

## 2.4GHz Base Station and Omnidirectional Antennas

Antenna P/N		GW-344030/ NV	GW-344029/ NV	GW-364029/ NV	GW-364034/ NH	GW-364040/ ND	GW-343018/ NV	GW-343018/ NH	GW-363010/ V N	GW-363010/ HN	GW-364036/NH	GW-344027/NV	GW-364028/VN
Type		Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station
<b>Electrical</b>						Preliminary							
Frequency Band	GHz	2.4-2.5	2.4-2.5	2.4-2.7	2.3-2.7	2.3-2.7	2.4-2.5	2.4-2.5	2.4-2.7	2.4-2.7	2.3-2.7	2.4-2.5	2.4-2.7
Gain	dBi (Min)	14	17 ±0.5	17 ±0.5	16.5 (@ 2.4-2.5)	16	13	13 ±0.5	13	13	15.5 (@2.5-2.7)	17	17
Polarization		Vertical	Vertical	Vertical	Horizontal	Dual Linear ± 45°	Vertical	Horizontal	Vertical	Horizontal	Horizontal	Vertical	Vertical
AZ/EL BW	Degree	60/19	60/6	60/8.5	60/7.5	65/7	90/15	90/13	90/13	90/13			
ETSI		N/A	N/A	N/A	ETSI EN**	N/A	ETSI EN**	N/A	N/A	N/A	90/8	90/5.5	90/5
Sidelobe Level	dB (Max)	-21 @ ±90 Deg	-19 @ ±90 Deg	-30 @±90 Deg	ETSI EN**	-13	-25 @ -/+135 Deg	-27 @ -/+135 Deg	-30 @ -/+135 Deg	-25 @ -/+135 Deg	N/A	N/A	N/A
Cross Polarization Level	dB (Max)	-18	-20	-20	ETSI EN**	-20	-19	-20	-25	-22	-28 @ -/+135 Deg	-32 @±135 Deg	-30 @ -/+135 Deg
Front to Back Ratio	dB (Max)	-30	-30	-35	ETSI EN**	-30	-30	-30	-30	-25	ETSI EN **	-20	-20
VSWR 50 Ohm		1.7:1	1.7:1	1.7:1	1.7:1 (@2.5-2.7)	1.5:1	1.7:1	1.5:1	1.7:1	1.5:1	ETSI EN **	-32	-30
Maximum Input Power	Watt	6	6	6	10	20	6	6	6	6	1.7:1	1.7:1	1.7:1
Additional Features		ISM Only	ISM Only	Broad Band	Broadband	Dual Linear	ISM Only	ISM Only	Broadband	Broadband	20	6	6
											Broadband	ISM Only	Broadband
													High Gain
<b>Mechanical</b>													
Size	mm	350x150x30	1050x128x28	720x390x28	925x270x58	900x120x50	500x200x30	500x200x30	508x330x30	508x330x30	925x270x53	1232x330x28	1232x330x30
Weight	Kg (Max)	1.2	2.5	4	4	3.5	1.5	1.5	3	3	4	5.5	5.5
Connector		N-Type Female	N-Type Female	N-Type Female	N-Type Female	2xN-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female
Mounting Kit		GW-120019	GW-120021	GW-120019	GW-1200	GW-12002	GW-120019	GW-12001	GW-120019	GW-120019	GW-120021	GW-120021	GW-120021

\* Most Omni antennas come in 2 versions: with N Connector for direct communication to the radio or with F connector

Antenna P/N		GW-364041/ND	GW-344031/NV	GW-344036/NV		Antenna P/N		GW-341018/N/A	GW-341019/N/A	GW-342025NV	GW-341017/N/A	Gw362017/ NV	GW-342020NV	GW-343013N	GW-952015N/A
Type		Base Station	Base Station	Base Station		Type		Omni	Omni	Omni	Omni	Omni	Omni	Omni	Omni
<b>Electrical</b>						<b>Electrical</b>									
Frequency Band	GHz	2.3-2.7	2.4-2.5	2.3-2.7		Frequency Band	GHz	2.4-2.5	2.4-2.5	2.4-2.5	2.4-2.5	2.3-2.7	2.4-2.5	2.4-2.5	2.4-2.5 & 5.47-5.875
Gain	dBi (Min)	17	13	16.5-17.5	15.5-16	14-15	Gain	dBi (Min)	4	5 . 5	7	52 . 7	8	9	12 -/+1
Polarization		Dual Slant ± 45°	Vertical	Vertical		Polarization		Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
AZ/EL BW	Degree	90/7	120/11	60/7	90/7	120/7	AZ/EL BW	Degree	360/45	360/32	360/25	360/21	360/8	360/11	360/5.1
ETSI		N/A	ETSI EN **	ETSI EN 301 525 V1.1.1. (2000-06)		ETSI		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sidelobe Level	dB (Max)	-25	ETSI EN **	ETSI EN 301 525 V1.1.1. (2000-06)		Sidelobe Level	dB (Max)	-	-	-	-	-	-	-	-
Cross Polarization Level	dB (Max)	-20	ETSI EN **	ETSI EN 301 525 V1.1.1. (2000-06)		Cross Polarization Level	dB (Max)	-	-	-	-	-	-	-	-
Front to Back Ratio	dB (Max)	-30	ETSI EN **	ETSI EN 301 525 V1.1.1. (2000-06)		Front to Back Ratio	dB (Max)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VSWR 50 Ohm		1.7:1	1.7:1	1.7:1		VSWR 50 Ohm		1.7:1	1.7:1	1.5:1	1.5:1	1.7 :1	1.5:1	1.5:1	2:1
Maximum Input Power	Watt	20	10	20		Maximum Input Power	Watt	6	6	4	6	4	6	6	6
Additional Features		Dual Slant	ISM Only	Broadband		Additional Features		*	*	*	*	*	*	*	*
				Installer selectable beam width 60°/90°/120°											
<b>Mechanical</b>						<b>Mechanical</b>									
Size	mm	1200 x 270 x 65	500x200x30	905x130x114	905x130x98	905x130x74	Size	mm	165xØ28	255xØ28	320xØ16	337xØ28	830xØ45	733xØ30	1400xØ30
Weight	Kg (Max)	4.5	1.5	2.3		Weight	Kg (Max)	0.2	0.2	0.1	0.15	0.5	0.7	1	0.2
Connector		2 x N-Type F	N-Type Female	N-Type Female		Connector		N-Type Male	N-Type Male	N-Type Female	N-Type Male	N-Type Female	N-Type Female	N-Type Female	N-Type Male
Mounting Kit		GW-120021	GW-120019	GW-120021		Mounting Kit		N/A	N / A	Included	N/A	Included	Included	Included	N/A

\* - Both F/M Connectors

\*\* - ETSI EN 301 525 v1.1.1 (2000-06)

Last Update: 01/05/2008

## 2.4GHz Subscriber Antennas

Antenna P/N		GW-362010/S	GW-364035/N	GW-955004/NV	GW-344041/N	GW-344026/N	GW-344020/N	GW-345010/N	GW-344048/ND	GW-365010/N	GW-365012/NVH	GW-345017/N
Type		Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber
Electrical				Preliminary								
Frequency Band	GHz	2.3-2.7	2.3-2.7	2.4-2.5&5.47-5.875	2.3-2.7	2.2-2.7	2.15-2.7	2.15-2.7	2.3-2.7	2.3-2.7	2.4-2.7	2.3-2.7
Gain	dBi (Min)	11.5 +/-0.5	15.5 @ 2.4-2.7	16 @ 2.4-2.5 22 @ 5.47-5.875	18 @ 2.6-2.7	15	16	17.5	17 @ 2.3-2.5 18 @ 2.5-2.7	19	19	20 @ 2.4-2.7
Polarization		Vertical	Linear V/H	Linear V/H	Linear V/H	Linear V/H	Linear V/H	Linear V/H	Dual Slant ± 45°	Linear V/H	Dual V+H	Linear V/H
Port-to-Port Isolation	dB (Min)		-			-	-	-	-18 (-25 typ)	-	30	-
AZ/EL BW	Degree	80/20	32/32	21/21 @ 2.4-2.5 9/9 @ 5.47-5.875	20/20	20/20	20/20	14/14	21/21	17/17	16/16	15/15
ETSI		N/A	TS2	N/A	TS2	TS2	N/A	ETSI EN**	DN2-DN3	TS3	ETSI EN**	ETSI EN**
Sidelobe Level	dB (Max)	-	TS2 @ 2.4-2.7	-12	TS2	TS2	-17 +/-1	-12	DN2-DN3	TS3	ETSI EN**	TS3
Cross Polarization Level	dB (Max)	-	TS2	-20	TS2	-18	-20	-26	DN2-DN3	-20	ETSI EN**	TS3
Front to Back Ratio	dB (Max)	-20	TS3	-30 @ 2.4-2.5	-28	-26	-30	-30	DN2-DN3	-26	ETSI EN**	TS3
VSWR 50 Ohm		1.5:1	1.7:1	1.5:1	1.7:1	1.7:1	1.5:1	1.5:1	1.7:1	1.8:1	2.0:1	1.6:1
Maximum Input Power	Watt	6	6	6	6	6	6	6	6	6	6	6
Additional Features		Indoor Antenna	Broadband	Dual Band	Broadband	Broadband	Broadband	Broadband	Dual Slant pol.	Broadband	Dual pol.	Broadband
			Available for IAE*		Available for IAE*						Available for IAE*	
Mechanical												
Size	mm	325x92x15	190x190x30	305x305x15	305x305x25	305x305x25	371x371x40	450x450x36	305x305x15	371x371x40	370x370x40	450x450x36
Weight	Kg (Max)	0.6	0.5	1	1.2	1.5	2	3	1.2	2	2.5	3
Connector		SMA Female	N-Type Female	N-Type F	N-Type Female	N-Type Female	N-Type Female	N-Type Female	2xN-Type Female	N-Type Female	N-Type Female	N-Type Female
Mounting Kit		Stand Alone	GW-120018A	GW-120018	GW-120018	GW-12001	GW-12001	GW-120018	GW-120018	GW-120018	GW-120018	GW-120018

\* - For our 0.5' and 1.0' die-cast Enclosures

\*\* - ETSI EN 301-525 V 1.1.1(2000-06)

Last Update: 01/05/2008

### Environmental

Temperature Range	-45 to +70 degree per IEC 68
Vibration	Random 4M3 per IEC 60721
Mechanical Shock	4M3 per IEC 60721
Humidity	95% per ETSI EN300
Water Tightness	Per IEC 529 IP67 (IP52 for some BTS antennas)
Salt Spray	500 hours per IEC 68
Solar Radiation	1000 hours per ASTM G53
Ice and Snow	25mm Radial
Wind Speed	160 Kmph Operation/220 Kmph Survival
Flammability	UL-94HB

### Notes

All specifications are subject to change without notice  
Preliminary specs are for antennas under development  
Upon request MTI may provide the complete spec controlled document for specific antenna

### Key Features

- y High-Quality Low-Cost
- y Lightweight antenna with easy installation
- y Low profile
- y Environmental friendly
- y Various polarities
- y Various configurations such as standalone, integrated or internal component
- y Narrow and broad band
- y Meets ETSI electrical and environmental requirements
- y Very aesthetic look

### Benefits

- y Provides High performance Low Cost subscriber
- y Reduces the cost of installation
- y Maintains real estate aesthetic look and value
- y Generates low wind load



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