



Solar Powered Emergency Tower Model 2100-TS

Product Specification

1.0 GENERAL DESCRIPTION

- 1.1 The Solar Emergency Phone Tower is required to eliminate the need to trench for electrical and phone lines.
- 1.2 The Tower shall be rectangular in appearance and made of continuous steel construction. It shall stand 9' from the base to the top of Tower. The word "EMERGENCY" with bright reflective lettering shall be located on all four sides and each letter shall be a minimum of 3" in height. The phone shall be compliant with the American with Disabilities Act (ADA) and be powered with a solar panel accompanied with a battery for power storage.
- 1.3 The emergency communication component shall comply with the ADA. The phone shall have the ability to be programmed with up to 5 emergency phone numbers. Upon activation of the emergency push button, a call will be automatically placed, the strobe shall instantaneously flash until the call has been disconnected by the called party.

2.0 CONSTRUCTION

- 2.1 The Tower shall be constructed of 11 gauge powder coated hot rolled steel that is weatherproof and manufactured with a weather and corrosion resistant finish.
- 2.2 The Tower is to stand 9' tall from base to top, 10 ¾" wide and 6" deep and all aspects of its construction will be vandal resistant.
- 2.3 The phone plate shall be made of 12 gauge Stainless Steel and be 11 ¼" inches high and 8 ¼" inches wide and will attach to the Tower using 6 Stainless Steel screws.
- 2.4 The phone button shall be located approximately 48" above the base to ensure conformance with the ADA requirements.
- 2.5 The Tower must have a Braille faceplate stating 'EMERGENCY PHONE' 'PUSH FOR HELP' to ensure conformance with ADA requirements.



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- 2.6 The base of the Tower shall be 5/8" in thickness, welded to body of Tower with 4 built in 1" mounting holes to attach to a concrete mounting pad.
- 2.7 The strobe shall be mounted on an aluminum pipe extension on top of the Tower. Strobe will come fully assembled. The extension shall be 30" long.
- 2.8 The strobe electronics access opening shall be 7 1/4" high and 6 3/4" wide and located on the back of the Tower.
- 2.9 Phone electronics and most electrical connections must be housed in a NEMA 4 enclosure within the Tower.
- 2.10 The Tower shall have a rear access panel located on the back of the tower, directly behind the phone plate. The panel provides access to the electrical and phone connections.
- 2.11 The Tower must have a rear access door located less than 2 feet above ground to allow for solar battery installation and maintenance.

3.0 MOUNTING

- 3.1 The Tower is constructed of steel that is of one continuous piece with a welded internal base 5/8" thick containing four built in mounting holes. A template for installing the anchor bolts is to be included. The unit shall be mounted on a concrete pad with 3/4" galvanized anchor bolts, galvanized nuts and washers (available for purchase Part # 7476 or # 7477).
- 3.2 Solar panel is to be mounted at the top of the Tower, affixed to the 30" aluminum extension below the strobe. It shall be at least 85 WATTS and not to exceed 145 WATT. A mounting bracket is provided.

4.0 ELECTRICAL

- 4.1 The phone shall be powered by a solar panel along with a 90 amp hour battery for energy storage.
- 4.2 The power consumption cannot exceed 2.5 amps with a fully active phone, cellular unit, strobe, beacon, faceplate LED and power supply.



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5.0 LIGHTS

- 5.1 The dual element light shall be located at the top of the Tower. The light shall contain a strobe and a constant-on beacon.
- 5.2 The strobe shall be activated upon pushing of the emergency phone button. It shall have an LED cluster and flash at a rate of a minimum of 60 flashes per minute.
- 5.3 The beacon shall provide continuous, steady illumination and will utilize an LED cluster as its light source.
- 5.4 A Photocell shall be offered as an option to allow for the deactivation of the beacon during daylight hours.
- 5.5 A single element strobe shall be offered as an option. The strobe shall be activated upon pushing of the phone button.
- 5.6 Strobes must also be available in custom colors.
- 5.7 An optional additional strobe must be available for a "Service Indicator" light.

6.0 COMMUNICATIONS

- 6.1 The unit shall have an ADA compliant and vandal resistant speaker phone.
- 6.2 The phone shall be a push once to talk phone. Once the button has been pushed, the phone will call programmed emergency numbers. The phone must be capable of being programmed with up to 5 emergency numbers.
- 6.3 The phone shall have location message capability. Phone must have a minimum 18 second recordable message capability programmable to play once, twice, or continuously until * is pressed by called party. Phone shall notify called party of the location of the call upon being received at the emergency dispatch center.
- 6.4 Phone shall be capable of allowing the called party to replay the phone location message if necessary to ensure an understanding of the location of Tower.



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- 6.5 Once call has been made (button pushed), the call can only be terminated by the called party.
- 6.6 Phone plate must have a red LED that will light up upon push of the button. The light shall be a solid color when the phone is activated and will flash when call has been answered.
- 6.7 The phone must be capable of being programmed and reprogrammed on-site at the Tower. Line powered phones and Dip Switch programming are not acceptable.
- 6.8 The phone must have a built in phone line consolidator feature. Phones must be capable of sharing phone lines with up to 10 RATH® SmartPhones if required by end user to reduce operational cost.
- 6.9 Communication options must include: Analog, VoIP, WI-FI VoIP, Cellular (both CDMA & GSM), 900 MHz, and 2-Way Radios.
- 6.10 Standard Phone features:
- Programmable with up to 5 emergency phone numbers
 - Weatherproof speaker
 - Weatherproof microphone
 - Operating temperature of between -40°F to +150°F (-40° to + 65°C)
 - Programmable passwords
 - On-site or remote programmable
 - EEPROM memory to protect programming
 - Adjustable speaker and microphones levels
 - Programmable location message with human voice recognition
 - Programmable conversation time
 - 2 button – 2 number capability
 - Remote and on-site diagnostic testing
 - Ability to control additional accessories (cameras, speakers)

7.0 FINISH

- 7.1 Unit shall be powder coated white with a weatherproof and corrosion resistant finish. End user must be capable of requesting custom colors.



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7.2 Unit must be UV resistant.

8.0 GRAPHICS

8.1 All wording shall be made of highly reflective vinyl lettering.

8.2 The standard text such as "EMERGENCY" shall be available in blue with each letter to be a minimum of 3" in height to meet ADA.

8.3 Text shall be available in custom colors upon request.

9.0 OPTIONS

9.1 Tower shall be available with custom colors, lettering, and faceplate engraving per customer's request.

9.2 Wireless communication options shall include Cellular, WI-FI VoIP, 900 MHz, and 2-Way Radio.

9.3 Both dome cameras and 'pinhole' camera options must be available from manufacturer. Wireless cameras must be capable of storing data on a 32G SD card or larger.

10.0 WARRANTY

10.1 The unit shall be warranted against factory defects for a period of two years.

11.0 MANUFACTURER

The manufacturer shall be:
RATH® Security
N56 W24720 North Corporate Circle
Sussex, WI 53089
800-451-1460
www.rathsecurity.com