



Long Pole Mast DKP110



Features

- Simple, easy to use, and rugged design
- Hinged base with manual tilt for easy installation and maintenance
- Highly efficient lightning and equipment grounding system for maximum safety
- Withstands winds of up to 60 m/s (134 mph)
- Suitable for a wide range of meteorological and climatological automatic weather station applications
- Foundation set includes all the necessary parts for quick and easy installation

Vaisala Long Pole Mast DKP110 is a simple, cost-effective, high-quality mast for use in surface weather applications.

Vaisala Long Pole Mast DKP110 is 10 meters (33 feet) high and suitable for a wide range of surface weather and climatological applications. The mast tubes are made of anodized aluminum and the remaining parts, including guy wires, bolts, and foundation set, are made of galvanized steel to resist weathering. The mast is painted white.

Manual Tilt for Easy Maintenance

The hinged base allows the mast to be manually tilted down for easy maintenance of the sensors and other equipment installed on the upper assembly. A grip hoist or electric winch can be used to help with mast tilting.

Basic Delivery Contents

The basic mast delivery includes a lightning rod with ground wire and underground copper wires, one set of guy wires, and a basic foundation set for installation on a concrete or rock base. The components are packed in durable wooden boxes that are suitable for airfreight.

Lightning Safety and Proven Wind Resistance

The sensors and other equipment are protected with a ground wire that runs from the lightning rod down the outside of the mast into an attachment on the baseplate. In addition, for maximum lightning safety copper wires run underground from the baseplate to the guy wire block.

With the standard set of guy wires included, the mast can withstand winds of up to 60 m/s (134 mph) with weather station enclosure, solar panel, and sensors installed.

Easy Installation

The foundation set includes everything needed to construct a steady base for the mast. The only additional item required at the installation site is concrete or an existing concrete block. Alternatively, in suitable soils the mast can be installed using 1500 mm (4 ft 11 in) long screw pile foundations.

Technical Data

Mechanical Specifications

Height	10 m (33 ft)
Diameter	
Lowest section (0 ... 1 m / 0 ... 3 ft 4 in)	120 mm (4.72 in)
Second section (1 ... 4 m / 3 ft 4 in ... 13 ft 1 in)	100 mm (3.94 in)
Third section (4 ... 7 m / 13 ft 1 in ... 23 ft)	80 mm (3.15 in)
Highest section (7 ... 10 m / 23 ft ... 32 ft 10 in)	60 mm (2.36 in)
Maximum wind speed	60 m/s (134 mph)
Weight	69.5 kg (153.2 lb)
Mast tube material	Aluminum alloy
Base and hinge material	Galvanized steel
Other parts, bolts material	Galvanized steel

Guy Wires

Length	11 m (36 ft 1 in)
Material	Galvanized steel
Breaking strength	14 kN
Marking	Black and yellow colored cable shrouds to the height of 2 m (6 ft 7 in) from the ground

Foundation Set

Material	Galvanized steel
Thread of foundation bolts	M20
Length of foundation bolts	500 mm (19.69 in), cast or drilled into concrete

Mast Screw Pile Base (Optional)

Material	Galvanized steel
Screw pile length	1500 mm (59.05 in)

Coating/Painting

Coating/Painting	
Aluminum parts	Anodized and painted white
Steel parts	Galvanized

Packaging

Material	Heat-treated wood
Mast DKP110	
Dimensions (L × W × H)	3060 × 460 × 290 mm (120.47 × 18.11 × 11.42 in)
Weight	108 kg (238.1 lb)
Screw Pile Set (4 pcs)	
Dimensions (L × W × H)	1800 × 460 × 290 mm (70.87 × 18.11 × 11.42 in)
Weight	60 kg (132.3 lb)
Foundation Set	
Dimensions (L × W × H)	700 × 50 × 50 mm (27.56 × 1.97 × 1.97 in)
Weight	5.6 kg (12.3 lb)

