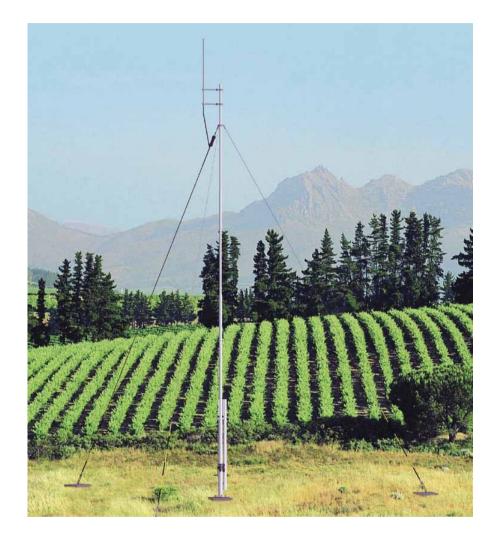
# VAISALA

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# Vaisala Tiltable Masts DKP206W and DKP210W



Features/Benefits

- Easily tilted down by one person for equipment installation and maintenance
- Insulated guy wire and lightning rod provide maximum lightning safety
- Can withstand winds of up to 50 m/s; up to 75 m/s with two sets of guy wires
- Suitable for wide range of meteorological and climatological automatic weather station applications
- Foundation set includes all the necessary parts for quick and easy installation

The Vaisala Tiltable Masts DKP206W (6 m high) and DKP210W (10 m high) are suitable for a wide range of surface weather and climatological applications. The mast tubes are made of anodized aluminum. The remaining parts of the main assembly are made of stainless steel to resist weathering. The mast is painted white.

One maintenance person can effortlessly tilt the mast with the optional, easily detached winch to maintain the sensors and other equipment installed on the upper mast assembly. This significantly reduces the costs associated with maintaining the automatic weather station.

The basic mast delivery includes the lightning rod with the grounding cable, one set of guy wires, the lifting rod and the foundation set. All the components are packed in durable cardboard boxes that are suitable for airfreight.

The lightning rod protects the sensors and other equipment by means of nonconductive holders and grounding via one of the three guy wires which is totally isolated from the mast. The equipment is always grounded to a separate grounding point.

With one standard set of guy wires, the mast can easily withstand winds of up to 50 m/s when the weather station enclosure, solar panel and sensors are installed on it. The optional second guy wire set enables the DKP210W to withstand winds of up to 75 m/s.

The foundation set includes all the parts needed for constructing a steady and correctly oriented base for the mast. The only additional item needed at the installation site is concrete or an existing concrete block.

# **Technical data**

#### Main mast assembly

| Height                       |                 |
|------------------------------|-----------------|
| DKP206W                      | 6 m             |
| DKP210W                      | 10 m            |
| Maximum wind speed (DKP210W) |                 |
| With one set of guy wires    | 50 m/s          |
| With two sets of guy wires   | 75 m/s          |
| Diameter                     |                 |
| Lowest section (0 1.9 m)     | 100 mm          |
| Second section (1.9 4.9 m)   | 75 mm           |
| Third section                | 63 mm           |
| Highest section              | 50/60 mm        |
| Top of the mast              | 60 mm           |
| Tube material                | Aluminum alloy  |
| Base and hinge               | Stainless steel |
| Other parts, e.g. bolts      | Stainless steel |

### **Guy wires**

| Material          | Stainless steel                     |
|-------------------|-------------------------------------|
| Breaking strength | 28 kN                               |
| Marking           | Black and yellow cable shrouds to a |
|                   | height of 2 meters above the ground |

# **Foundation set**

| Material                   | Galvanized steel              |
|----------------------------|-------------------------------|
| Thread of foundation bolts | M20                           |
| Length of foundation bolts | 300 mm                        |
| Wedge bolts                | Cast or drilled into concrete |
|                            | using the template provided   |

#### Mast concrete base

Soil bearing capacity must exceed 45 kPa

## **Coating/Painting**

| Aluminum parts        | Anodized and painted |
|-----------------------|----------------------|
| Steel parts           | Galvanized           |
| Stainless steel parts |                      |
| Base and hinge        | Painted              |
| Other parts           | Uncoated             |
|                       |                      |

#### Packages

| Material                               | Cardboard               |
|--|-------------------------|
| Weight                                 |                         |
| (packaged with DKF200, DKL200, DKW200) |                         |
| DKP206W                                | 105 kg                  |
| DKP210W                                | 125 kg                  |
| Maximum length                         | < 3.1 m,                |
|  | suitable for airfreight |

### **Order information**

| DKP210W           | 10 m mast with guy wire set |
|-------------------|-----------------------------|
|                   | and basic accessories       |
| DKP206W           | 6 m mast with guy wire set  |
|                   | and basic accessories       |
| Basic accessories |                             |
| DKF200-1          | Foundation set              |
| DKL200            | Passive lightning rod       |
| DKP200LR          | Lifting rod                 |
| Options           |                             |
| DKW200            | Winch                       |
| DKP200TS          | Tilting support             |
| DKP210GW-2        | Additional guy wire set     |
|                   | for DKP210W                 |
|                   |                             |



For more information, visit us at sales@vaisala.com

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