



CATALOG 2024

FRANGIBLE TOWERS & POLES
FOR METEOROLOGICAL
SYSTEMS

Meteorological Towers and Poles in Compliance
for Full Impact Testing with ICAO guidelines
Aerodrome Design Manual Part-6, chapter 5 and
US Department of Transportation, FAA Advisory
Circular No 150/5345-45C, April 2007

SGS FRANGIBLE TOWERS (P) LIMITED

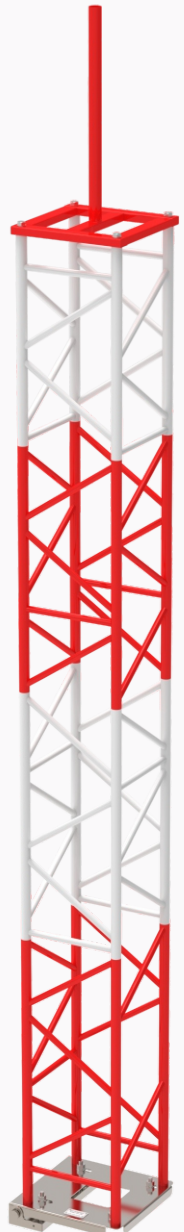
SAFE & STRONG



10 METER METEOROLOGICAL TOWER LT 4050-10 CH



10 METER METEOROLOGICAL TOWER LT 4050-10 BH



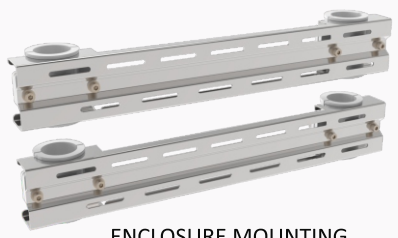
6 METER METEOROLOGICAL TOWER LT 4050-06 BH



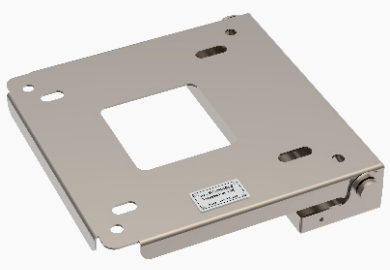
POLE FOR VISIBILITY SENSOR PT 9060



CROSS ARM SET CA 180



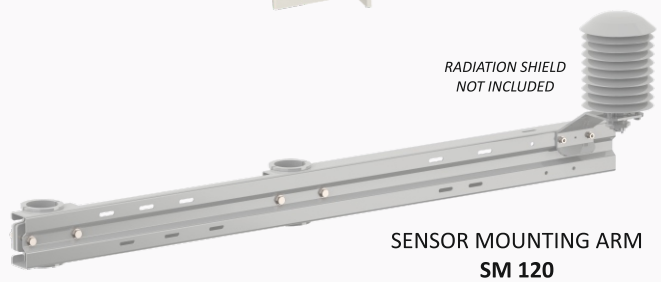
ENCLOSURE MOUNTING (SET OF 2) EM 522



STAINLESS STEEL BASE HINGE INCLUDED WITH TOWER



CENTER HINGE (ALUMINUM CASTING)



SENSOR MOUNTING ARM SM 120

RADIATION SHIELD NOT INCLUDED



SET OF FOUNDATION BOLTS (4 NOS.) INCLUDED WITH TOWER



UNIVERSAL MOUNTING FOR POLE UM 122



LED OBSTRUCTION LIGHT SINGLE LAMP OL 201



LED OBSTRUCTION LIGHT DUAL LAMP OL 202

MODELS & ACCESSORIES

SAFE & STRONG

SGS Frangible Towers Pvt. Ltd. is a leading manufacturer of frangible towers, mast and poles for hoisting weather equipments (AWOS), approach lights, glide path mast etc. for airports. Both lattice and pole type frangible structures are manufactured for various airport applications. The towers and mast 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

Successful Frangibility Crash Tested at Narnaul Airport in India and Successfully tested at PMG Technologies in Blainville, Quebec Canada in presence of Intertek FAA approved Test Inspection Agency



FEATURES

STANDARD PRODUCTS

METEOROLOGICAL TOWERS

- 6 METER TOWER AWOS
- 10 METER TOWER WITH BASE HINGE
- 10 METER TOWER WITH CENTER HINGE
- POLE FOR VISIBILITY SENSOR

WIND SOCK MAST

- 5 METER MAST
- WITH EXTERNAL LIGHTNING

8 METER LIGHTNING

- WITH EXTERNAL LIGHTNING

3 METER VIGILANCE CAMERA POLE

- POLES FOR AIRPORT LIGHT APPLICATION

- ✓ STRICTLY COMPLIANCE OF FRANGIBILITY WITH ICAO AND 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 YEARS MANUFACTURING DEFECT WARRANTY ON COMPLETE TOWER
- ✓ NO ELECTRO-MAGNETIC INTERFERENCE
- ✓ FACILITY FOR CUSTOMIZATION
- ✓ PROMPT DELIVERIES
- ✓ ASSURE DURABILITY
- ✓ LIGHT WEIGHT
- ✓ ALL STANDARD INSTRUMENTS MOUNTINGS AVAILABLE

CUSTOMIZED PRODUCTS

CAMERA MOUNTING TOWERS

FRANGIBLE FENCING

MOUNTING FOR SPECIFIC SENSORS

TAILOR MADE FOR SOLAR PANEL MOUNTING

CUSTOMIZED FLOOD LIGHT POLES AND TOWERS

ORDER DETAILS

DESCRIPTION	SPECIFICATIONS	ORDER CODE
6 meter Meteorological Lattice Tower	5.0 meter frangible lattice tower, 1 meter top mounting assembly, Stainless Steel bottom hinge base plate, set of 4 foundation bolts, colour aviation red & white.	LT 4050 - 06 BH
10 meter Meteorological Lattice Tower with base hinge	5.0 meter bottom frangible lattice tower, 4.0 meter top lattice tower, 1 meter top mounting assembly, fixed center assembly, Stainless Steel bottom hinge base plate, Set of 4 foundation bolts, colour aviation red & white.	LT 4050 - 10 BH
10 meter Meteorological Lattice Tower with center hinge	5.0 meter bottom frangible lattice tower, 4.0 meter top lattice tower, 1 meter top mounting assembly, center hinge assembly with accessories, hinge rope set, set of 4 foundation bolts, Stainless Steel bottom hinge base plate, colour aviation red & white.	LT 4050 - 10 CH
Frangible Pole for Visibility Sensors	Frangible pole of variable length, bottom aluminum base, set of foundation bolts, colour aviation red & white.	PT 9060 - 03 BP

STANDARD ACCESSORIES

Foundation Template	Metallic foundation template.	FT 500
Enclosure Mounting	Universal mounting fixture (Set of 2), mounting bracket & standard mounting nut/bolts kit suitable for all types of enclosure & battery box.	EM 522
Cross Arm	1.8 meter cross arm with vertical sensor mounting assembly suitable for wind speed & direction sensor.	CA 180
Sensor Mounting Arm	1.2 meter aluminum sensor mounting arm with accessories suitable for Temp/Humidity sensor and solar radiation sensor.	SM 120
Pole Mounting	Universal mounting kit for pole suitable for all types of enclosure & visibility sensor.	UM 122
Lightning Arrester Kit	75 cm Copper rod with spool, 50 sq mm 14 meter Copper earthing wire, connecting thimbles, 2 meter ground copper rod/strip.	LA 102
Obstruction Light Single Lamp	LED obstruction light single lamp, Complaint to ICAO (Aerodromes Annexure 14) and FAA - 180, Aviation Red Colour, Selectable flashing rate, AC 110V ~ 220V, Auto light sensing ON/OFF.	OL 201
Obstruction Light Dual Lamp	LED obstruction light dual lamp, Complaint to ICAO (Aerodromes Annexure 14) and FAA - 180, Aviation Red Colour, Selectable flashing rate, AC 110V ~ 220V, Auto light sensing ON/OFF.	OL 202
Packaging	Wooden carate packaging/steel cage packaging as per the transportation needs.	WP 901



COMPLIANCE

- Compliance with FAA AC 150/5345-45C and Compliance with ICAO guidelines Aerodrome Design Material Part-6 Frangibility Doc 9157 First Edition – 2006 chapter 5.
- Wind load deflection test
- Salt Spray Test as per MIL-STD- 810F & ISO 9227: 2017
- Temperature Resistance Test -40° C to + 65° C
- Flammability Test IS : 6746 - 1994
- 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 for 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



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Specifications/technical details included are subject to change without notice.