# **VAISALA**

# Composite Pole Mast DKE110W/AV



Vaisala Composite Pole Mast DKE110 is a 10-meter (33-feet) mast that is available with white (DKE110W) and with red/orange and white (DKE110AV) painting. The mast is suitable for a wide range of surface weather and climatological applications.

## **Lightweight but Rigid**

DKE110W/AV mast is lightweight, but rigid enough to withstand wind speeds of up to 60 m/s (134 mph) with 1 set of guy wires. With 2 sets of guy wires, the mast can withstand wind speeds of up to 75 m/s (168 mph).

To achieve excellent weather resistance, the metal parts of the mast are made of anodized aluminum alloy and maritime-grade stainless steel.

#### **Weather Resistant**

The mast tubes of DKE110W/AV are made of glass-fiber reinforced plastic (GRP) which has very good weathering properties.

#### **Features**

- Painted white (DKE110W) or red/ orange and white (DKE110AV)
- Suited for surface weather and climatological applications
- Withstands wind speeds of up to 60 m/s (134 mph)
- With 2 sets of guy wires, withstands wind speeds up to 75 m/s (168 mph)

# Technical Data

# **Operating Environment**

Maximum wind speed (top guying)	60 m/s (134 mph)
Maximum wind speed (top and middle guying)	75 m/s (168 mph)

# **Mechanical Specifications**

Recycling	According to EU directive 2008/98/EC
Height (assembled)	10 m (33 ft)
Height, mast tube 1	0 3 m (0 9 ft 10 in)
Height, mast tube 2	3 6 m (9 ft 10 in 19 ft 8 in)
Height, mast tube 3	6 9 m (19 ft 8 in 29 ft 6 in)
Height, top section	9 10 m (29 ft 6 in 32 ft 10 in)
Length, mast tubes 1, 2, 3	3 m (9 ft 10 in) each
Length, top section	1 m (3 ft 4 in)
Diameter, mast tubes 1, 2, 3	106 mm (4.17 in)
Diameter, top section	60 mm (2.36 in)
Weight (mast only)	35 kg (77 lb)

#### **Mast Tube Material**

Mast tubes 1, 2, 3	Glass-fiber reinforced plastic (GRP)
Top section	Aluminum alloy
Base and hinge	Aluminum alloy
Other parts	Aluminum alloy, glass-fiber reinforced plastic (GRP), or maritime-grade stainless steel
Fasteners	Maritime-grade stainless steel

## **Guy Wires**

Material	Maritime-grade stainless steel
Fasteners	Maritime-grade stainless steel
Guy wires, top guy wire set	3 pcs
Guy wires, middle guy wire set (optional)	3 pcs
Length	11 m (36 ft)

#### **Foundation Set**

Material	Galvanized steel
Thread of foundation bolts	M20
Length of foundation bolts	350 mm (13.78 in), cast in or drilled to concrete

# Coating

Glass-fiber reinforced plastic (GRP) parts	Painted, white (DKE110W) Painted, red/orange and white (DKE110AV)
Aluminum parts	Anodized and painted
Steel parts	Galvanized
Stainless steel parts	Painted

### **Packaging**

#### Plywood Mast Package

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Dimensions (L × W ×	311 × 52 × 43 cm (122.44 × 20.47 × 16.93 in)
Weight	52 kg (115 lb)
Cardboard Mast Package with Plywood Reinforcements	
Dimensions (L × W ×	318 × 51 × 42 (125.20 × 20.08 × 16.54 in)
Weight	11 kg (24.5 lb)
Foundation Set Pack	ge
Dimensions (L × W ×	385 × 275 × 110 mm (15.16 × 10.83 × 4.33 in)
Weight	12 kg (26.5 lb)



