

Side Mounted Solar Kit: 150 Watt / 140 Ah

SOLAR NORTH KIT: M75-SOLAR-000N



SOLAR/BATTERY KIT

TraffiCalm® solar and battery kits provide year-round operation of the system. We have a multitude of solar and battery kits and will make sure you have the right-sized system for your particular location using our sophisticated solar calculator that takes into account the amount of sunlight (insolation), temperature, and cloudy days experienced by month, as well as the power draw of the particular model of Radar Speed Sign chosen.

FEATURES

Complete Kit

Includes the solar panel, post-top panel mount, solar controller, battery box, heavy-duty mounting bracket, batteries, and conduit-enclosed wiring.

Easy Installation

No trenching is required for cables. Utilizes industry-standard hardware and mounting techniques. Consistent connectors and fasteners are compatible with all TraffiCalm Radar Speed Signs.

Environmentally Friendly

Utilizing solar energy combined with the low-power draw of Light-Emitting Diodes (LEDs) in TraffiCalm Radar Speed Signs, these solar kits are the environmental choice for our planet while helping make our roadways safer.

3-Year Warranty

3-year limited warranty on the solar kit, with 1 year on the batteries.

Made in the USA

TraffiCalm Solar/battery kits are manufactured in the USA in an ISO 9001:2015 certified facility. In addition, we provide you with unlimited technical phone support for the life of the unit. Build America/Buy America Compliant.

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SPECIFICATIONS

Physical Descriptions

Mounting: Universal bracket accommodates 4.5" (OD) round post of any make or material

NEMA 3R enclosure

All electronics potted for weatherproofness

Stainless fasteners used for corrosion resistance

Battery Box Dimensions: 35.5" h x 11" w x 8.2" d
(90.17 cm x 27.94 cm x 20.83 cm)

Solar Panel Dimensions: 44.88" l x 27.76" w x 1.38" d
(114 cm x 70.5 cm x 8.5 cm)

Total System Weight: 167 lbs (75.75 kg), includes qty 4 - 35Ah batteries, battery box w/ contents, solar panel, and solar panel rack

Construction

1/16" (.06, 1.58mm) thick aluminum Weatherproof NEMA 3R battery housing

Standard, heavy-duty mounting brackets

Provisions for locking in place are provided with key included

Replacement keys available upon request

Standard DOT powder coat green color (additional colors optional)

Solar Panel Power Specs

Maximum Power (PMax): 150W
Voltage at PMax (Vmp): 18.53V
Current at PMax (Imp): 8.32A

Open Circuit Voltage (Voc): 21.37V
Short-Circuit Current (Isc): 8.77A

Temp. Coefficient of Voc: $-(80 \pm 10) \text{mV}/^\circ\text{C}$
Temp. Coefficient of Isc: $(0.065 \pm 0.015) \%/^\circ\text{C}$
Temp. Coefficient of power: $-(0.5 \pm 0.05) \%/^\circ\text{C}$

NOCT (Air 20°C; Sun 0.8kW/m² wind 1m/s): 47±2°C
Operating Temperature: -40°F to +185°F (-40°C to +85°C)

Maximum system voltage: 1500V DC

Power tolerance: ± 5%

Battery Specs

M75-SOLAR-000N includes qty 4 batteries

12V AGM valve regulated, spill proof, high energy density, DOT approved for transport. Nominal Voltage: 12V (6Cells). Nominal Capacity: 20-hr. (1.75A to 10.50V): 35Ah

Approx. Weight: 24.7 lbs each

Energy Density: 1.70 W-h/in³

Internal Resistance: 8 milliohms

Max Discharge Current (7 Min.): 105.0 amperes

Operating Temperature: Charge: -4°F to 122°F (-20° C to 50° C)

Discharge: -40°F to 140°F (-40° C to 60° C)

Dimensions: 7.72" l x 5.14" w x 6.22" h (19.61 cm x 13.06 cm x 15.8 cm)

Bracket

Fixed Bracket: Quantity 2 - 27.5" h x 1.97 w x 1.1" d
(69.85 cm x 5 cm x 2.79 cm);

Fixed Bracket: Quantity 2 - 29.4 h x 3.3 w x 1.9in
(74.68 cm x 8.38 cm x 4.83 cm);

Tilt Arms: Quantity 2 - 19" h x 1.7" w x 1.1"d
(48.26 cm x 4.32 cm x 2.79 cm);

Fixed Bracket: Quantity 2 - 4.1" h x 3" w x 2.5" d
(10.41 cm x 7.62 cm x 6.35 cm)

90MPH (144KPH) Wind Load Rating

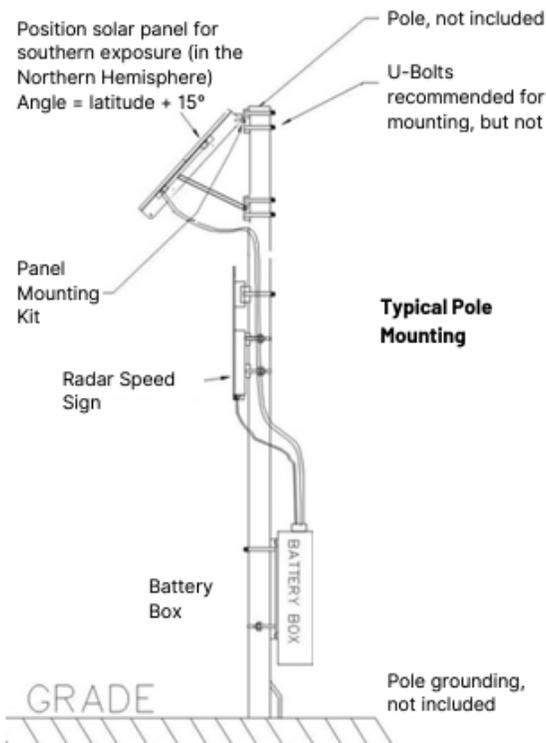
1.1kN/M² Snow Load Rating

Side of Pole (u-bolts required) or Wall Mount

Warranty

3-year warranty, 1 year on batteries

Unlimited technical support



*Due to changing markets and advancements in solar panels, Sizes and voltage may vary, please consult TrafficCalm for the latest cut-sheets