



GENERAL DESCRIPTION

The LMT 303/12.5-2 is a 12.5m composite telescopic mast designed for supporting top loads up to 90kg. The mast can be Shelter or vehicle mounted and is raised and lowered fully automatically by a 24V/DC electrical motor. The LMT 303/12.5-2 has a short collapsed height enabling it to fit within the Shelter or vehicle height.

The main features of the mast are:

- Self-supported and remote controlled
- heavy duty
- fast deployment
- easy maintenance
- outstanding resistance to the most demanding environments
- safe and reliable
- Integrated inside vehicle/Shelter or back-wall mounted

CONSTRUCTION

For best compromise between weight and rigidity, mast sections are manufactured using High Modulus carbon fibre reinforced Epoxy resin composite material which provides both lightness and high mechanical resistance.

Composite tubes are produced in-house by Filament Winding process and can be tailor designed to meet the customer requirements.

All metallic parts are protected against corrosion.

Sections are deployed by a lifting winch and a belt system. A 24V/DC electrical drive operates the lifting winch but can be removed anytime and replaced by a crank. A control by PC is available in option.

SAFETY CONTROLS

Safety is controlled by an electronic control box connected to the electrical drive. End-travel limits secure mast operation in normal conditions. In case of abnormal effort, aN electrical current limit stops the current.

A mechanical fuse, located on lifting winch transmission arm, is used as a back-up of all electronic controls.

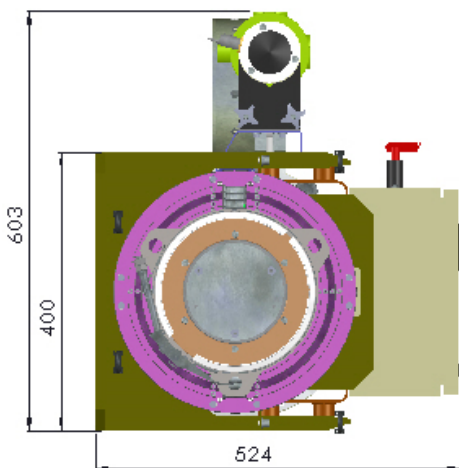
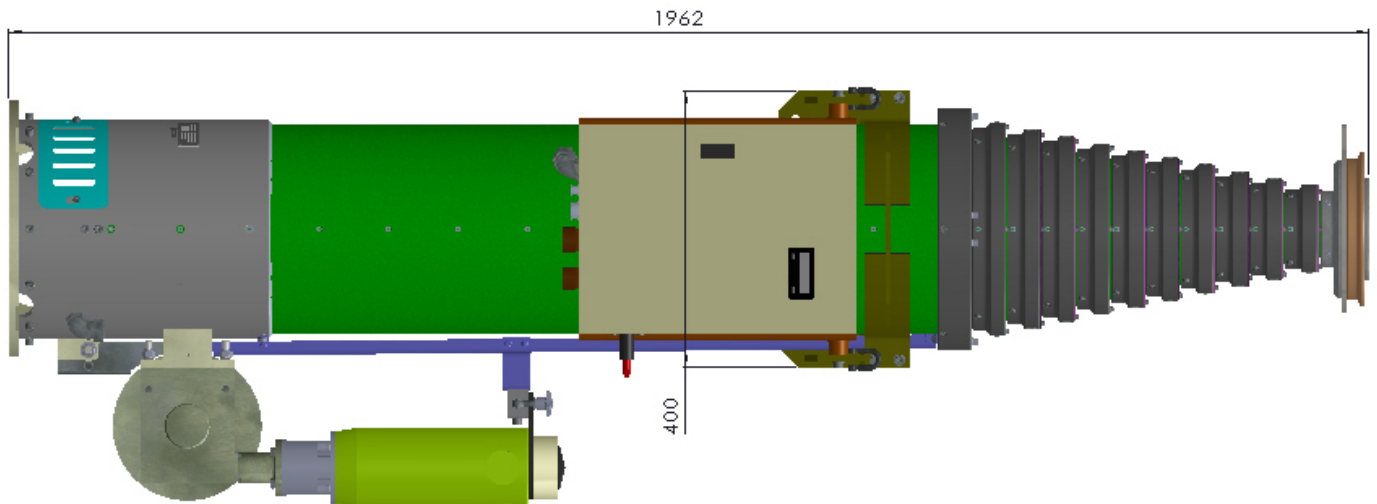


TECHNICAL CHARACTERISTICS

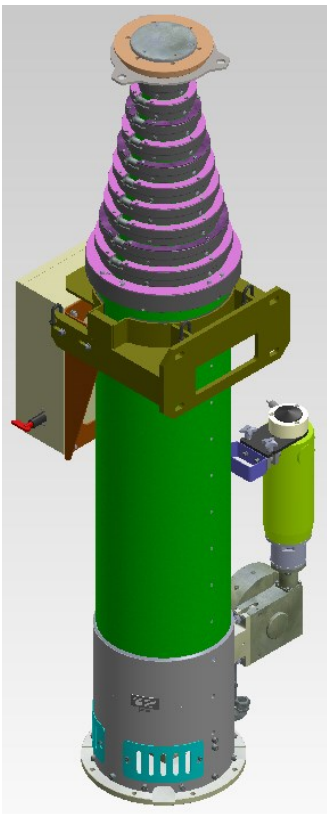
Full specification and qualification procedures are available upon request

Max. Headload*	91kg, 0.5m ²
Interface with headload	Flange for V-Ring collar
Number of mast sections	12
Number of operators	1
Deployment time	4 minutes
Temperature (operation)	-40 to +55°C
Max. wind speed: (according to TIA/EIA-222-F standard)	
Deployment / retraction:	60km/h
Operation:	100km/h
Survival:	120km/h
Pointing accuracy at operational wind	±3°
Relative Humidity Chocks	95% at 40°C
Average power consumption during deployment	600W max.

* depending on headload specification



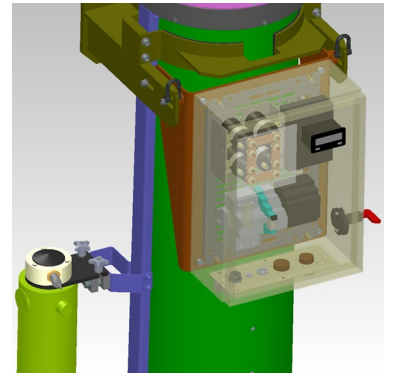
Nested Height	<2.1m
Deployed Height	12.5m
Lower section diameter	320mm
Weight:	
• Mast pillar:	• 145kg
• Electronic control box	• 15kg
• Accessories bag	• 5kg



STANDARD DELIVERY ITEMS

Standard mast is delivered with:

- Telescopic mast
- Electrical motor 24V/DC
- Electronic control box and its support
- V-Ring collar
- Lifting winch wheel for backup



Electronic control box manages the end-travel limits.

A DC/DC converter is integrated to deliver a continuous 24V/DC current, independently from the 18-32V/DC on-board feeding according to MIL-STD-1275D.

The remote control shows 3 buttons:

- UP
- DOWN
- EMERGENCY STOP

A display on the remote control shows mast height. LEDs lamps inform about preventive maintenance.

OPTIONS

Control by PC

Slope compensation device $\pm 5^\circ$ for back-wall mount

Fixed Wall bracket for integration inside Shelter

Manual or electrical rotator/tilter

Automatic cable reel with RF turning joint

Night warning beacon

Kit for field maintenance



Automatic cable reel



Slope compensation device



Field maintenance



Vehicle brackets can be adapted to customer specification