New Solar Repeater Kit



Our new Solar Repeater kit includes everything you need to implement a solar powered repeater for the Tehama RF network. The kit comes with our 3rd generation repeater, solar panel, battery, charge controller, UV resistant outdoor enclosure, and mounting hardware for a 2-inch pole. It can also be mounted to a wall or other Unistrut structures.

The 20W solar panel is large enough to fully charge the battery with just 3-4 hours of direct sunlight. With a full charge, the lithium iron phosphate battery can run the repeater for over a week with no further sun exposure.

The Solar Repeater was designed for locations where electric power is not easily available. Mobile/manufactured home communities or larger spread-out sites are prime applications. Additionally, it lets you easily add a repeater to any site without the need of an electrician.

Repeaters implement a redundant and self-healing 2-way mesh radio network which forwards messages from remote MDTs and other repeaters toward the data collecting DCAP.

Specifications

Radio	902 – 928 MHz; FCC Certified; +20dBm transmit power, Open field range approaching 5 miles for standard range and 12 miles for Max Range*
LED-Power	Bi-color, indicates Power state: - Green: AC Power good, Red: No AC power but running on capacitor, **Off**: Off, no power.
LED-Status	Bi-color, indicates Network connection status and Link Quality - Green: Link Quality > 65, Orange: LQ between 31 and 64 - Red: LQ between 0 and 30, **Off** or flashing red: no connection
Dimensions	Solar panel: 18.5” X 14.2” X 0.9” Enclosure: 7.7” x 7.7” x 5.9”
Weight	Under 10 pounds
Operating Environment	-5 to 140 degree F (-20 to 60 C) Charging disabled above 113F (45C) and below 32F (0C)
Power	20W Solar panel plus 3200mAh lithium iron phosphate battery. Solar power priority goes first to the Repeater, then to charge battery. Please contact Tehama Wireless before replacing battery.

*Line of site, actual range will vary depending on installation location and topography. Continual product enhancements may cause specifications to change without notice.

Models

For use in **Standard Range** systems **		
Standard Solar Diversity Repeater	TW-191S	Solar Repeater kit with Repeater, 20W solar panel, 12Ah battery, charge controller, UV resistant outdoor enclosure, and mounting hardware optimized for a 2-inch pole.
For use in **Max Range** systems **		
Max Range Solar Diversity Repeater	TW-195S	Solar Repeater kit with Repeater, 20W solar panel, 12Ah battery, charge controller, UV resistant outdoor enclosure, and mounting hardware optimized for a 2-inch pole.

**** Standard and Max Range systems are NOT compatible: only Max Range MDTs can be used with a Max Range Repeater (and Max Range DCAP) and vice versa. Refer to AN-119 in the documents section of our website for more information.

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