



20m (65 ft) MLV Sectional Tripod Mast

Overview

- Fully deployed heights of 10, 15, 20, 30 and 34m (32, 49, 65, 98 and 110ft)
- Heavy duty composite sectional tripod masts capable of supporting top loads up to 130kg *
- Comprises individual glass or carbon fiber composite sections that fit together to give the desired height.
- The mast packs down to a compact kit allowing stowage in smaller vehicles or shelters.
- The tripod includes a manual or electric lifting mechanism and hoist to raise each section.
- Telescopic tripod legs allow deployment on uneven ground.
- Tripod has a kneeling position to allow easy access to the top load.
- Guy wires are manufactured from either steel wire or aramid rope.
- Central guying system enables the guy tension to be maintained by a single operator during deployment of the mast.
- Requires 2 or 3 operators to deploy the mast even in high winds.
- The mast is supplied with all accessories required for field deployment.
- Bracketing available to support installation of equipment at any height
- Suitable for supporting heavy headloads such as directional and omni-directional antennas, optronic equipment, lighting etc.
- 360 degree azimuth rotation from the ground to orientate the top load.

* Typical values shown. Actual values will be subject to a combination of top load weight, top load area and pointing accuracy required.



MLV sections stowed

Mechanical Specification

Model	MLV 125/10-1.6	MLV 125/15-1.6	MLV 125/20-1.6	MLV 125/30-1.6	MLV 125/34-1.6
Height	10m (32 ft)	15m (49 ft)	20m (65 ft)	30m (98 ft)	34m (110 ft)
Tube diameter	125mm (5 ins)				
Mast section length	1.6m (63 ins)				
Maximum Headload *	130 kg (286 lb)				
Maximum wind speed	Deployment - 60km/h (37 mph) Operational - 100km/h (62 mph) Survival - 150km/h (93 mph)				
Total kit weight	165 kg (363 lbs)	185 kg (407 lbs)	220 kg (484 lbs)	260 kg (572 lbs)	270 kg (594 lb)
Top load interfaces available	40mm (1.57 in) spigot 50mm (1.97 in) spigot Vee Ring Adaptor				
Temperature range	-40°C (-40 °F) to +55°C (131 °F)				
Anchoring	3 locations at 120°	3 locations at 120°	3 locations at 120°	3 locations at 120°	3 locations at 120°
Guy Radius	8m	10m	16m	25m	27m
Guying - Levels	Two levels	Two levels	Two levels	Four levels	Four levels
Stainless steel wire					
Standard color	IR-NATO 24x5 Army Green Other colors available on request				
Number of operators	2	2	2	3	3
Set-up time	20 mins	25 mins	30 mins	40 mins	45 mins

* Typical values shown. Actual values will be subject to a combination of top load weight, top load area and pointing accuracy required.



MLV Tripod Assembly



Multiple headload mounting options

Installation

Two or three people are required to deploy the mast depending on the height. Once the tripod has been deployed it can be set into a kneeling position (see photo opposite). This allows the payload to be installed safely at ground level. The tripod is then put back into the upright position and staked to the ground using the supplied ground stakes.

One person operates the lifting winch, and the other person controls the guy winch. The central guying system keeps the top guys under tension during deployment allowing the mast to be deployed in high winds. The mast sections are fed into the tripod from the bottom and then lifted into position using the supplied lifting winch mechanism. Once fully deployed, all the mast guys should then be fully tensioned.



Kneeling position enables easy access to the top load



Tripod mast section lifting hoist



Top load attached to top mast section



Central guying system maintains tension during deployment



Hand operated lifting winch (motorized version available)

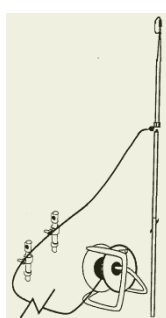
Mast Options



Electric motor for lifting winch



Brackets for lower payloads



Lightning Protection Systems



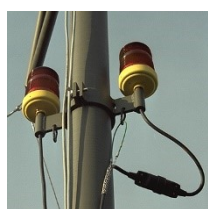
Manual rotator, tilters and positioners



Fully automated payload alignment systems (CAPAS)



Anti-twist systems Star-Bar and T-Bar

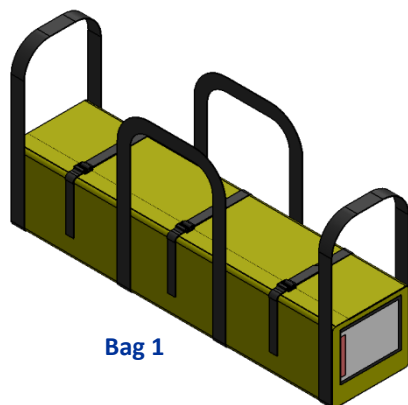


Night warning beacon

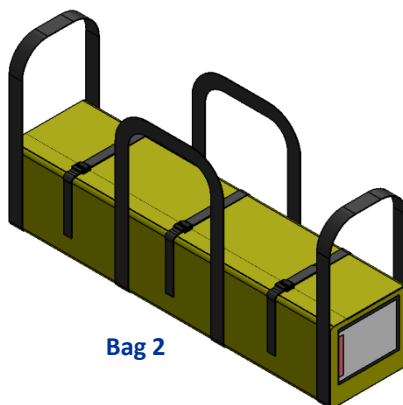


Stake remover for hard soils

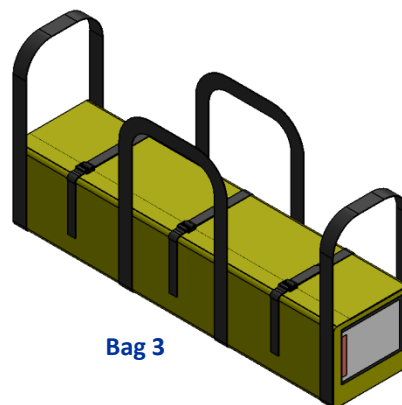
Typical Kit Contents (10m/32ft model)



Bag 1



Bag 2



Bag 3

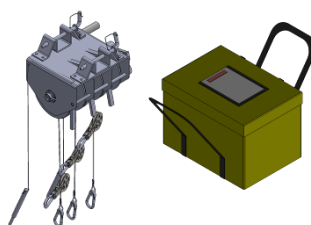
Description (Bag 1)	Qty
Mast section	6
Mast top section with 50mm spigot	1
Carrying Bag	1

Description (Bag 2)	Qty
Guy winch (includes 3 x guys)	1
Guy winch bag	1
Lifting winch	1
Lifting winch bag	1
Carrying Bag	1

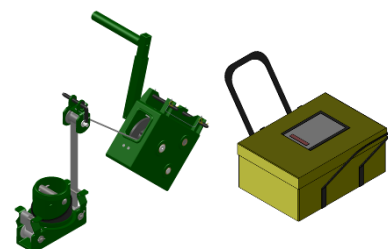
Description (Bag 3)	Qty
Mast tripod MLV	1
Guy stake	6
Guy cable	3
Guying collar	2
Tripod anchor stake	6
Cross pin	2
Hammer	1
Radius rope	1
Coupler	3
Fast tensioner	6
Carrying Bag	1



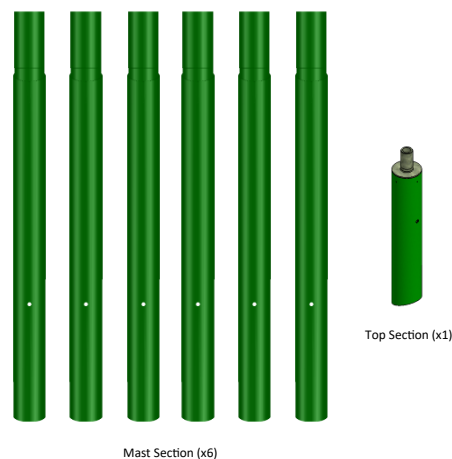
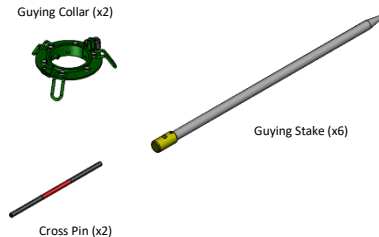
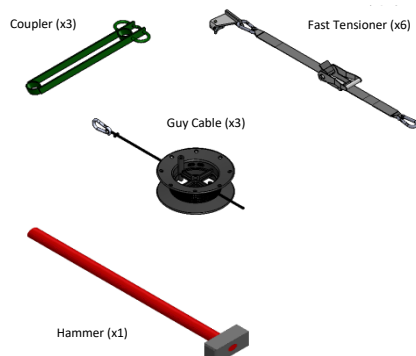
Mast Tripod MLV (x1)



Guy Winch & Bag (x1)



Lifting Winch & Bag (x1)



Outline Drawing (10m/32ft model)

