-	25mm Radial	
WIND SPEED SURVIVAL	-	-	-	220 Km/h	
OPERATION	-	-	-	160 Km/h	
WIND LOAD SUR. FRONT TH.	-	-	-	39.6 kg	
SIDE TH	-	-	-	4.3 kg	

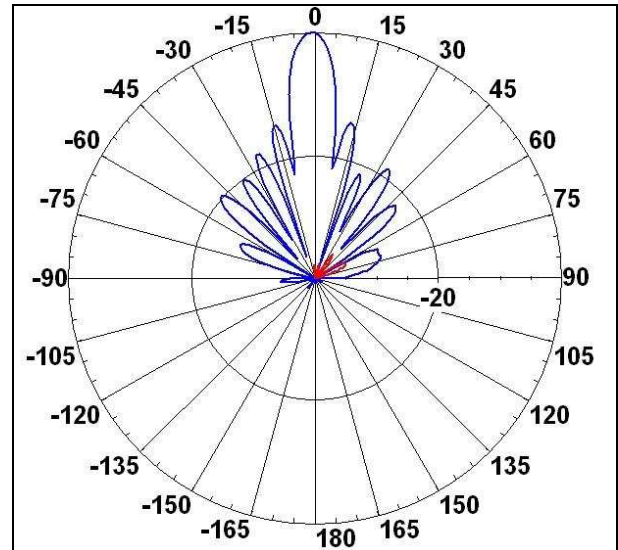
5.15-6.09 GHz 23dBi Dual Polarization Subscriber

Antenna

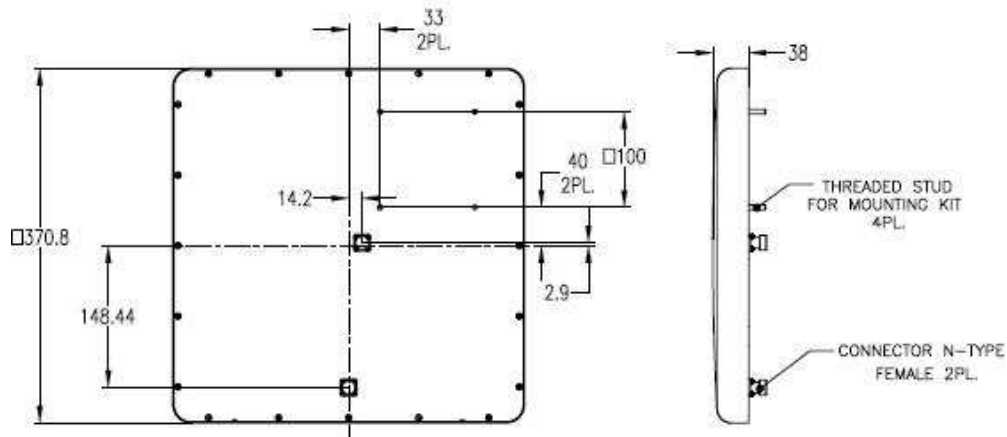
Azimuth Radiation Pattern
 Midband Freq. 5.47 GHz



Elevation Radiation Pattern
 Midband Freq. 5.47 GHz



Dimensions [mm]



Existing Antenna Versions

MT-485025/SVH/E	Integrated Antenna Enclosure
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MTI Wireless Edge is certified according to ISO 9001 and ISO 14001.

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DUAL BAND, VERTICALLY POLARIZED OMNI

The wide band S24493BPX antenna offers full band coverage over 802.11b/a/g and includes all hardware required to mount indoors or outdoors. Achieve the no compromise performance expected from a single band radio system in a dual band radio. While many dual band antennas are a compromise between the two operating bands, the Laird Technologies S24493BPX provides full band coverage and omni-directional coverage in necessary GHz. With a design assisted by Laird Technologies' proprietary optimization tools, performance and value are unparalleled.

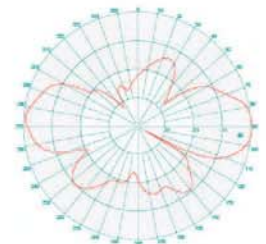
FEATURES

- Vertically polarized omni-directional
- Rugged, lightweight and water resistant
- 2.4-2.9/4.9-5.9 GHz, full 802.11b/a/g wide band performance
- Reverse type SMA connector

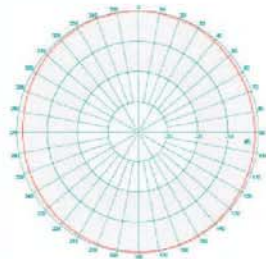
MARKETS

- Outdoor metropolitan mesh networks
- Indoor/outdoor mast mounts
- Point-to-point links supporting broadband wireless systems access
- High to medium density customer premise locations

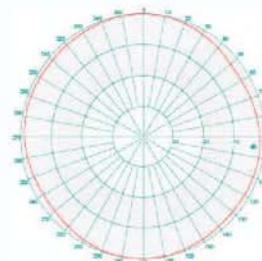
PARAMETER	SPECIFICATION
Frequency Range	2.4-2.5 / 4.9-5.9 GHz
Gain	5 dBi (typical with 3' cable)
3 dB E-Plane low-band/hi-band	25°/ 17°
3 dB Azimuth plane	Omni-directional
Maximum VSWR	2.0:1
Polarization	Linear Vertical
Input Impedance	50 ohm
Weight	0.4 lbs (0.18 kg) antenna only
Mechanical Size	24.75" x 1.0" (62.86 x 2.54 cm)
Dimensions	91.2 x 16.3 x 10.2 cm
Wind Survival Rating	Operation 100 mph / Survival 136 mph
Antenna Connection	Reverse SMA
Radome	White UV Polycarbonate
Mount Style	BPXHK pole mount kit
Temperature	Operational -30°C to +65°C; Storage -40°C to +80°C



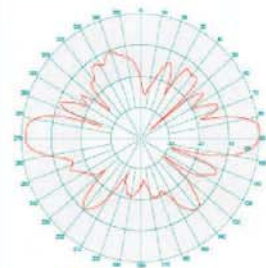
E-Plane 2.45 GHz



H-Plane 2.45 GHz



H-Plane 5.47 GHz



E-Plane 5.47 GHz

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802.11n MIMO OMNIDIRECTIONAL PANEL ANTENNAS

802.11n is the latest WLAN standard. This technology takes advantage of the multi path nature of microwave signal propagation to provide greatly increased data throughput. This is achieved by using MIMO (multiple input multiple out) signal processing in the access point. The MIMO configuration makes use of multiple transmitters and receivers, and, therefore, requires antennas with multiple antenna elements. MIMO antennas must be designed to have good coverage properties, as well as proper electrical isolation between the multiple elements.

Dual-Band MIMO Panel Antenna

The radiation patterns are uniform and symmetrical, providing high levels of signal density into defined coverage zones. This antenna will greatly enhance the performance of 802.11n systems

Specifications:	Part Number S24493TS
Frequency Range (GHz)	2.4-2.5 & 4.9-5.9
Gain (dBi)	3.0 / 4.0
VSWR	2.0:1
Polarization	Linear
Azimuth (3dB beamwidth)	Omnidirectional
Elevation (3dB beamwidth)	60°
Mounting Style	Ceiling grid / Suspension tile
Power (Watts)	2
Dimensions (mm)	12.1" x 8.6" x 3.6" (308 x 22 x 92)

Antennas in this series

S24493TS Antenna with 3 x 36" pigtail and reverse SMA

