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WiMAX Antenna

WIRELESS SOLUTIONS

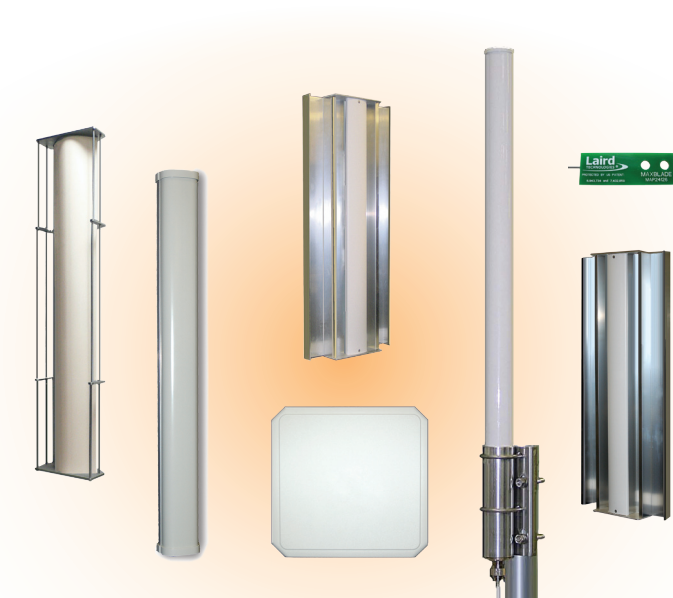


World-Leading Solutions

Laird Technologies' world class engineering teams utilize proprietary, state-of-the-art design tools to create antenna products that maximize total system performance and user satisfaction. Laird Technologies' WiMAX product line features antennas that easily meet the European Telecommunications Standards Institute's (ETSI) most stringent compliance standards while still being competitively priced.

Depend on Laird Technologies

Laird Technologies' WiMAX antennas meet stringent compliance standards and are competitively priced. Its worldwide engineering teams, using proprietary artificial intelligence antenna design software, create antenna designs with the tightest patterns and highest gain in the most compact package. With Laird Technologies' proven expertise in high-capacity manufacturing operations, its WiMAX product line exhibits a good value/performance ratio.



A Brief Introduction to WiMAX

WiMAX is a telecommunications technology aimed at providing wireless data over long distances in a variety of ways, from point-to-point links to full mobile cellular type access. WiMAX operates over greater distances and for a greater number of users and is used in a variety of applications including banking and education networks, public safety, offshore communications and military communications.

Benefits of WiMAX Technology

Some benefits of using Laird Technologies' WiMAX antennas include:

- Maximum spectral efficiency
- Reutilization of channels in the next over-adjacent sector antenna
- Reduced crosstalk
- Reduced interference, improved S/N ratio, improved C/I ratio
- Most uniform energy distribution across the entire coverage area
- Reduced system overhead compensating for nulls and hot spots in the coverage area
- Highest quality of service (QoS) and subscriber satisfaction

WiMAX External ANTENNAS



700 MHz

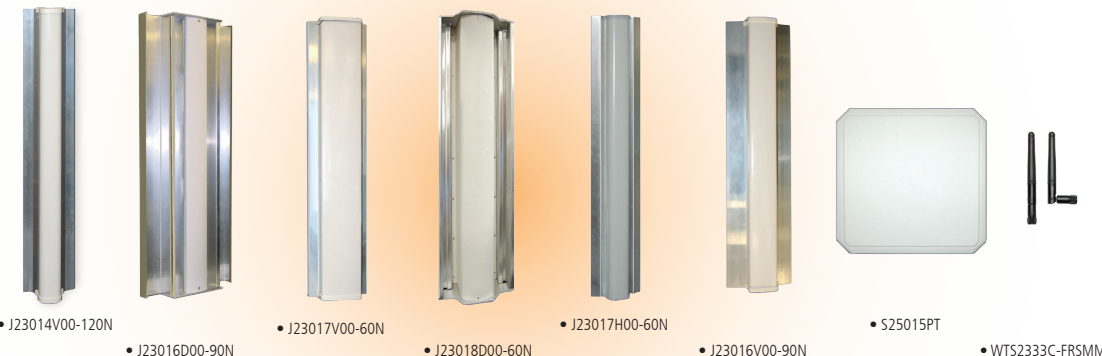
The Laird Technologies high-performance 700 MHz band external WiMAX antenna provides non-line-of-sight broadband wireless access. It affords service providers with a heavy-duty, easy-to-install sector antenna with low side lobe performance and uniform coverage characteristics.

PART NUMBER	FREQUENCY (MHz)	ANTENNA TYPE	PATTERN TYPE	VSWR	GAIN	BEAMWIDTH		POLARIZATION	DIMENSIONS (INCHES)			CONNECTOR TYPES	MOUNT STYLE	INDOOR/ OUTDOOR
						EL	AZ		LENGTH	WIDTH	HEIGHT			
J71014V00-70N	710-790	Sector	Directional	1.5	16.0	14	60	Vertical	63	13.2	11.7	Type N(f)	Mast	Outdoor

• J71014V00-70N

2.5 GHz

Laird Technologies' 2.5 GHz external WiMAX antennas offer extremely low-side lobes, null fill below the horizon, and uniform energy distribution with the coverage area are achieved thanks to our highly skilled engineering staff and the utilization of our proprietary Artificial Intelligence RF Optimizing development tool. These antennas meet all aspects of ETSI EN 301.525 CS.



• J23014V00-120N

• J23016D00-90N

• J23017V00-60N

• J23018D00-60N

• J23017H00-60N

• J23016V00-90N

• S25015PT

• WTS2333C-FRSMM

PART NUMBER	FREQUENCY (MHz)	ANTENNA TYPE	PATTERN TYPE	VSWR	GAIN	BEAMWIDTH		POLARIZATION	DIMENSIONS (INCHES)			CONNECTOR TYPES	MOUNT STYLE	INDOOR/ OUTDOOR
						EL	AZ		LENGTH	WIDTH	HEIGHT			
J23014V00-120N	2300/2500	Sector	Directional	1.8	15.5	7	120	Vertical	39.9	4.3	8	Type N(f)	Mast	Outdoor
J23016D00-90N	2300/2500	Sector	Directional	1.8	16.5	7	90	H/V	39.8	15.7	8.3	Type N(f)	Mast	Outdoor
J23016H00-90N	2300/2500	Sector	Directional	1.8	16.5	7	90	Horizontal	39.9	3.8	8.3	Type N(f)	Mast	Outdoor
J23016S00-90N	2300/2500	Sector	Directional	1.8	16.5	7	90	Dual Slant 45	40	8.2	4.5	Type N(f)	Mast	Outdoor
J23016V00-90N	2300/2500	Sector	Directional	1.8	16.5	7	90	Vertical	39.9	4	8.4	Type N(f)	Mast	Outdoor
J23017H00-60N	2300/2500	Sector	Directional	1.8	18.0	7	60	Horizontal	39.9	3.8	8.3	Type N(f)	Mast	Outdoor
J23017S00-65N	2300/2500	Sector	Directional	1.8	18.0	7	65	Dual Slant 45	40.1	6.3	4	Type N(f)	Mast	Outdoor
J23017V00-60N	2300/2500	Sector	Directional	1.8	18.0	7	60	Vertical	39.9	4	8.4	Type N(f)	Mast	Outdoor
J23018D00-60N	2300/2500	Sector	Directional	1.8	18.5	7	60	H/V	39.9	4	8.4	Type N(f)	Mast	Outdoor
S25015PT	2400-2700	Panel	Directional	2	14,15	25	25	H/V	10.2	1.3	10.2	Type N(m)	Mast	Indoor/ Outdoor
WTS2333C-FRSMM	2300-2700	Dipole	Omni-directional	2	2.3	90	360	Vertical	3.78	0.37	—	Type RPSMA	Rubber Duck	Indoor

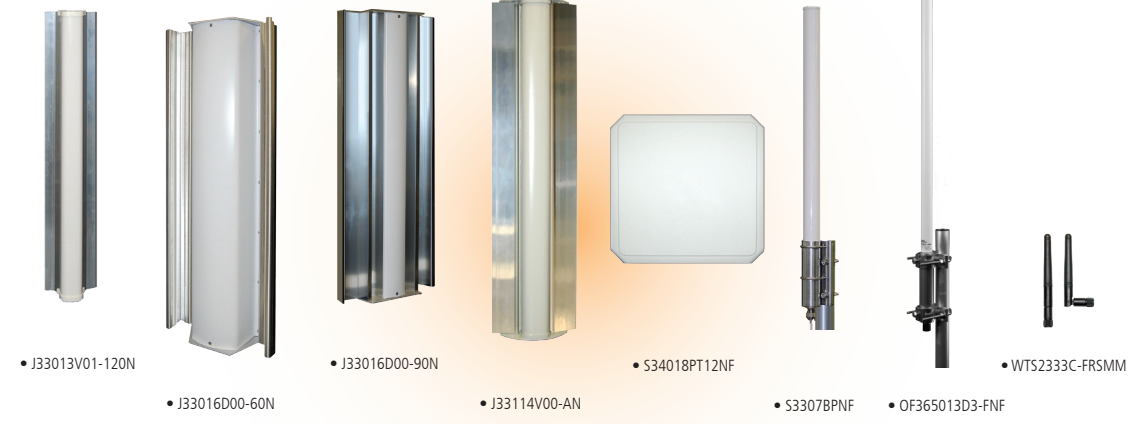


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WiMAX External ANTENNAS

3.5 GHz

Laird Technologies' suite of high-performance 3.5 GHz WiMAX antennas feature proprietary design elements resulting in extremely high levels of system performance and ruggedness while maintaining very slim profiles with low wind and ice loading.



• J33013V01-120N

• J33016D00-60N

• J33016D00-90N

• J33114V00-AN

• S34018PT12NF

• S3307BPNF

• OF365013D3-FNF

• WTS2333C-FRSMM

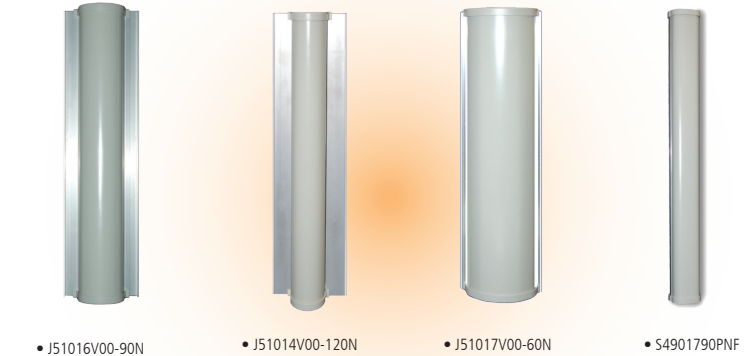
PART NUMBER	FREQUENCY (MHz)	ANTENNA TYPE	PATTERN TYPE	VSWR	GAIN	BEAMWIDTH		POLARIZATION	DIMENSIONS (INCHES)			CONNECTOR TYPES	MOUNT STYLE	INDOOR/ OUTDOOR
						EL	AZ		LENGTH	WIDTH	HEIGHT			
J33013V01-120N	3300/3500	Sector	Directional	1.8	15.5	7	120	Vertical	30.2	5.7	3.3	Type N(f)	Mast	Outdoor
J33015V01-90N	3300/3500	Sector	Directional	1.8	16.5	7	90	Vertical	30.2	5.9	3.4	Type N(f)	Mast	Outdoor
J33016D00-60N	3300/3500	Sector	Directional	1.8	18.5	7	60	H/V	28.3	6.4	10.8	Type N(f)	Mast	Outdoor
J33016D00-90N	3300/3500	Sector	Directional	1.8	16.5	7	90	H/V	28.2	6.3	11.3	Type N(f)	Mast	Outdoor
J33017S00-65N	3300/3500	Sector	Directional	1.8	17.0	7	65	Dual Slant 45	28.2	4.8	2.7	Type N(f)	Mast	Outdoor
J33017V01-60N	3300/3500	Sector	Directional	1.8	17.5	7	60	Vertical	30.2	5.9	3.4	Type N(f)	Mast	Outdoor
J33114V00-AN	3300-3700	Sector	Directional	1.7	18.5	7	Mechanical Field Adjustable	Vertical	28.2	7.1	3.3	Type N(f)	Mast	Outdoor
J34114V01-120N	3400-3700	Sector	Directional	1.5	15.5	7	120	Vertical	30.2	5.7	3.3	Type N(f)	Mast	Outdoor
J34216V00-120N	3400-3800	Sector	Directional	1.7	17.5	3.5	120	Vertical	52.2	5.7	3.3	Type N(f)	Mast	Outdoor
J34218V00-90N	3400-3800	Sector	Directional	1.7	18.5	3.5	90	Vertical	52.2	5.9	3.4	Type N(f)	Mast	Outdoor
J34220V00-60N	3400-3800	Sector	Directional	1.7	20.0	3.5	60	Vertical	52.2	5.9	3.4	Type N(f)	Mast	Outdoor
S34018PT12NF	3400-3600	Panel	Directional	1.5	18.0	19	20	H/V	259.1	33.5	259.1	Type N(m)	Mast	Indoor/ Outdoor
S3307BPNF	3300/3500	Collinear (Stick)	Omni-directional	2	9.0	8	Omni-directional	Vertical	28.2	—	1.7	Type N(f)	Mast	Outdoor
OF365013D3-FNF	3650-3700	Collinear (Stick)	Omni-directional	1.8	13.0	4.8	Omni-directional	Vertical	43.1	—	1.3	Type N(f)	Mast	Outdoor
WTS2333C-FRSMM	3300-3900	Dipole	Omni-directional	2	2.7	90	360	Vertical	3.78	0.37	—	Type RPSMA	Rubber Duck	Indoor

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WiMAX External ANTENNAS

5 GHz

Laird Technologies offers WiMAX antennas that cover the 5 GHz frequency band. They are designed to provide wide angle directional coverage from a wall or mast mounting location. Applications include any 802.11a enterprise access point system deployment including educational or industrial campuses, healthcare, and transportation terminals.



• J51016V00-90N

• J51014V00-120N

• J51017V00-60N

• S4901790PNF

PART NUMBER	FREQUENCY (MHz)	ANTENNA TYPE	PATTERN TYPE	VSWR	GAIN	BEAMWIDTH		POLARIZATION	DIMENSIONS (INCHES)			CONNECTOR TYPES	MOUNT STYLE	INDOOR/ OUTDOOR
						EL	AZ		LENGTH	WIDTH	HEIGHT			
J51014V00-120N	4900-5900	Sector	Directional	1.7	15.0	7	120	Vertical	18.2	4.7	2.9	Type N(f)	Mast	Outdoor
J51016V00-90N	4900-5900	Sector	Directional	1.7	16.0	7	90	Vertical	18.2	4.7	3.1	Type N(f)	Mast	Outdoor
J51017V00-60N	4900-5900	Sector	Directional	1.7	17.5	7	60	Vertical	18.2	4.7	2.8	Type N(f)	Mast	Outdoor
S49016120PNF	4900-5850	Sector	Directional	2	15.5	5.5	15	Vertical	24.6	2	2.7	Type N(f)	Mast	Outdoor
S4901790PNF	4900-5850	Sector	Directional	2	16.5	5.5	7	Vertical	24.6	2	2.7	Type N(f)	Mast	Outdoor

WiMAX Internal ANTENNAS

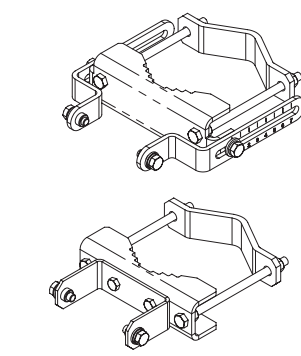
Laird Technologies' internal wireless device antennas feature wide bandwidth to enhance the performance and application of portable wireless devices based on standards such as 802.11 and Bluetooth. The antennas are specifically designed to be embedded inside devices for aesthetically pleasing integration with high durability.



PART NUMBER	FREQUENCY (MHz)	ANTENNA TYPE	PATTERN TYPE	VSWR	GAIN	POLARIZATION	DIMENSIONS (INCHES)		CONNECTOR TYPES	MOUNT STYLE	INDOOR/ OUTDOOR
							LENGTH	WIDTH			
EMX2360A1-10UFL	2300-6000	Embedded	Omnidirectional	2	4 dBi (2.3-2.7 GHz), 2.1 dBi (3.3 GHz) and 4 dBi (4.9-5.875 GHz)	Vertical	2	0.65	IPEX MHF	Surface Mount	Indoor
EMX2360A1-15UFL	2300-6000	Embedded	Omnidirectional	2		Vertical	2	0.65	IPEX MHF	Surface Mount	Indoor
EMX2360A1-20UFL	2300-6000	Embedded	Omnidirectional	2		Vertical	2	0.65	IPEX MHF	Surface Mount	Indoor
EMX2360A1-25UFL	2300-6000	Embedded	Omnidirectional	2		Vertical	2	0.65	IPEX MHF	Surface Mount	Indoor

Accessories

Laird Technologies supplies accessories that are the perfect complement to its antenna systems. Cable assemblies, surge suppressors, lightning arrestors, POE inserters and splitters, wall and roof-top antenna mounts, connector adapters and die-cast aluminum enclosures are available.



PART NUMBER	DESCRIPTION
JBXRX-01-TM5	Bracket for J Series WiMAX Sector Antenna

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Innovative Technology for a Connected World