



UT20

20 ft Universal Tower with Adjustable Mast



## Overview

The UT20 is a durable instrument tower that can be used for a variety of applications. The UT20 tower provides a sturdy mount for many meteorological monitoring applications—especially fire weather stations, where a 6 m (20 ft) measurement height for wind sensors is standard. It also holds

antennas, solar panels, environmental enclosures, radiation shields, and crossarms. It is a versatile instrument mount: many of the same sensor mounts that are used with either our tripods or other towers can be used with the UT20.

## Benefits and Features

- ▶ Sturdy, long-term instrument mount
- ▶ Corrosion-resistant

## Detailed Description

The UT20 tower includes two 3-m (10 ft) sections, one extendable mast, and two cable-tie kits. It has a 1.5-m (5 ft) length and a 3.175-cm (1.25 in.) outer diameter [swagged to 2.5 cm (1 in.) OD]. The 3-m sections are constructed from 2.5-cm (1 in.) OD aluminum tubing.

### Top 3 m Section

This section's width is 33.3 cm (13.1 in) on a side (center of tubing to center of tubing).

### Bottom 3 m Section

This section's width is 43.2 cm (17 in) on a side (center of tubing to center of tubing).

### Mounting Base, Grounding Kit, and Guying Kit

This tower requires a mounting base and grounding kit. Campbell Scientific also recommends guying the UT20 with our UTGUY Guy Kit. See Ordering Info on web page for more information.

## Specifications

Material

Hardened drawn 6063-T832

aluminum

Guyed Tower Area Requirements	~3.5 m (11.5 ft) radius
Required Concrete Pad Dimensions	91 x 91 x 122 cm (36 x 36 x 48 in.) for B18 Concrete Mounting Base  Concrete pad requirements assume heavy soil; light, shifting, or sandy soils require a larger concrete pad.
Extendable Mast	<ul style="list-style-type: none"> <li>› 1.5 m (5 ft) length</li> <li>› 3.175 cm (1.25 in.) outer diameter (swagged to 2.5 cm [1 in.] outer diameter)</li> </ul>
Pipe Outer Diameter	<ul style="list-style-type: none"> <li>› 3.18 cm (1.25 in.) for vertical tubing of lower section</li> <li>› 2.5 cm (1.0 in.) for vertical tubing of upper section</li> <li>› 0.953 cm (0.375 in.) for cross supports/webbing</li> </ul>
Crossarm Measurement Height	6 m (20 ft)
Height	6.1 m (20 ft)
Shipping Dimensions	310 x 46 x 46 cm (122 x 18 x 18 in.)
Shipping Weight	23 kg (50 lb)

### Maximum Wind Load Recommendation

B18 Base (unguyed)	177 km/h (110 mph)
RFM18 Base (with UTGUY)	177 km/h (110 mph)
UTBASE (unguyed)	177 km/h (110 mph)

*-NOTE-*

*Wind load endurance is affected by quality of anchoring and installation; guy wire tension; soil type; guy angle; and number, type, and location of instruments fastened to the tower.*

*Wind load recommendation assumes proper installation, proper anchoring, adequate soil, and total instrument projected area of less than 0.19 m<sup>2</sup> (2 ft<sup>2</sup>).*

*For the RFM18 base, the wind load recommendation also assumes that the UTGUY's turnbuckles are preloaded just enough to equalize tension and that the tower is guyed at a 60 degree angle relative to the ground (maximum).*

For comprehensive details, visit: [www.campbellsci.com/ut20](http://www.campbellsci.com/ut20) 



Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | [www.campbellsci.com](http://www.campbellsci.com)  
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