### Model GEO-FT / PM FRANGIBLE TOWERS & POLES AWOS & METEOROLOGICAL MAST



Airport Weather Observation System Towers and Masts in Compliance for Full Impact Testing with:

- ICAO guidelines Aerodrome Design Manual Part-6, chapter 5
- US Department of Transportation, FAA Advisory Circular No 150/5345-45C, April 2007

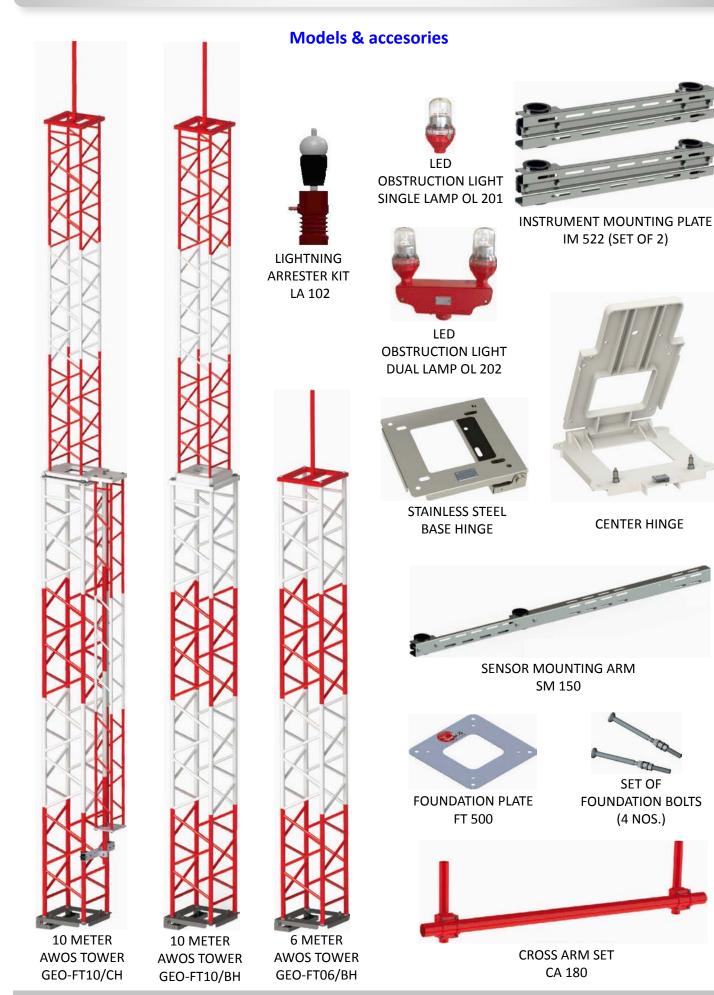


METEODATA Datalogger with Integrated Comms (3G / GPRS, Modbus, Line, Radio or Satellite)

SET OF

(4 NOS.)

2/4



### **SAFE & STRONG**

GEONICA offers a complete line of frangible towers, masts and poles for hoisting weather equipments (AWOS), approach lights tower, glide path mast, etc for airports. Both lattice and pole type frangible structures are manufactured for various airport applications. The towers and masts are made of fibre glass composites and resins to give frangibility in the products for strength and durability against high wind & jet blast.

Full impact testing was carried in compliance with U.S. Department of Transportation Federal Aviation Administration (FAA), advisory circular No 150/5345 45c, section 3.9 and 4.2.5 and International Civil Aviation Organization (ICAO) doc 9157 An/901 part 6, subsections 4.9.20, 4.9.21, and 4.9.22

Successfully tested at PMG Technologies in Blainville, Quebec Canada in presence of Intertek FAA approved Test Inspection Agency

Successful Frangibility Crash Tested at Narnaul Airport in India





### FEATURES

- Strictly compliance of frangibility to ICAO FAA guidelines
- Follow all safety regulations
- Tested under third party supervision
- Corrosion-free tower and accessories
- UV- resistant PU paint with 3-year warranty
- 5-Year manufacturing defect warranty on complete tower
- No electromagnetic interference
- Facility for customization
- Prompt deliveries
- Assure durability
- Light weight
- All standard instruments mountings available





#### STANDARD PRODUCTS

#### AWOS lattice tower

- 6 Meter tower AWOS
- 10 Meter with base hinge
- 10 Meter with middle hinge
- 2 Meter visibility sensor pole
- 3 Meter vigilance camera pole

#### **CUSTOMIZED PRODUCTS**

- Camera mounting towers
- Frangible fencing
- Mounting for specific sensors
- Tailor made enclosures and mounting
- Customized flood light poles and towers

#### **ORDER DETAILS**

DESCRIPTION	SPECIFICATIONS	ORDER CODE	
6 meter Lattice	500x500mm, 5 meter Lattice Tower, 1 meter Instruments mounting Assembly, Bottom Hinge Stainless steel base plate, Set of 4 foundation bolts, Stainless Steel mounting bolts with Accessories, color Aviation Red & White	GEO-FT06/BH	
10 meter Lattice Tower with base hinge	500x500mm, 5.0 meter bottom Lattice Tower, 400x400, 4.0 meter Top Lattice tower, 1 meter instrument mounting assembly, Fixed center assembly, Bottom Stainless Steel Hinge base plate, Set of 4 foundation bolts with accessories, Stainless Steel mounting bolts, color Aviation Red & White	GEO-FT10/BH	
10 meter Lattice Tower with center hinge	500x500mm, 5.5 meter bottom Lattice Tower, 400x400, 3.5 meter Top Lattice tower, 1 meter instrument mounting assembly, Centre Hinge Assembly with accessories, Hinge Rope set, Set of 4 foundation bolts with accessories, Stainless Steel mounting bolts, Stainless Steel Bottom Hinge base plate, color Aviation Red & White	GEO-FT10/CH	
2 meter Visibility Pole		GEO-PM02/BH	
3 meter Vigilance Camera Pole	Ø 90 mm Pole 3 meter with 0.5 m long Ø 55 mm top piece with for variable length, Bottom Hinge Stainless Steel with Base Plate, Set of foundation bolts, color Aviation Red & White, Optional Yellow available	GEO-PM03/BH	
STANDARD ACCESSORIES			
Foundation Template	Powder Coated foundation template 500x500mm and 400x400mm	FT 500	
Instruments Mounting Plate	Set of 2 plates with mounting bracket and Stainless Steel screw set	IM 522	
Cross Arm	1.8 meter cross arm with vertical sensor mounting assembly	CA 180	
Sensor Mounting Arm	1.5 meter sensor mounting arm with accessories	SM 150	

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Lightning Arrester	50 meter Passive Lightning arrester with insulator, cable 10 meter & mounting accessories	LA 102
Obstruction Light Single Lamp	LED obstruction light single lamp, Complaint to ICAO (Aerodromes Annex 14) and FAA - L810, Aviation Red color, Selectable flashing rate, AC 110 ~ 220V, Auto light sensing on/off	OL 201
Obstruction Light Dual Lamp	LED obstruction light dual lamp, Complaint to ICAO (Aerodromes Annex 14) and FAA - L810, Aviation Red color, Selectable flashing rate, AC 110 $^{\sim}$ 220V, Auto light sensing on/off	OL 202
Packaging	Wooden crate packing	WP 901













SGS Frangible Towers Aviatio



#### **COMPLIANCE**

- Compliance with FAA AC 150/5345-45C and Compliance with ICAO Flammability Test IS 6746 1994 guidelines Aerodrome Design Material Part-6 Frangibility Doc 9157 First Edition-2006 chapter 5
- Wind load deflection test ٠
- Salt Spray Test as per MIL-STD-810F & ISO 9227:2017 ٠
- Temperature Resistance Test -35°C to +55°C ٠

- Di-Electric Strength Test ASTM D 149:2009
- UV Resistance Test ASTM G 154:2016/IS-14887
- Tensile Strength Test ASTM D638
- Flexural Strength Test ASTM D790
- Flame Spread & Smoke develop Index test ASTM E84

#### **CERTIFICATION**

Third party full crash test certificate as per compliance far full impact testing with ICAO guidelines Aerodrome design manual Part-6, chapter 5 and US department of transportation, FAA Advisory circular No 150/5345, April 2007