

MAG - Lattice Series

The Lattice Series mobile towers are designed to meet two primary factors for a mobile tower platform. The first factor being obtainable height without guy wires. The second is modularity of integrated systems that the trailer can carry to support your application, whether it includes power or enclosures with HVAC systems. The MAG-Lattice Series mobile tower platform is capable of meeting all of your requirements.



What is a MAG? The Mobile Application Gateway is an enablement platform to extend the boundary of your network. As technology moves more towards a wireless infrastructure the reach of your network is constantly changing. The MAG Series is designed to be completely mobile and towed by standard 1-ton truck. Whether your application is voice, data or video we have a mobile tower solution that can help your application reach new heights!



The Mobile Application Gateway (MAG) - Lattice Series portable communications platform was designed support a broad range of requirements. The MAG is more than just a tower on a trailer, it is a base platform to build and develop your application on. Expanding the boundaries of your network or just delivering temporary services to a new market are just two solutions the MAG-Lattice Series is capable of delivering.

Each MAG Lattice Series mobile tower can be customized to include portable power systems, shelters, etc. to support your application. A typical mobile command center design that can be used for long term temporary use in any type of environment would encompass solutions from voice

and data to wireless and VSAT terminal support making your tower solution a true Mobile Application Gateway!

The MAG - Lattice Series is designed to accommodate both the commercial and government. What do Geophysical, Emergency Services, Cellular Service Providers, Federal State and Local Govt. have in common? They all have requirements to deliver or support applications where standard communication services are not available



The key to the MAG platform is mobility, delivering service where it is needed, when it is needed at a moments notice. The MAG is self-supporting up to 106'. If required by local ordinances or additional stability is needed, all MAG mobile towers support two methods of guying the tower to improve the wind loading capabilities. The standard method of guying is to extend the guy wires to anchors into the earth.

This method does not work well when hard surfaces like concrete or asphalt cover the earth. Our enhanced system of guying enables the deployment of the tower on hard surfaces and to be guyed as required. The outriggers on each tower when extended provide the majority of the stability when the tower is deployed.

The MAG is easy to deploy and includes limit switches to prevent damage to the tower and ensuring the tower can not be over extended.



Contact TowerWorx to explore what the MAG Lattice Series of mobile towers can do to remove your network boundaries!

MAG - Lattice Series Specifications

Tower Specifications	MAG-45	MAG-60	MAG-85	MAG-106	MAG-120	MAG-150
Hot-Dipped Galvanized Tower Sections	3	4	5	6	7	8
Main Winch Gear Reducer - Direct Drive	Y	Y	Y	Y	Y	Y
Main Winch Electric Motor	1.5 HP	1.5 HP	1.5 HP	1.5 HP	1.5 HP	2 HP
Tilt Winch Gear Reducer - (40 to 1)	40:1	40:1	40:1	40:1	40:1	Hydraulic
Tilt Winch Electric Motor	3/4 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP	Hydraulic
Galvanized Lifting Cables: (Section A)	N/A	N/A	N/A	N/A	N/A	3/8"
Galvanized Lifting Cables: (Section B)	5/16" / 7.9 mm	5/16" / 7.9 mm	5/16" / 7.9 mm	5/16" / 7.9 mm	5/16" / 7.9 mm	5/16" / 7.9 mm
Galvanized Lifting Cables: (Section C)	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	5/16" / 7.9 mm
Galvanized Lifting Cables: (Section D)	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm
Galvanized Lifting Cables: (Section E)	N/A	N/A	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm
Galvanized Lifting Cables: (Section F)	N/A	N/A	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm
Galvanized Tilt Winch Cable	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	1/4" / 6.35 mm	3/8" / 9.5mm
Galvanized Guy Cables	N/A	N/A	N/A	N/A	1/4" / 6.35 mm	1/4" / 6.35 mm
NEMA-4 Rated Control Panel	Y	Y	Y	Y	Y	Y
Safety Limit Switches	Y	Y	Y	Y	Y	Y
Tower Power Requirements	110v / 60Hz **	110v / 60Hz **	110v / 60Hz **	110v / 60Hz **	110v / 60Hz **	110v / 60Hz **
Tower Minimum Operational Height	25' / 7.6m	25' / 7.6m	29' / 8.8m	29' / 8.8m	29' / 8.8m	38' / 11.5m
Tower Height - Self-Supporting	45' / 13.7m	60' / 18.2m	85' / 25.9m	106' / 32.3m	N/A	N/A
Tower Height Extended - Enhanced Guying	N/A	N/A	85' / 25.9m	106' / 32.3m	N/A	N/A
Tower Height - Guyed to Ground	N/A	N/A	N/A	N/A	120' / 36.5m	150' / 45.7m
Operational Setup Time	20 Minutes	20 Minutes	30 Minutes	30 Minutes	30 Minutes	60 Minutes
Weight Load on tower	550 lbs / 249.4 kg	550 lbs / 249.4 kg	550 lbs / 249.4 kg	550 lbs / 249.4 kg	550 lbs / 249.4 kg	550 lbs / 249.4 kg
Maximum Wind Loading (*Off the Shelf)	80 Mph / 128 kph	80 Mph / 128 kph	80 Mph / 128 kph	80 Mph / 128 kph	80 Mph / 128 kph	90 Mph / 144kph
Trailer Specifications						
Overall Trailer Length	16' / 4.8m	16' / 4.8m	22' / 6.7m	25' / 7.6m	22' / 6.7m	29' 7" / 9m
Overall Trailer Width	8' / 2.4m	8' / 2.4m	8' / 2.4m	8' / 2.4m	8' / 2.4m	8' 4" / 2.5m
Overall Tower & Trailer Length - Transportation Mode	16' / 4.8m	23' / 7m	30' / 9.1m	33' / 10m	30' / 9.1m	29' 7" / 9m
Trailer Height - Transportation Mode	11' 5" / 3.5m	11' 5" / 3.5m	12' 6" / 3.8m	12' 6" / 3.8m	12' 6" / 3.8m	12' 8 5/8" / 3.9m
Available Deck Space for Options	6' x 6' / 1.8m x 1.8m	6' x 6' / 1.8m x 1.8m	9' 6" x 6' / 2.8m x 1.8m	9' 6" x 6' / 2.8m x 1.8m	9' 6" x 6' / 2.8m x 1.8m	-
Dual Axle Suspension	7,000 lbs / 3,175kg	7,000 lbs / 3,175kg	7,000 lbs / 3,175kg	7,000 lbs / 3,175kg	7,000 lbs / 3,175kg	12,000 lbs / 5,443 kg
Gross Trailer Weight (GVW)	14,000 lbs / 6,350 kg	14,000 lbs / 6,350 kg	14,000 lbs / 6,350 kg	14,000 lbs / 6,350 kg	14,000 lbs / 6,350 kg	18,000 lbs / 8,164 kg
One Piece Fender Wells	1 Each	1 Each	1 Each	1 Each	1 Each	1 Each
Electric Breaks per Axle	Per Axle	Per Axle	Per Axle	Per Axle	Per Axle	Per Axle
Stabilizing Jacks (2)	5	5	7	7	7	8
Spare Tire (LT235-85R)	1	1	1	1	1	1
DOT - Safety Chains	Y	Y	Y	Y	Y	Y
DOT - Break Away Kit	1	1	1	1	1	1
7 Pin RV Trailer Plug	1	1	1	1	1	1
2 5/16" Ball Hitch (Adjustable to Variable Hitch Height)	Y	Y	Y	Y	Y	Gooseneck

*Maximum Wind Loading - The standard tower design includes an engineering calculation for a maximum wind load of gusts up to 80 MPH/128kph. Your local ordinances/laws may require a higher rating.

**Tower Power Requirements - Our electric motors are not switchable between 110v and 220v; if 220v is required please note this when ordering.

All trailers meet D.O.T Standards and Requirements for lighting

All towers are designed using RISA Tower Analysis and Design software to accommodate for full wind loading and structure design. All cabling used to raise, lower and guy our towers is Air Craft Quality cable. The strength required for each application is determined using the TIA/EIA-222G specification. Sheaves are constructed of solid steel for extra strength. All bolts are made of Grade 5 and/or Grade 8 steel. AWS D1.1 Welding Procedures are used in the fabrication of the tower.