SITE-ON-WHEELS SPECIFICATIONS

	60' MINI SITE-ON-WHEES BUMPER PULL	82' ToughTower™ Site-on-Wheels, Bumper Pull	106' ToughTower™ Site-on-Wheels, Bumper Pull	120' ToughTower™ Site-on-Wheels, Gooseneck	150' ToughTower™ Site-on-Wheels, Gooseneck
MODEL NUMBER	ST-SOW-MINI-60	ST-SOW-BP-82	ST-SOW-BP-106	ST-SOW-PB-120	ST-SOW-GN-150
Hot-Dipped galvanized sections, equal sections	6	4	6	7	9
Main winch gear electric motor (Tilt)	12VDC 1.6 HP	1.5 HP	1.5 HP	1/5 HP	1.5 HP
Main winch gear reducer (Erect) 90:1	N/A	Y	Y	Y	N/A
Main winch reducer (Erect) 900:1	N/A	N/A	N/A	N/A	Y
Gear reducer (Erect) 5.00	N/A	Y	Y	Y	N/A
Gear Reducer (Erect) 2.91	N/A	Y	Y	Y	N/A
Galvanized stranded lifting selection cables	1/4"	5/16"	5/16"	5/16"	3/8"
Galvanized lifting security safety cable (Spring)	N	5/16"	5/16"	5/16"	5/16"
Tilt winch strained galvanized aircraft cable	1/4"	3/8"	3/8"	3/8"	3/8"
User operation and control panel	Y	Y	Y	Y	Y
Safety limit switches	N/A	Y	Y	Y	Y
Tower power requirements	12V BATTERY	30 Amp AC 120V/60hz	30 Amp AC 120V/60hz	30 Amp AC 120V/60hz	30 Amp AC 120V/60hz
Tower minimum operations height	17ft/5.18m	26ft/7.93m	30ft/9.14m	34ft/10.4m	39ft/11.89m
Operational setup time	10 minutes	20 minutes	25 minutes	25 minutes	40 minutes
Weight load on tower 1,100lbs/317.51kg	N (500lb)	Y	Y	Y	Y
Weight tilt load on tower 1,100lbs/317.51kg	N (500lb)	Y	Y	Y	Y
Maximum wind (off the shelf) 110mph	Y	Y	Y	Y	Y
TIA/EIA-222-G, and IBC	Y	Y	Y	Y	Y

TRAILER SPECIFICATIONS

Overall trailer length	8ft/2.43m	18ft/5.5m	18ft/5.5m	18ft/5.5m	20ft/6.1m
Overall trailer width	5ft/1.53m	8ft 5in/2.57m	8ft 5in/2.57m	8ft 5in/2.57m	8ft 5in/2.6m
Overall tower and trailer height in transportation mode	5ft/1.53m	10ft 3in/3.13m	10ft 3in/3.13m	10ft 3in/3.13m	11ft 5in/3.5m
Trailer and Tower Weight	3,500lbs	8,900lbs	9,200lbs	11,200lbs	18,200lbs
Trailer Gross Vehicle Weight Rating (GVWR)	5,000lbs	14,000lbs	14,000lbs	14,000lbs	30,000lbs
Available deck space for options	N/A	11ft x 8ft	11ft x 8ft	11ft x 8ft	6ft 10in x 8ft
	N/A	3.35m x 2.44m	3.35m x 2.44m	3.35m x 2.44m	2.0m x 2.44m
Slide out option for deck	N/A	Y	Y	Y	Y
Dual axle suspension	N/A	Y	Y	Y	Y
Electric brakes per trailer	N/A	Y	Y	Y	Y
Outrigger with jacks	4	4	4	4	4
Toolbox - lockable and secure	Y	Y	Y	Y	Y
Spare tire	1	1	1	1	1
Leveling bars	2	2	2	2	2
Safety chains	Y	Y	Y	Y	Y
7 pin RV trailer kit	Y	Y	Y	Y	Y
2 5/16" ball hitch (adjustable to height)	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"

SITE-ON-WHEELS BUILT TOUGH IN TEXAS, USA



BUILDING THE INFRASTRUCTURE THAT KEEPS YOU CONNECTED

OUR MOBILE TOWER IS HAND BUILT IN TEXAS USING HOT DIPPED GALVANIZED STEEL AND STATE-OF-THE-ART TECHNOLOGY, SOLARIS TECHNOLOGIES SERVICES:

Special Events

Short Term Needs

Sporting Events, Concerts, Festivals, Fairs, Rallies and more Remote locations, New Construction, Security and more **Disaster Recovery**

Hurricanes, Earthquakes, Tornados, Tsunami, Floods, FEMA and more

APPLICATIONS | CELLULAR WI-FI SATELLITE LIGHTING AUDIO VIDEO



ABOUT SOLARIS TECHNOLOGIES SERVICES

Solaris is the cellular tower manufacturer that created an innovative mobile cellular tower product platform. The Solaris site-on-wheels, cell-on-wheels, and quick-deploy towers ensure quick, safe telecommunications site deployment. Solaris services customers across many verticals including telecom networks,hospitals, security, disaster recovery, and emergency response.

TOWER ASSEMBLY

The tower utilizes galvanized, 2 3/8" OD schedule 40 steel pipe for its 36" base spread, among the largest in the industry. This creates a much stronger overall tower giving it the ability to hold payloads up to 1,100lbs at the top while providing unprecedented protection against the harshest conditions.

Our winch system uses a 3/8" stranded galvanized cable as the primary lifting cable and a 5/16" secondary lifting cable for added security. Heavy-duty, zinc plated sheaves with brass brushings assure smooth raising and lowering of tower in all weather conditions and protection against sand, dirt and corrosion.





BASE ASSEMBLY AND TRAILER

The design includes a fully functional, one-piece integrated tower base that is constructed with 4"x4"x1/4" square tubing. The strength of this base insures the stability of the tower while tilting with heavy loads and stability in high winds when fully extended. The extreme size of the base steel materials keep the tower from twisting while supporting heavy head loads.

The trailer deck is a full 18' long with equipment mounting spaces on the rear and a very large 9'x7'7" forward deck for generators, toolbox, and fuel storage etc. Tie-down rails with stake pockets extend along each side of the trailer allowing the ability to secure additional equipment. Gross Vehicle Weight Rating (GVWR) for the trailer is 14,000lbs and the entire system can be pulled by a 2500-series truck.

GALVANIZING PROCESS

The steel used for the mobile tower goes through a thorough 4 step galvanizing process with our Preferred Partner AZZ Galvanizing, that helps protects the tower from corrosion. First the team prepares the steel and ensures there are no physical flaws. After inspection the steel is cleaned by being immersed in a hot alkali solution. After which it is put into acid pickling that removes rust or scale that might have built up. Once the cleaning process is complete the steel is submerged into hot molten zinc until it reaches 840° F.

We then see the zinc react with the steel to form zinc/iron intermetallic layers on all surface both interior and exterior. The last step is for the team to carefully weighed and inspect the galvanized steel to ensure quality standards are met. The team evaluates the coating thickness and appearance to ensure ASTM compliance, before giving a final approval. The galvanizing 4 step process is ideal for modern applications because is ensures an enduring finish and meets ASTM A123, ASTM 153 and ASTM B6 requirements.





MOTOR DRIVE UNITS

The drive motor is a 1.5HP wash-down quality unit with direct drive worm gear output with 2 reduction gear boxes or a final reduction of 900 to 1.

The system is designed to be operated by hand with a Cordless drill, if necessary, in case of a power or motor failure or theft.

This unit is designed to withstand the most severe conditions, such as winds up to 110mph, humidity, sand and extreme temperatures. The redundant winch system uses 3 cables per section to raise and lower the tower. If you have a failure on one cable, 2 backup support cables are available to safely operate the tower.

KEY FEATURES

TOWER

- · Lattice-type telescopic tower
- · Galvanized steel construction
- 60' and 150' models available
- Includes complete guy wire kit
- · 36" base spread
- Zinc-plated raising sheaves with brass bushings for smooth lifting and lowering of tower in all conditions
- Twin Gear Reduction allowing the tower to lift 1,100lbs

BASE

- Heavy-duty 4"x1/4" square tubing provides maximum stability while lifting tower and prevents twisting in high winds
- Aligned cuts fit tight for maximum strength at weld points
- Tie-down strap and heavy-duty Y block in front cradle provide reduced tower vibration during transit

TRAILER

- Heavy-duty galvanized metal base and steel trailer configuration is designed to provide maximum stability and long-lasting protection in the harshest conditions.
- Power Coasted, diamond plated, steel trailer deck for maximum traction and weather resistance
- 5-point leveling jack system and heavy-duty jacks
- Dual axels, suspensions & tires with 6-ton capacity
- Electric trailer brakes on each axel (7,000lbs each axle)
- Four outriggers with easy view levels

- Hidden, under deck full-sized spare tire
- Locking utility/storage box
- (2) 5/16" Ball hitch, safety chains, break away kit, 7-pin trailer plug
- Tie down rails along each side
- Total weight of 9,600lbs
- Easy tow with standard 2500 series truck
- 10,340lbs GVWR for standard configuration
- Towing Dimensions: 10' high by 32' long
- Meets all D.O.T. standards and requirements