### **ULM-C 92 Series**

10-24 m sectional tripod mast kit, carbon composite sections, 1.5 m sections, 92 mm diameter

**Tactical Masts: Sectional Tripod** 





#### **Overview**

- Fully deployed heights of 10, 15, 20 and 24 m.
- The ULM-C 92 is a lightweight carbon composite sleeve mast capable of supporting headloads up to 80 kg\*.
- The mast comprises individual composite mast tube sections that fit together to give the desired height.
- The tripod support includes a lifting mechanism and hoist to raise each section.
- Telescopic tripod legs allow deployment on uneven ground.
- Tripod kneeling position for easy access to the top load.
- Central guying enables the guy tension to be maintained during erection of the mast. This enables the mast to be deployed safely in high winds.
- The mast is supplied with a ground mounting kit containing all the items required for field deployment.
- Particularly suited to supporting line-of-sight (LOS) antennas. Also suitable for supporting directional, omni-directional or wire antennas, optronic equipment and sensors.
- Azimuth rotation is possible from the ground to orientate directional top loads.
- Can be deployed by two operators in 20 minutes or three operators in 15 minutes (typical for 15 m model).
- full compliancy with ANSI TIA/EIA-222-F wind standard.



15 m ULM Mast

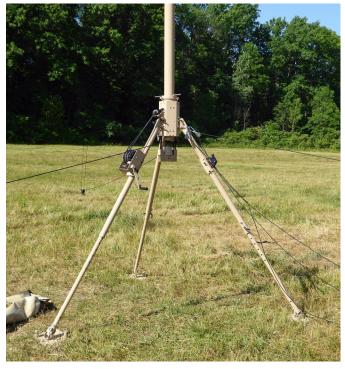
Complete mast kit packs into two man-portable bags

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

# **Mechanical Specifications**

Model	ULM-C 92/10-1.5	ULM-C 92/15-1.5	ULM-C 92/20-1.5	ULM-C 92/24-1.5	
Height	10 m	15 m	20 m	24 m	
Tube Diameter	92 mm				
Mast Section Working Llength	1264.5 mm				
Maximum Headload*	80 kg, 1 m²	40 kg, 1 m²	40 kg, 0.5 m²	40 kg, 0.5 m²	
Maximum Wind Speed:					
Deployment	40 km/h				
Operation	90 km/h				
Survival	120 km/h				
Maximum Bending Deflection Under Operational Wind*	< ± 3°	< ± 3°	< ± 3°	< ± 3°	
Total Kit Weight	84 kg	94 kg	120 kg	130 kg	
Guy Radius	8 m	10 m	14 m	16 m	
Top Load Interfaces available	40 mm spigot				
	50 mm spigot				
	Vee Ring Adaptor				
Temperature Range	- 40°C to +55°C				
Anchoring	3 locations at 120°	3 locations at 120°	3 locations at 120°	3 locations at 120°	
Guying - 2 Levels	Lower level - Kevlar Rope	Lower level - Kevlar Rope	Lower level - Kevlar Rope	Lower level - Kevlar Rope	
	Upper level - Kevlar rope	Upper level - Kevlar rope	Upper levels - Kevlar rope	Upper levels - Kevlar rope	
Standard Colour	IR-NATO 24x5 Army Green				
	Other colours available on request				
Number of Operators	2 or 3	2 or 3	2 or 3	2 or 3	
Setup Time	10 mins (3 operators)	15 mins (3 operators)	20 mins (3 operators)	25 mins (3 operators)	
	15 mins (2 operators)	20 mins (2 operators)	25 mins (2 operators)	30 mins (2 operators)	

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



Tripod assembly (shown with optional winch assembly)



Multiple headload mounting options



# Typical Kit Contents (15 m model)

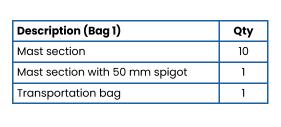


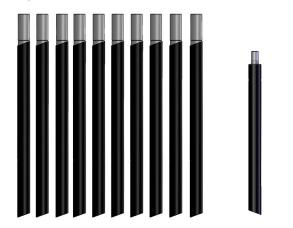


Bag 1

Qty :(2) Transportation bag (1500x370x290) Uw : 5.6kg (12.34lbs)

Bag 2

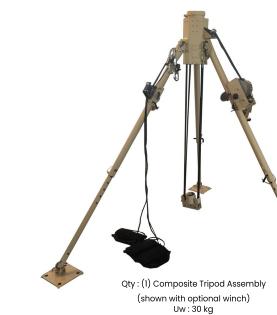




Qty: (10) ULM Mast section Uw: 2.61kg (5.75lbs)

Qty: (1) Top section Ø50mm Uw: 3kg (6.61lbs)

Description (Bag 2)	Qty
Tripod assembly with lifting system	1
Guy stakes 60 cm	6
Lower guy cable	3
Guying collar	2
Anchor stakes	6
Cross pin	2
Hammer 3 kg	1
Cable strap	4
Radius rope	1
Safety cable for kneeling position	2
Transportation bag	1



Qty : (1) 3Kg Hammer Uw : 4.5kg (9.92lbs)



Qty: (6) Anchor stake Uw: 0.6kg (1.32lbs)





Qty: (4) Cable strap Uw: 0.01kg (0.02lbs) Qty : (2) Crosspin Uw : 0.25kg (0.55lbs)

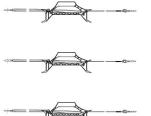


Qty : (1) Radius Rope 10m (32ft) Uw : 0.8kg (1.76lbs)





Qty: (2) Guying collar Uw: 0.97kg (2.15lbs)



Qty: (3) Lower guy cable Uw: 0.8kg (1.76lbs)



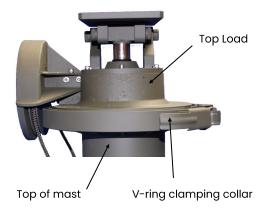
# Top Load Interface (top of mast)

The top of the mast can be supplied with a 40 mm or 50 mm spigot or

V-ring collar. The V-ring collar can be adapted to suit many different headloads. The V-ring provides reliable, strong and tactical fixation of many available adaptors.



V-ring flange on top of mast

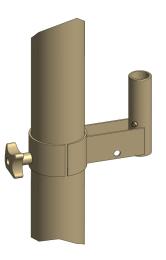


## **Optional Accessories**



**Winch Assembly** 

An optional winch assembly allows heavier top loads to be deployed with reduced effort.



**Bracket for Lower Antenna** 

A lower bracket is available with a 40 mm or 50 mm spigot. It is designed to fix a lower antenna on a ULM mast section.

#### **Manual Tilters and Rotator**

Manual rotators and tilters allow orientation of the antenna in azimuth over 360° and elevation over ±15°. The Comrod range of rotators and tilters are particularly designed for tactical line of sight (LOS) antenna systems.

All rotators and tilters are operated from the ground using ropes.



Manual Tilter



**Manual Rotator** 

April 2020

All specifications are subject to change without notice
The information contained herein is for reference only and does not constitute a warranty of performance



