

## 4.4/4.9GHz Base Station and Omnidirectional Antennas

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

Antenna P/N		GW-444007/NV	GW-464002/NV	GW-464002/NH	GW-484032/NV	GW-464003/NH	GW-444003/NV	GW-464004/NH	GW-462006/N/A	GW-462007/N/A	GW-443007/NV	GW-462008/N	GW-462008/N/A	GW-463007/NV/A	GW-463008/NV/A
Type		Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Base Station	Omni	Omni	Omni	Omni	Omni	Omni	Omni
Electrical		Preliminary											Preliminary		Preliminary
Frequency Band	GHz	4.4-5GHz	4.9-5.35	4.9-5.1	4.9-5.875	4.9-5.1	4.9-5.35	4.9-5.1	4.9-5.1	4.9-5.875	4.4-5GHz	4.9-5.875	4.9-5.875	4.9-5.15	4.9-5.15
Gain	dBi (Min)	14	16	15.5	17 (16.5@4.9G)	15	15	14	8.5	8.5±1	9.5	9.5±1	10±1	10.5 ± 0.5	10.5 ± 0.5
Polarization		Vertical	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Port to Port Isolation	dB (Min)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AZ/EL BW	Degree	60/16	60/4	60/10	90/5.5	90/7	120/6	120/6	360/8.5	360/15	360/5 0 6 3	17	360/8	360/7	360/7
ETSI		-	CS3	CS3	CS3	CS3	CS3	CS3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sidelobe Level	dB (Max)	-20	-25@-/+90 Deg	-25@-/+90 Deg	-30@-/+135Deg	-25@-/+135Deg	CS3	CS3	10 EL Plane	10 EL Plane		10 EL Plane	10 EL Plane	10 EL Plane	10 EL Plane
Cross Polarization Level	dB (Max)	-	-28	-28 AZ/-20 EL	-20	-20	CS3	-17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front to Back Ratio	dB (Max)	-30	-35	-35	-35	-30	CS3	-32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VSWR 50 Ohm		1.5:1	1.7:1	1.7:1	1.7:1 (typical)	1.7:1	1.7:1	1.7:1	1.7:1	2.0:1	2.1:1	2.0:1	2.0:1	1.7:1	1.7:1
Maximum Input Power	Watt	10	6	6	6	6	6	6	6	6	10	6	6	6	6
Additional Features									*	*		*	*		Electrical Tilt -2°
Mechanical															
Size	mm	350x150x30	350x150x30	350x150x30	550 x 250 x 18	530x260x27	550x250x17	550x200x60	465xØ16	330xØ28	610xØ28	464xØ28	450xØ28	500xØ28	500xØ28
Weight	Kg (Max)	1.5	1.5	1.5	1.8	2.5	1.8	2	0.5	0.5	0.75	0.7	0.7	0.5	0.5
Connector		N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Female	N-Type Male	N-Type Male	N-Type Female	N-Type Female	N-Type Male	N-Type Male	N-Type Male
Mounting Kit		GW-120019	GW-120019	GW-120019	GW-120019	GW-120019	GW-120019	GW-120019	N/A	N/A	Included	Included	N/A	N/A	N/A

\* - Both F/M Connectors

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

## 4.4/4.9GHz Subscriber Antennas

Antenna P/N		GW-483010/S	GW-464005/N	GW-465005/N	GW-445005/ N	GW – 465009N	GW-445003/NVH	GW-466004/ N	GW-466003/N	GW-446002/ N	GW – 446003/N
Type		Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber	Subscriber
<b>Electrical</b>											Preliminary
Frequency Band	GHz	4.9-5.875	4.9-5.1	4.9-5.35	4.4-5.1	4.9 – 6	4.4-5.1	4.9-5.1	4.9-5.1	4.4-5.1	4.9 – 5.875
Gain	dBi (Min)	13	18	21	21.5	21 @ 4.9–5.15 22.5@5.47–6	20.7H/22.8V	25	27	27±0.5	27 @ 4.9–5.15 28 @ 5.15–5.875
Polarization		Vertical	Linear V/H	Linear V/H	Linear V/H	Linear V/H	Dual V+H	Linear V/H	Linear V/H	Linear V/H	Linear V/H
Port to Port Isolation	dB (Min)		-	-	-	-	35	-	-	-	-
AZ/EL BW	Degree	60/18	20/17	9/9	13/13	9/9	10/10	6/6	5/5	6/6	4.5/4.5
ETSI		N/A	-	TS3	ETSI EN**	DN3	TS1-TS3	TS1-TS5	TS1-TS5	TS1-TS5	TS1-TS5
Sidelobe Level	dB (Max)	-10	-	TS3	DN3	DN3	TS1-TS3	TS1-TS5	TS1-TS5	TS1-TS5	TS1-TS5
Cross Polarization Level	dB (Max)	-	-20(AZ)/-12(EL)	-28	DN3	DN3	TS1-TS3	-20	TS1-TS5	TS1-TS5	TS1-TS5
Front to Back Ratio	dB (Max)	-20	-35	-30	-40	-35	-35	-30	-40	-40	-40
VSWR 50 Ohm		1.5:1	1.8:1	1.7:1	1.7:1	1.7 : 1	2:1	1.7:1	1.7:1	1.5:1	1.7 : 1
Maximum Input Power	Watt	6	6	6	10	6	6	6	6	10	6
Additional Features		Indoor Antenna		Available for IAE*			Available for IAE*	Available for IAE*			
<b>Mechanical</b>											
Size	mm	325x92x15	190X190X30.5	305x305x15	305x305x14	305 x 305 x 15	370x370x40	450x450x30	600x600x51	600x600x51	600 x 600 x 51
Weight	Kg (Max)	0.6	0.7	1.2	1.2	1.2	2.5	3	5	5	5
Connector		SMA Female	N-Type F	N-Type F	N-Type F	N-Type F	2 x N-Type F	N-Type F	N-Type F	N-Type F	N-Type F
Mounting Kit		Stand Alone	GW-120018A	GW-120018	GW-120018	GW-120018	GW-120018	GW-120018	GW-120019	GW-120019	GW-120019

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

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