



Mast fully elevated with guy lines



Automatic tilt from the horizontal storage position during mast deployment

### General Description

The LMT 362/16-3.85 is a carbon composite 16 m (52.5 ft) telescopic mast designed to be integrated into a vehicle or shelter. The mast is capable of supporting a top load up to 230 kg (506 lb)\*.

### Application

The LMT 362/16-3.85 mast has been designed to elevate heavy top loads such as electronic warfare (EW) antennas and sensors. The mast is stored horizontally during transportation with the top load fitted and is automatically tilted to the vertical position prior to the mast being deployed. The mast can be deployed in two ways:

- The mast can be deployed fully automatically, self supporting (un-guyed) up to a height of 6.5 m (21.5 ft). In this configuration the mast can support a DF antenna.
- The mast can be deployed at its full 16 m (52.5 ft) height by installing guy lines and anchor stakes. In this configuration the masts can support the DF antenna plus two Line-of-Sight (LOS) antennas with electrical pan and tilt.

### Construction

The mast tubes are manufactured using carbon fibre composite material which provides both lightness and high mechanical strength and stiffness. All metallic parts are painted or plated to protected against corrosion.

### Mast Mechanism

The LMT 362/16-3.85 mast uses a belt drive system which controls the mast during elevation and retraction. The positive retraction feature ensures that the mast will be retracted even when deployed on a significant slope. The mast does not suffer from the same ice and dust problems associated with pneumatic telescopic masts. The design allows water and dust to enter between the sections and drain at the base. The main advantages of the belt drive system are as follows:-

- Heavy top load capacity
- Belt fully enclosed inside the mast for better protection against damage and U.V. exposure.
- Easy maintenance. The belt can be changed in the field without dismounting tubes.

\* Subject to top load wind surface area

## Mechanical Specification

Height (extended)	16 m (52.5 ft) (mast only)
Height above vehicle roof	650 mm (2.2 ft)
Max. headload	230 kg (506 lb)
Deployment: Tilt to vertical position Mast extension	2 minutes 8 minutes
Electrical feed	24 V/DC, 60 A
Emergency operation	A wheel is provided for manual operation in case of electrical failure
Wind: Operational Survival	90 km/h (56 mph) 160 km/h (100 mph)
Pointing Accuracy	±1° (depending on headload)
Temperature range: Operational Storage	-25°C to +45°C (-13°F to 113°F) (+UV, 1120 W/m <sup>2</sup> ) -40°C to +70°C (-40°F to 158°F)



Mast elevated in the self-supporting (un-guyed) position

## Weight & Dimensions

Description	Weight	Dimensions
Mast with its platform	550 kg (1210 lb)	4000 x 900 x 650 mm (13.1 x 2.9 x 2.1 ft)
Electronic Control Box	30 kg (66 lb)	600 x 400 x 200 mm (23.6 x 15.7 x 7.9 in)
Remote control	3 kg (6.6 lb)	85 x 440 x 80 mm (3.3 x 17.3 x 3.1 in)
Accessories	99 kg (218 lb)	



Mast in the horizontal (stowed) position during transportation

## Kit Contents

Description	Qty
Telescopic mast	1
Mechanical system for tilting, deployment and fixation to the vehicle	1
Micro sequencing device and Electronic control box to control mast and EW antenna (if applicable) deployment	1
Mast head Cable support	2
Emergency box	1
Accessories bag	1



Remote control



Control Panel