



# Sturdy, Long-Term Instrument Mount

## Overview

The UT10 is an aluminum, corrosion-resistant tower that provides a 10 ft (3 m) crossarm height. This general-purpose tower supports the attachment of sensors, mounts, solar panels, antennas, and environmental enclosures. The UT10 includes a lightning and grounding rod, grounding cables, grounding-cable clamps, hinged base, and UV-resistant cable ties. A J-bolt kit is used to secure the base to the concrete pad. This kit is ordered as an option, so it can be ordered separately and shipped before the rest of the tower.

The UT10 is used as a sturdy, long-term instrument mount for a variety of applications. It can be augmented with mounts (for example, CM204, CM220, CM225) that allow attachment of meteorological sensors such as wind sets, pyranometers, and temperature/relative humidity probes. Other meteorological sensors such as barometers, soil temperature and moisture probes, and rain gages can also be used with a UT10-based station.

## Benefits and Features

- › Sturdy, long-term instrument mount
- › Base and grounding kit included

## Detailed Description

The tower consists of 2.5 cm (1 in.) OD corrosion-resistant aluminum tubing. In cross-section, it is 25.7 cm (10.1 in.) on a side (center of tubing to center of tubing). It includes an adjustable mast, a hinged base, lightning rod, grounding rod, and cable tie kit.

The J-bolt kit is required to assemble the tower to its concrete pad.

- › The J-bolt kit can be ordered as the -J option, and the kit is delivered with the rest of the tower.
- › If the -NJ option is ordered, without the J-bolt kit, and the kit is ordered separately, the user can have delivery on the J-bolt kit prior to the rest of the tower, making the parts available when the concrete pad is poured.

---

## Specifications

Material	Hardened drawn 6063-T832 aluminum
Required Concrete Pad Dimensions	61 x 61 x 61 cm (24 x 24 x 24 in.)  Concrete pad requirements assume heavy soil; light, shifting, or sandy soils require a larger concrete pad.
Leg Spacing	26 cm (10.25 in.) between legs, center to center
Extendable Mast	› 1.37 m (54 in.) length that is threaded on one end › 4.83 cm (1.9 in.) outer diameter
Pipe Outer Diameter	› 0.953 cm (0.375 in.) for cross support › 2.5 cm (1 in.) for vertical
Crossarm Height (attached to mast)	› 3.7 m (~12 ft) maximum with mast fully extended

- › 2.7 m (~9 ft) minimum
- › 3 m (10 ft) standard

---

Height	3 m (10 ft)
Weight	11.8 kg (26 lb)

### Maximum Wind Load Recommendation

*-NOTE-*

*Wind load endurance is affected by quality of anchoring and installation; soil type; 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>).*

---

Wind Load Recommendation	177 km/h (110 mph) for gusts
--------------------------	------------------------------