



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"> › 1.5 m (5 ft) length › 3.175 cm (1.25 in.) outer diameter (swagged to 2.5 cm [1 in.] outer diameter)
Pipe Outer Diameter	<ul style="list-style-type: none"> › 3.18 cm (1.25 in.) for vertical tubing of lower section › 2.5 cm (1.0 in.) for vertical tubing of upper section › 0.953 cm (0.375 in.) for cross supports/webbing
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 m² (2 ft²).

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 

