



ALUMA TOWER COMPANY, INC.

1639 Old Dixie Hwy.
P.O. Box 2806
Vero Beach, FL 32961-2806
Ph 1.772.567.3423
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www.alumatower.com

TM54-80S/TU-90HD - Unit System Specifications

Tower Specifications– All Aluma Tower Company, Inc. towers are designed to TIA-222-G Structural Standards for Antenna Supporting Structures and Antennas.

Model	TU-90HD
Tower Construction	American Aircraft Aluminum 6061-T6
No. of Sections	4
Sections ID	EU, DU, CU & BU
Length of the Section	25 ft.
Sections Overlap	4 ft.
Maximum Height w/o Mast	88 ft.
Standard Mast Length	8 ft.
Maximum Height w/ Mast	92 ft.
Nested Height w/o Mast	27 ft.
Raising System	AC or DC Winch (Multiple Voltage Available)
Tilting Mechanism	AC or DC Winch (Multiple Voltage Available)
Type of Retraction	Positive
Winch Manual bypass	Yes
Lockable Mechanism	Yes – Safety Stop
Multiple height Lockable	Yes – Every 45"
Multiple Safety Redundancy	Yes
Tower Operations Temperature	-40°F / +120°F
Maximum Pay Load*	200 lbs.
Maximum Wind Load (Sail Area)*	15 sq.ft.
Maximum Wind Speed*	55 mph.
Approximate Tower Weight	450 lbs.

* Number reflect top section of the tower when fully erected (deployed)

Trailer Specifications – All Aluma Tower Company, Inc. trailers are licensed and designed to meet or exceed Department of Transportations (DOT) regulations. Aluma Tower is certified manufacture and an active member of National Association of Trailer Manufactures (NATM)

Frame Model	TM54-80
Frame Construction	American Structure Steel
Finishing and Corrosion Protection	Hot Deep Galvanized
Trailer Frame Length	263"
Trailer Frame Width	88"
Approximated Trailer Frame Height (deck height)	22"
Approximated Trailer Height (with tower)	125 1/8"
Coupler Type	2 5/16" Ball
Coupler Height	18" - 22" – Adjustable, 2" increments
Standard Axles Sizes*	(2) 5200 lbs.
Axles Type	Galvanized Torsion
GVWR	6990 lbs.



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Standard Tire Size*	235-85R/16LT
Tire Load Range	E
Brakes*	Electric in 4 wheels
Breakaway Kit	Yes
Spare Tire	Yes – Full Size
<i>Approximated Shipping Weight (w/ accessories, frame, shelter and tower)</i>	7000 lbs.
Shelter Construction	American Aircraft Aluminum 6061-T6
Shelter Insulation	R-18 (Applied to all Walls)
Shelter Dimensions (external)	84" L. x 58" W. x 74" H
Internal Floor	0.125 Aluminum Sheets
Wall Finished	FRP Panels – 3/8" Fire treated plywood with a washable finishing
Approximated Door Size	5 ft. 6 in. H x 30 in.
Door Insulated	Yes
Door Latch	3 Point Latch, Key Lockable
Tongue Weight	10% to 15% of Shipping Weight
Standard Tongue Jack*	(1) 8000 lbs. mechanical
Leveling System	(8) 8000 lbs. mechanical Jacks
Outriggers	(2) slide-out and (2) swing-out
HVAC	1 Ton Wall Mounted
Radio Racks	19"W x 65 1/2" H, 2 post
Shore Power & Generator Connector	50 Amp. / 5.5KW with a 25Gal. Fuel Tank
Shore Power Extension Cord	50 ft.
Generator Pig Tail cable	10 ft.
Electrical Wiring*	Raceway, 4"x 2" , 3 channels
Electrical Receptacles*	16, (2) Front, (2) Rear, (6) Curb, (6) Road
Interior Lighting*	(2) 4 ft. Florescent light
I/O Port	Single Roxtec 9 ports
Coax Reel	Single – Rated for 300 ft. 5/8" cable
Work Light	Dual 12V
DC System	AGM Deep Cycle Battery

* Multiple Options available

Generator Specifications - Aluma Tower Company, Inc. – Quiet Diesel 5.5KW Generator – ZGEN5.5KWALUMADSL

Kubota Diesel Engine	
Model	D722-E4B
Emission Regulation	Tier4 (EPA Tier4 Compliant)
Type	Vertical 4-Cycle liquid Cooled Diesel
Number of Cylinders	3
Bore	67 mm / 2.64 in



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Stroke	68 mm / 2.68 in
Displacement	0.719 L / 43.88 cu.in
Combustion System	Indirect Injected
Intake System	Naturally Aspirated
Engine Maximum Speed	3600 rpm
Output	Continuous
Generator Use	12.2 kW
Operation Engine Maximum Speed	1800 rpm
Brake Horse Power	16.4 hp. / 16.6 ps.
Direction of Rotation	Counterclockwise Viewed on Flywheel
Oil Pan Capacity	3.8 L / 1.00 Gal
Starter Capacity	12 V / 0.8 kW
Alternator Capacity	DC 12 V / 30 Amp
Length	435.1 mm / 17.13 in
Width	404.0 mm / 15.91 in
Height (1)	564.1 mm / 22.21 in
Height (2)	219.0 mm / 8.62 in
Dry Weight	63.0 Kg / 139 lb.
<i>Aluma Tower Configuration Specifications</i>	
Operation Engine Maximum Speed	1800 rpm
Operation Output	120/240 dedicated 06 Winding Alternator ; Standard 60Hz (50Hz available)
Main Line	Circuit Breaker Mounted
Enclosure size	38" L X 28" W X 32" H
Enclosure Color	Power Coated White (Multiple options available, CARC & NON CARC paint available)
Frame Construction	Structural Aluminum
Ship Weight	595 lb. / 269.89 Kg
Battery System	H.D. Group 27 AGM battery
Fuel Tank	25 Gallon Aluma Fuel Tank
Fuel Water Separator	Racor primary 30 micron
Fuel Filter	Kubota Standard Spin-on secondary Fuel Filter
Recovery System	Coolant
Fuel Pump	Solid state electronic Fuel Transfer Pump. 72" Dry lift
Exhaust System	Under mounted Stainless Steel
Spark Arrestor	USFD Approved
Discharge System	Oil and Coolant drain plumbed of enclosure, valve and plugged to prevent leakage
Block Heater	120 V engine block heater
Control Box – Control Box	DSE 4410 engine/generator controller, mounted in a NEMA 12R water proof enclosure with see through door. (optional with 20 ft. of harness)
Spare parts	Set with: (2) Oil Filter, (2) Fuel Filter, (1) Air Filter and, (1) Fan Belt