

Features

Fiber Glass Construction

Indoor or Outdoor use

Motorized Remote Operation

Height Range - 1 to 4 meters / 1 to 6 meters

Can be tilted



Description

The Com-Power AM-400 and AM-600 are motorized antenna masts designed for EMI testing. Antenna mast Model AM-400 allows antenna height variation from 1 to 4 meters, and Model AM-600 can vary antenna height from 1 to 6 meters. They are constructed using non conductive fiber glass material.

The antenna is mounted on a one piece cross boom, which is attached to a slider assembly. The slider assembly rides over the length of the mast on delrin wheels. It is pulled by a rope and pulley mechanism powered by a electric motor. The slider assembly is equipped with a spring loaded braking mechanism to prevent inadvertent descent should the rope fail.

The antenna height is controlled by using the bidirectional remote switch. The remote switch lets the test personnel operate the antenna mast from a location outside the test area, to avoid interfering with the antenna reception. It can raise and lower the antenna to the desired height. The friction brake attached to the motor makes sure that the slider stops at the desired height without slipping.

The mast is shipped with two interlocking mast sections. The base section is supported by four locking swivel casters. The casters swivel for positioning the mast. The base section also has a pivoted joint so that the mast can be tilted and laid flat when it is not in use.

Application

When testing on an Open Area Test Site (OATS) for radiated emissions, most specifications require antenna height variation to maximize emissions at each frequency. The antenna masts are used to vary the antenna height for this purpose. Generally the maximum antenna height is 4 meters, but some specifications require 6 meter antenna height when the test distance exceeds 10 meters. Some common specifications with test distance and antenna height are listed below.

Specification	Distance* (meters)	Height (min) meters	Height (max) meters
FCC_class B	3	1	4
CISPR22	10	1	4
EN 55011 class A	30	1	4
FCC Part 18	30	2	6

^{*} Distance of antenna from the equipment under test.

Specifications

ModelAM-400 /AM-600Mast Height:193"(5 m)/272" (7 m)Max. Antenna Height:157" (4 m)/236" (6 m)Min. Antenna Height:39" (1 m)/39" (1 m)

Current Rating (F/L): 0.77 Amp Power: 115 VAC, 60 Hz

Weight: 150 lb (68 kg)/170 lb (77 kg)