

# TRITON™ SONIC WIND PROFILER SPECIFICATIONS

## DATA CAPTURE

Maximum height	200 m
Wind data capture heights	30, 40, 50, 60, 80, 100, 120, 140, 160, 180, 200 m
Wind speed range	0–25 m/s (0–55 mph)
Measurement accuracy	<0.5 m/s wind speed <1.5° wind direction
Data correlation	Within 2% of anemometers
Data availability	98% at 60 m; 96% at 80 m (with >90% Quality Factor)
Data upload rate	Every 10 minutes, via communications link. Automatic data buffering and backfilling protocol.
SD memory card socket	2 GB SD card records a minimum of 2 years of 10 minute data.

## POWER SUPPLY

Power consumption	7 W (average)
Solar panels	2 panels, each rated @ 85 W
Internal batteries	Leak-proof AGM marine batteries, rated 12V, 92 Ah.
Battery capacity	Internal shipping-safe mounting system holds up to 4 batteries, for 20 days of operation without charging.

## INSTALLATION

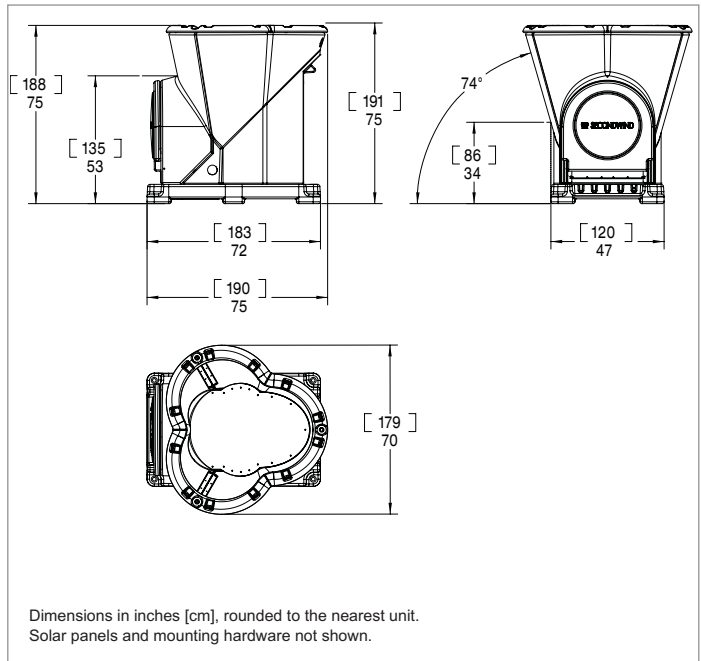
Footprint	2 m x 3 m (6' x 9') with solar panels fitted
Orientation	Dual-axis accelerometer and magnetometers for automatic correction for out-of-level and directional orientation. Site location determined by GPS.
Leveling of base	Within 5° of level in x and y axes

## OPERATION

Ambient temperature	–40°C to +65°C (–40°F to +150°F)
Frequency of sound beams	4,500 Hz (nominal), with automatic temperature correction
Number of sound beams	3
Data sampling rate	85 'chirps' per sound beam per 10 minute period
Duration of sound 'chirp'	60–100 milliseconds
Sound level at ear level	87 dBa at 0m; 63 dBa at 50m

## TRANSPORTATION

Dimensions	2 x 2 x 2 m (6' x 6' x 6'). 1.2m (3' 11") wide base fits pick-up truck bed or trailer
Weight	350 to 450 kg (750 to 1000 lbs.) depending on configuration
Integrated shipping	Triton and all accessories ship as one unit



## MIRROR HEATER SYSTEM

Energy source	LPG (propane)
Storage capacity (to be provided by the customer)	Triton enclosure has nesting locations for two LPG bottles with a combined capacity of 30 kg (70 lbs). Additional (external) LPG capacity can be connected
Run time	Up to 200 hours of active snowfall with internal tanks
Heater control	Intelligent system with remote control capacity

## Configurations

### STANDARD TRITON

Includes 2 batteries, 2 solar panels, GlobalStar modem and antenna, and 4 screw-in ground anchors.

### TRITON WITH HEATER PREP

Standard Triton plus 2 additional batteries, heatable mirror, and heater tubing.

### TRITON WITH MIRROR HEATER

Above, plus complete mirror heater system.



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**Partner Certificato per Triton in Italia**  
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