

### Features

- Meets ICAO and FAA standards
- Built-in frangibility
- Fully impact tested
- Transparent to electromagnetic radiation – no interference with airport communication equipment
- Optional passive air terminal protects sensors and other equipment
- Composite structure provides superior air terminal insulation

Vaisala Frangible Lattice Mast DKE200 is a lightweight and rigid mast especially suited for aviation use. The mast complies with ICAO and FAA standards and is compatible with all Vaisala weather stations.

### Fully compliant with safety specifications

The DKE200 mast materials comply with aviation safety specifications and the mast is impact tested according to the ICAO Aerodrome Design Manual Part 6, chapter 5 and FAA AC 150/5345-45C, section 4.

The DKE200 mast is rigid and strong but lightweight, and its composite structure makes it brittle in case of sudden impact. In collision, the mast breaks at the point of impact without causing hazard to the aircraft.

### Robust and corrosion-resistant build

The DKE200 mast withstands wind speeds of up to 60 m/s (134 mph). The composite materials resist fatigue, corrosion, and other effects of weather and temperature, making the masts also suitable for marine and other corroding environments.

As composite materials do not distort electromagnetic signals of the airport communications equipment, the need to calibrate instrument landing system (ILS) antennas is reduced.

The DKE200 mast is maintenance free.

### Custom options for all kinds of airports

The mast is supplied with a bottom hinge, allowing maintenance from a crane truck without lowering the mast. A center-hinged version is also available, allowing the mast to be lowered by a single maintenance worker for easy maintenance of the sensors and other equipment. Note that the number of persons needed depends on local safety regulations.

An optional passive air terminal is available for protecting sensors and other equipment. The composite materials of the mast provide superior air terminal insulation.

# Technical data

## Operating environment

Maximum wind load 60 m/s (134 mph)

## Mechanical specifications

Height, assembled 10 m (32 ft 10 in)

### Dimensions

Upper mast module (H × W × L) 400 × 400 × 3750 mm  
(15.75 × 15.75 × 147.64 in)

Lower mast module (H × W × L) 500 × 500 × 5550 mm  
(19.69 × 19.69 × 218.50 in)

Top frame with spigot (Ø × L) 60 × 1000 mm (2.36 × 39.37 in)

## Materials

Main mast assembly Glass reinforced plastic (GRP)

Top frame and spigot Aluminum

Base frame and foundation kit Galvanized steel

Crossbar, sensor support tubes, and joining element Glass-reinforced plastic (GRP)

Sensor support arm at 2-meter (3-foot) height Aluminum

Painting Orange (RAL2004) and white (RAL9016) in 7 sections according to ICAO Annex 14 and FAA AC 150/5345-45C  
Red (RAL3020) and white (RAL9016) in 7 sections according to ICAO Annex 14

Packaging Plywood, suitable for air freight

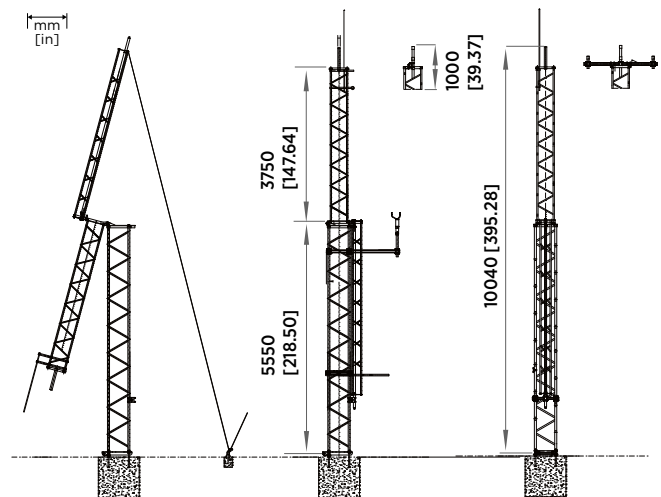
## Frangibility certification

ICAO

Aerodrome Design Manual Part 6:  
Frangibility Doc 9157 AN/901  
1st edition, 2006

FAA

Advisory Circular (AC) 150/5345-45C



Dimensions

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