

### Representative ITS Shelter COW Configurations

- »  **$\pm 125'$ (38m),  $\pm 120'$ (36m),  $\pm 106'$ (33m),  $\pm 89'$ (27m),  $\pm 72'$ (22m) &  $\pm 55'$ (17m) Self-Supporting & Guyed Tower Heights**
- » **Fully Automated, Direct Drive Tower Operating System; No Belts, No Chains, No Guy Wires Required**
- »  **$\pm 500$  lb/227kg to  $\pm 650$ lb/295kg Standard & Upgraded Tower Load Capacity; 120-220VAC/60-50Hz Configurations**
- » **Greatest Self-Supporting and Guyed Wind/Payload Capacity of Any Comparable Tower System**
- » **Custom Drawbar, Gooseneck & 5<sup>th</sup> Wheel Tow Configurations; Electric, Hydraulic or 2S1M Air Brake Systems**
- » **20,000lb/9,070kg to 36,000lb/16,326kg GVWR Capacity; Typical Shelter Size from 8'-16'0" L x 8'0"W x 8'0"H (OD)**



### Model Series Summary:

NC/SR Series Communication-Site-on-Wheels (COWs) are custom manufactured and accessorized by ITS pursuant to individual client specifications. Models include extra heavy-duty drawbar, gooseneck, and 5<sup>th</sup> wheel style trailer configurations that accommodate a variety of communications equipment shelter sizes, tower systems, power plants and other common and proprietary ITS and/or client-installed equipment. A multi-section ~ 21'0"/6.4m or 25'0"/7.6m each, lattice steel telescopic structure is designed to transport horizontally over the shelter and automatically tilt by means of a heavy-duty, chrome plated hydraulic cylinder. The tower system is raised to its full extension utilizing a direct drive, minimum 1HP, totally enclosed fan cooled (TEFC), wash-down rated electric winch motor and gearbox assembly. **Each COW configuration is capable of being deployed, elevated to its full-extended height, and secured by a mechanical tower lock mechanism by one person in under 30 minutes.** For added security and stability during poor weather conditions, excessive loading, long-term deployment, or to minimize structure deflection for critical applications, this **self-supporting** tower may be further protected by the use of an optional guy cable and ground anchor system.

### Standard "B" & Upgraded "C" Series Towers: Standard Elevations ~ $\pm 106'$ (33m), 89' (27m), 72' (22m) & 55' (17m) Custom Heights ~ $\pm 125'$ (38m) and $\pm 120'$ (36m)

- Self-Supporting and Guy Capable Steel Tower Structures
- To  $\pm 500$ lb/227kg - 650lb/295kg Lift and Tilt Capacity
- Full Automation; Multiple Limit Switch Controls
- From (3) to (6) 21'/6.4m or 25'/7.6m Each Tower Sections
- 1/4" & 5/16" 7x19 Aircraft Quality Galv or Stainless Cables
- Electronic Safety & Motor Protection Features
- Solid State Control Circuitry; Locking NEMA Enclosure
- Min. 1HP TEFC Motor/Gearbox Assembly; Weather Rated
- Hydraulic Tilt Assembly with Integrated Safety Features
- Heavy-Duty Galvanized Tower Base Support Structure
- Direct Drive Telescopic Winch/Motor Assembly ~ No Belts/Chains
- Two (2) to Five (5) Coax/Cable Rings; Min. 15'0"/4.6m Power Cable
- Positive Pull Down and Redundant Tower Cabling Systems
- 120VAC/60Hz and 220VAC/60/50Hz Power Configurations Offered
- Extended Tower Locking Mechanism; Tower Transport Locks
- Optional 3-Arm Antenna, Camera and/or Pan/Tilt Mounts
- Optional Multi-level Guy Kit, Anchor and Torque Arm Assemblies
- Optional Lightning Protection and Grounding Packages
- Optional Aviation Obstruction Lighting; Halogen Work Lights
- Power Generation, Climate Controlled Electronics Cabinets & More

## NC/SR SERIES ~ Communication-Site-on-Wheels (COW)

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**NC/SR Series - General Trailer Description: 20,000lb/9,070kg to 36,000lb/16,326kg GVWR Capacity**

• <b>Gross Vehicle Wt. Rating (GVWR):</b>	Typical from 20,000 lb to 36,000 lb capacity; FET applies at capacities 26,000 lbs and greater
• <b>Gross Axle Wt. Rating (GAWR):</b>	Typical from 10,000 lb to 12,000 lb capacity each axle
• <b>Overall Transport Length:</b>	From $\pm 36'0"$ to $49'0"$
• <b>Overall Transport Width:</b>	$\pm 8'0"$
• <b>Overall Transport Height:</b>	Typical to $13'0"$
• <b>Platform Height:</b>	Typical to $\pm 37"$ rear/upper platform; $\pm 25"$ forward/lower shelter platform and drawbar
• <b>Deployed Footprint:</b>	Typical from $\pm 22'6"$ wide to $\pm 54'0"$ long
• <b>Axes:</b>	Tandem axles, typical 10,000-12,000lb capacity each; EZ-lube or nominal oil bath, adjustable
• <b>Brake System:</b>	Electric with break-away devise, Hydraulic/Surge or 2S1M ABS air on all wheels – FMVSS121
• <b>Tires:</b>	Typical dual LT235/85R16 LR E or G 215/75R17.5 LR H
• <b>Wheels:</b>	Typical $16" \times 6k$ 8-hole dual to $17.5 \times 6.7HC$ , 10-hole disc/hubs stud piloted, oil bath
• <b>Shelter Platform:</b>	Smooth steel plate, $1/8"$ , painted or rubber coated beneath shelter; typical lengths from $\pm 8'6"$ to $\pm 18'0"$
• <b>Operating Platform:</b>	Diamond steel plate, $1/8"$ , painted or rubber coated operating platform; typical length $\pm 14'6"$ – $17'6"$
• <b>Tow Configuration</b>	Drawbar with $2-5/16"$ heavy-duty ball coupler or pintle; gooseneck with $2-5/16"$ ball coupler or inverted $5^{th}$ wheel sleeve; SAE 2" king pin with typical swing clearance to $\pm 82"$ and $\pm 18"$ pin setting to accommodate single and tandem axle tractors; SAE 7-pin or 12-pin Military vehicle connector
• <b>Safety Chains:</b>	$5/16"$ or $3/8"$ P-70 safety chains with back latches/hooks
• <b>Stabilizing Outriggers:</b>	Four (4) heavy-duty steel tube outriggers, retractable and locking; $\pm 6'7"$ front to $\pm 10'0"$ rear extension
• <b>Outrigger Leveling Jacks:</b>	Four (4) 15,000 lb static/12,000 lb lift capacity each, outrigger stabilizing jacks with minimum $14" \times 14"$ galvanized steel sand and marsh platforms
• <b>Landing Gear:</b>	Single or tandem 15,000 lb static/12,000 lb lift capacity each, auto-retract, drop leg or 2-speed with adjustable height; minimum $14" \times 14"$ galvanized steel sand and marsh platforms; optional electric or hydraulic auto-stabilizing trailer jacks
• <b>Spare Tire &amp; Carrier:</b>	Full-sized spare tire secured beneath trailer structure or gooseneck/ $5^{th}$ wheel platform
• <b>Lights &amp; Wiring:</b>	ICC/DOT sealed beam lights, LED, dual stop and turn lights, arctic/desert modular wiring package
• <b>Perimeter Lashing Rings:</b>	Typical 2 to 4 pair perimeter lashing "D" rings; additional at ends of each outrigger
• <b>Leveling Jack Mounts:</b>	Galvanized jacks stands, deck mounted with lanyard
• <b>Ground Rod Storage Tube:</b>	$8'0"$ ground rod storage tube with removable end caps
• <b>Perimeter Grounding Lugs:</b>	Multiple pairs of lugs, perimeter channel mounted
• <b>Perimeter Bubble Levels:</b>	Multiple levels, perimeter channel mounted
• <b>Wheel Chocks/Cones:</b>	Set of DOT compliant wheel chocks and marker cones
• <b>Reflectors/Notices:</b>	Set of DOT compliant reflectors, warning and informational decals
• <b>Trailer Finish:</b>	ITS industrial, multi-part black paint with impact and weather resistant rubberized top coat on shelter and operating deck top platforms





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#### NC/SR Series - General Shelter Description: Standard Sizes ~ 8', 12', 14' & 16'L x 8'0"W x 8'0"H (OD)

<b>Typical Shelter Dimensions</b>	A variety of custom shelter configurations range in size from 8'0" to 16'0" Long x 8'0" Wide x 8'0" High (Outside Dimensions). Shelters may be configured per client specifications, DOT and environmental requirements
<b>Shelter Weight</b>	Standard from 2,300 lbs to 5,500 lbs prior to installation of ITS and/or customer equipment
<b>Standard Shelter Skid Construction</b>	Reinforced, heavy-duty perimeter steel channel skid and cross members sized according to floor load requirement; minimum 250 lbs/sq. ft. All welded construction. Skid to be powder coat painted after fabrication. All steel to be A-36 grade
<b>Standard Shelter Floor Construction</b>	4" thick floor panels – cam lock mechanism for panel assembly, high density expanded polystyrene foam laminated between exterior sheets of 26 gauge galvanized steel and interior sheets of 20 gauge galvanized steel, 1" fire treated plywood reinforcement, minimum 3.5 lbs weight per square foot of panel surface, minimum R-28 insulation factor, exterior white or tan stucco embossed finish, interior smooth galvanized, commercial grade floor tile with vinyl cove base
<b>Standard Shelter Wall Construction</b>	4" thick wall and ceiling panels – cam lock mechanism for panel assembly, high density expanded polystyrene foam laminated between sheets of 26 gauge galvanized steel, ½" fire treated plywood wall reinforcement, minimum 2.4 lbs weight per square foot of panel surface, minimum R-18 insulation factor, exterior white or tan stucco embossed finish ~ multiple 4"W powder coated shelter-to-skid wind shears; rating to 135 mph
<b>Standard Shelter Roof Treatment</b>	Rain roof with thermoplastic single ply PVC roof system, 6"-8" termination bar and fasteners
<b>Standard Shelter Door Construction</b>	Typical 3'0" x 6'0" or double 4'0" x 6'0", insulated, 20 gauge steel constructed, white or tan, 20 or 16 gauge steel frame, drip cap, threshold, weather seal, stainless steel NRP hinges, door lockset, lever-type assembly, deadbolt, latch guard, chrome plate grab handle
<b>Standard Shelter Electrical</b>	Shelter wiring is installed in surface mounted conduit. Interior devices such as switches and receptacles are installed in surface mounted boxes. All circuits are breaker protected. A service entrance is provided on the exterior of the shelter for connecting to main electrical power supply. Additional entrances are provided for telephone and generator hook-ups. All electrical is installed in accordance with the National Electric Code
<b>Air Conditioning and Heating Systems</b>	1 or 2 air conditioners; typical 2-ton (24,000 BTU) or 3-ton (36,000 BTU) capacity each, typical 3-5kW heat, wall mounted unit(s); tandem AC systems have lead lag controller. Standard configuration to include: thermostat, supply grill, return grill, low ambient fan control, adjustable time delay relay, low pressure by-pass, full length mounting brackets, rain hood, dry contact for remote on lockout, high and low pressure switches with lockout relay, 2" pleated filter, and internal disconnect ~ 230/208/1/60Hz
<b>Partial List of Shelter Installed Accessories</b>	<ul style="list-style-type: none"> <li>• Surface mounted sodium exterior lights with photocell</li> <li>• Ground bar kit, ¼" x 4" x 12"-20", exterior and/or interior mounted</li> <li>• Halo ground kit with accessories, #2 solid tinned copper drops</li> <li>• Wave guide entry ~ 2 to 8 ports</li> <li>• Exterior shelter receptacle(s), 120V, GFI</li> <li>• 100-200 Amp/240/120V/60Hz/1PH service panel, 20-42 breaker spaces and disconnect</li> <li>• 2" LB connectors for incoming power, optional generator</li> <li>• Shelter roof access ladder</li> <li>• Multiple duplex and/or four-plex receptacles, 20 amps each</li> <li>• Telco board, 2'x4' with FRP on one side</li> <li>• Alarm terminal strip with open door, high/low temperature, smoke/fire alarm</li> <li>• Emergency lighting with battery backup</li> <li>• Fluorescent lights, 2' – 4' each with RFI filter and cover or wire guard</li> <li>• Detachable shelter entry steps</li> <li>• Automatic or manual transfer switch</li> <li>• UPS and surge suppression systems, and much more</li> </ul>

