

IDTM Series Masts

Composite Crank-Up Telescopic Masts



GENERAL DESCRIPTION

- The IDTM is a composite telescopic mast capable of supporting heavier headloads up to 100kg*
- Fully extended heights available up to 24 metres.
- Retracted heights from 1.8 metres.
- Can be deployed at any height in between.
- Mast tube sections are manufactured from either glass composite or carbon/glass composite depending on the top load requirement. The glass fibre version is invisible to radio frequency.
- Suitable for supporting heavy headloads such as line-of-sight (LOS) antennas, omnidirectional antennas, electronic warfare (EW) antennas, optronic equipment etc.
- Meets MIL-STD-810F environmental standard for operation in extreme conditions.
- All metal parts are plated or painted aluminium and stainless steel.
- Hand crank winch or motorised winch options.
- The mast can be supplied with a ground mounting kit containing all the items required for field deployment.
- Wide range of vehicle and shelter mounting bracket options available.
- Azimuth rotation is possible from the ground to orientate directional top loads such as antennas and cameras.

Subject to wind surface area of headload

MAST CONFIGURATION

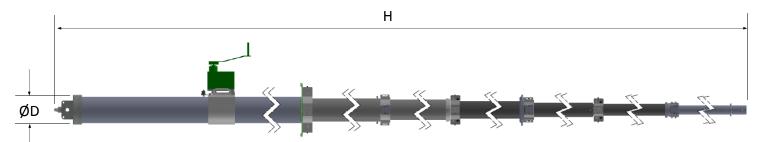
Masts can be configured to suit the specific customer requirement. The main parameters that will determine the mast configuration are as follows:-

- 1. Extended height.
- 2. Retracted height.
- 3. Top load weight and surface area.
- 4. Deflection requirement (pointing accuracy) of the top load.

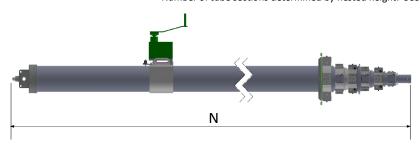
Some standard configurations are shown in the table below. If you cannot see a configuration that matches your exact requirement then please contact Comrod.

Once the basic mast has been specified, ancillaries can be added such as manual/motorised winch, ground mounting kit, vehicle/shelter mounting brackets, guying, top load adaptors and positioners, etc

STANDARD CONFIGURATIONS



Number of tube sections determined by nested height. See table below for details.



Mast Type	IDTM-C 120/6-2.2	IDTM-C 120/8-2.6	IDTM-C 140/10-2.8	IDTM-C 140/12-3.2	IDTM-C 160/15-3.2	IDTM-C 160/18-4.2	IDTM-C 184/20-3.8	IDTM-C 184/24-4.6
Elevated length overall, H (m)	6	8	10	12	15	18	20	24
Retracted length overall, N (m)	2.2	2.6	2.8	3.2	3.2	4.2	3.8	4.6
Base tube diameter, D	120	120	140	140	160	160	184	184
Max antenna area CxA (m²) (2)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Stay Radius (m)	7	7	7	10	15	16	14	16
Number of sections	4	4	5	5	6	6	7	7
Number of Stays x levels	2 x 4	2 x 4	2 x 4	2 x 4	2 x 4	3 x 4	3 x 4	3 x 4
Wind speed survival (km/h)	130	130	130	130	130	130	130	130
Max vertical top load (kg) ⁽¹⁾	100	100	100	100	100	100	100	100
Antenna attachment (mm)	Ø60	Ø60	Ø60	Ø60	Ø60	Ø60	Ø60	Ø60
Weight: Mast (kg)	39	42	55	59	85	88	97	112
Weight: Accessories (kg) ⁽³⁾	35	35	35	35	35	35	35	35

⁽¹⁾ Subject to wind surface area of top load

⁽²⁾ Larger top load wind surface area possible - contact Comrod for further information

⁽³⁾ Manual winch version