



15 meter (50 ft) ULM-C 48/15-1.2 mast shown

<u>Overview</u>

- The ULM-C 48 is an ultra-lightweight carbon composite tripod mast capable of supporting headloads up to 25 kg *
- Fully deployed height of 6, 10, 12 & 15 meters. Intermediate heights available on request.
- The mast is comprised of individual carbon composite mast tube sections that fit together to give the desired height.
- The aluminum tripod support includes a lifting mechanism and hoist to raise each section.
- Telescopic tripod legs allow deployment on uneven ground.
- Tripod height of 1.4 meters (55 in) allows easy access to top load
- Central guying system enables the guy tension to be maintained during deployment of the mast. Enables safe deployment in high winds.
- Supplied with a ground mounting kit containing all the items required for field deployment.
- Supplied in two carrying bags 1200 x 270 x 280 mm
- Optional antenna mounting kit can be supplied to allow an omni-directional antenna to be mounted below the top load (see page 4)
- Can be used to elevate omni-directional & directional antennas, sensors, lighting, etc.
- Can be rapidly deployed by two operators (see table).
- Full compliance with ANSI TIA/EIA-222-F wind standard.

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



Complete mast kit packs into two man-portable bags (15m kit)

Mechanical Specifications

C Carbon Fibre - 48 tube diameter 48mm / XX maximum height - 1.2 retracted length

Model	ULM-C 48/6-1.2	ULM-C 48/10-1.2	ULM-C 48/12-1.2	ULM-C 48/15-1.2			
Height	6m (20 ft)	10m (32 ft)	12m (39 ft)	15m (49 ft)			
Tube diameter		48mm (1.89 ins)				
Mast section working length	1092mm (43 ins)						
Maximum Headload *	25kg (55 lbs) 0.5m² (5.4 ft²)	20kg (44 lbs) 0.5m² (5.4 ft²)	20kg (44 lbs) 0.5m ² (5.4 ft ²)	20kg (44 lbs) 0.5m² (5.4 ft²)			
Maximum wind speed: Deployment Operation Survival		90km/h	(25 mph) (56 mph) (93 mph)				
Maximum bending deflection under operational wind *	<±3°	<±3°	<±3°	<±3°			
Total kit weight	33 kg (73 lbs)	38 kg (84 lbs)	40 kg (88 lbs)	43 kg (95 lbs)			
Guy Radius	6 m (20 ft)	10 m (32 ft)	12 m (39 ft)	15 m (49 ft)			
Top load interfaces available	40mm (1.57 in) spigot 50mm (1.97 in) spigot Vee Ring Adaptor						
Anchoring	3 locations at 120°	3 locations at 120°	3 locations at 120°	3 locations at 120°			
Guying	1 Level	2 Levels	2 Levels	2 Levels			
Standard colour	Black						
Number of operators	2 or 3	2 or 3	2 or 3	2 or 3			
Set-up time	15 mins	< 20 mins	20 mins	20 mins			
Temperature range	-40°C to +55°C (-40 °F to 131 °F)						

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



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Typical Kit List (15m version)





Bag 1 1200 x 270 x 280 mm (47 x 10.5 x 11 in)

Item

4

-

Qty

15

1

4

Description (Bag 1)

Transportation bag

Mast section (Carbon Fiber Composite)

Bag 2 1200 x 270 x 280 mm (47 x 10.5 x 11 in)

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	C	Qty : (1	5) Carb	on Fib	er Com	posite	e Tube	Sectio	ns		

Description (Bag 2)	Item	Qty
Tripod assembly with lifting system	1	1
Anchor stakes	2	6
Cross pin	3	2
Guying collar	7	2
Central guying system	8	1
Lower guy cable	9	3
Guy stakes	10	3
Fast tensioner	12	3
Radius rope	13	1
Lifting handle	14	1
Hammer 3 kg	15	1
Transportation bag	-	1





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Omni-directional antenna mounting kit (below top load)

The ULM 48 mast can be supplied with an optional mounting kit to enable an omni-directional antenna to be mounted below the top load. The kit includes an antenna mounting bracket together with two glass fiber tube sections. Glass fiber sections are RF invisible so will have no effect on the performance of the lower antenna. These two sections replace the carbon composite sections in the area directly next to the antenna radiating element. The image below shows two Comrod elevated tri-band antennas, one mounted at the top of the mast, the other positioned beside the glass fiber sections.

Description	ltem	Qty
Mast section (Glass Fiber Composite)	1	2
Bracket	2	1
Transportation bag	-	1





15 meter ULM-C 48/15-1.2 mast supporting Two Comrod VHF302000TB-TRI/TB-S elevated tri-band antennas



13 carbon fiber and 2 x glass fiber tube sections (2 x glass fiber sections will be painted black to match standard carbon sections)

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