



GENERAL DESCRIPTION

5m mast designed to support optical equipment, such as Night and Day cameras, or any other heavy equipment that needs stability.

CONSTRUCTION

In order to obtain the best compromise between weight and rigidity, the pillars are made of carbon fibre reinforced epoxy resin composite material which provides both lightness and high mechanical resistance.

All metallic parts are protected against corrosion.

MECHANICAL SPECIFICATION

Height (extended)	5.046 m
Height (retracted)	1.462 m
Tube diameter	283 mm
Top interface	8 holes dia. 12mm on 355 mm PCD
Max. headload	170 kg, 0.25 m ²
Deployment	30 seconds (electrically operated)
Retraction	20 seconds (electrically operated)
Electrical motor	24 V/DC, 80 A
Maximum slope	10°
Wind:	
Operational	80 km/h
Survival	130 km/h
Pointing Accuracy	1° to 2° (depending on headload)
Temperature range:	
Operational	-35° to +65°C
Storage	-40° to +70°C
Relative humidity	95% RH
Shock	10 g, 40 ms - 3 axis
Vibration	2 g effective, 5 to 200 Hz

MAST MECHANISM

The LMT mast was originally designed for the French Army HADES Program. In order to meet the very severe requirements of this program concerning the deployment time, COMROD has developed a telescopic mast with a belt drive system which controls the mast upwards as well as downwards. This is a unique feature for most of the telescopic masts get jammed during retraction. Moreover, this system does not need to be air-proof or waterproof as dust, sand and water are circulating through the mast and evacuated through the bottom cap.

INSTALLATION

The LMT 283/5-1.5 mast can be installed inside small armoured vehicles. Upper interface with vehicle roof is provided
6 holes $\varnothing 12\text{mm}$ on $\varnothing 330\text{mm}$ circle are available on mast bottom for vehicle floor fixation.

COMROD can design special interfaces upon request.

TOTAL UNIT

Standard mast is provided with:
mast pillar and lifting winch
upper fixation for vehicle roof
Electrical control box
24V/DC Electrical Motor-reducer
Lower support

