



Aluminium Telescopic Masts

Comrod Sweden is the leading global supplier of mobile telescopic masts. We have supplied thousands of masts to the armed forces worldwide. Our telescopic masts are designed to meet the most demanding requirements of modern communication and surveillance where they are used to support various types of payloads.

► MIL-STD 810 Approved Products

► All weather capability

All of our telescopic masts, both military and commercial, feature the unique and proven all-weather design features of space between sections allowing the masts to be raised or lowered with an accretion of ice or sand. It has been proven that the masts perform excellently in arctic and tropical areas as well as in desert environments

► A rugged easy to operate design

The masts are light-weight, compact and easy to transport and erect.

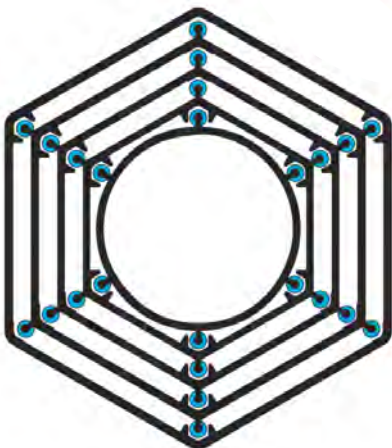
► Experience

Comrod Sweden has decades of experience working with our industry partners and equipment integrators to provide the customer with the right material solution to meet their specific needs.

► Standard and tailor-made solutions

Although Comrod Sweden provide a number of standardised products, we appreciate that no two customers are the same and therefore we can always offer you a tailored-made solution

Excellent Torsional Resistance



All of our masts are made of extruded hexagonal and circular aluminium alloy tubes with screws and riveted fittings in stainless steel.

The hexagonal sections move inside each other on plastic guide ways which provide the mast with excellent torsional resistance. The design with the free space between sections enables reliable operations in arctic through desert environments.



► Transport and Operational Assist Accessories.

The MecPAM with its electric powered movement control with manual crank backup provides for the safe, quick and precise deployment and recovery of 25 meter mast with demanding head loads by a crew of two.

Aluminium Mast Accessories

► Mast accessories are designed and manufactured to resist external forces and to ensure quick and safe deployment by a two person crew. With a wide range of accessories and the adaptability of meeting the customers needs, Comrod Sweden is the complete supplier of accessories for telescopic masts.

VEHICLE/SHELTER BRACKETS

- Brackets are available for various shelters, trailers and military vehicles.
- Can also be tailored to your specific requirement.
- One or two operators can quickly and safely deploy telescopic mast systems with heavy top loads.



ANTENNA DIRECTIONER



The antenna directioner enables the antenna to rotate 360 degrees and to tilt ± 10 degrees from the horizontal plane.

- The antenna directioner operates by means of two separate rope-slings with different colours.
- To increase the horizontal stability the unit can be equipped with torsional arms.
- An electric powered version is available.

PAYLOAD INTERFACE



- We excel at providing tailored payload interfaces to meet customer application needs.

ANTENNA BAR



- Comrod Sweden's antenna bar enables multiple antennas to be mounted on a single mast

DOUBLE ROTATOR



- The mast mounted rotator enables two antennas to rotate 360 degrees independent of each other.
- The parts are made of aluminium and stainless steel.
- Electric or manual operation.

Lightweight Hand Crank, 12V or 24V

Mast Type	TM 100/10-2.4	TM 128/10-3.1	TM 128/14.2-3.3	TM 128/15-2.9 HCLOS	TM 128/18-4.2
Nato Stock No. 5985-	01-484-0908	-	25-126-9148	01-465-2883	-
Elevated length overall (m), ft	10 33	10 33	14.2 47	15 49	18 59
Retracted length overall (m), ft	2.4 8	3.1 10	3.3 11	2.9 9.5	4.2 14
Max antenna area CxA (m ²), ft²	0.16 1.7	1.25 13	1.0 11	0.69 7	1.0 11
Stay Radius (m), ft	5.5 18	8 26	8/10 26/33	8/13 26/43	8/10 26/33
Number of sections	5	4	5	6	5
Number of Stays x levels	3 X 2	4 X 3	4 X 3	4 X 3	4 X 3
Wind speed survival (m/s), mph	36 80	35.6 80	30 67	35.6 80	33 74
Max vertical topload (kg), lbs	12 27	50 110	50 110	20 44	35 77
Antenna attachment (mm)	Ø50	Ø50	Ø50	Ø50	Ø50
Weight: Mast (kg), lbs	19 42	45 99	49 108	50 110	59 130
Accessories (kg), lbs	19 42	45 99	38 84	40 88	45 92

Heavy Duty Hand Crank or 24V

Mast Type	TM 150/18-4.3	TM 150/20-4.9	TM 150/25.9-5.9	TM 170/25-4.8	TM 190/29-6	TM 210/24.5-5	TM 210/30-5.9
Elevated length overall (m), ft	18 59	20 66	25.0 82	25.2 82	30 98	24.5 80	30 98
Retracted length overall (m), ft	4.3 14	4.9 16	5.9 19	4.8 16	6.0 20	5.0 16	5.9 19
Max antenna area CxA (m ²), ft²	1.2 13	1.0 11	0.8 9	0.8 9	1.5 15	1.4 15	2 x 0.7 2 x 7.5
Stay Radius (m), ft	8.7/12 28/39	8.7/12 28/39	8.7/12 28/39	8.7/12 28/39	14.5/18.5 47/61	7/12.5 23/41	15/16/17 49/52/56
Number of sections	5	5	5	6	6	6	6
Number of Stays x levels	3 x 4	3 x 4	3 x 4	3 x 4	3 x 4	3 x 4	3 x 4
Wind speed survival (m/s), mph	30 67	30 67	30 67	27.8 62	30 67	31 69	33 74
Max vertical topload (kg), lbs	70 154	70 154	60 132	40 88	80 176	100 220	100 220
Antenna attachment (mm)	Ø66	Ø66	Ø66	Ø66	Ø66	Ø66	Ø66
Weight: Mast (kg), lbs	86 189	93 205	86 189	123 270	190 418	231 508	220 484
Accessories (kg), lbs	77 169	77 169	77 169	102 224	150 330	120 264	120 264

Unguyed Hand Crank or Electric Powered 24V or 220V

Mast Type	TM 128/6.5-1.5	TM 170/4.7-1.0	TM 170/10-1.9	TM 210/4.8-1.1	TM 210/10-1.95	TM 210/15-2.7
Elevated length overall (m), ft	6.5 21	4.7 15.4	10 33	4.8 15.7	10 33	15 50
Retracted length overall (m), ft	1.6 5	1.0 3.3	1.9 6.2	1.1 3.6	1.95 6.4	2.7 8.8
Max antenna area CxA (m ²), ft²	0.3 1	0.5 5.4	0.5 5.4	0.3 3.2	0.3 3.2	0.3 3.2
Number of sections		7	7	7	7	7
Weight: Mast (kg), lbs	30 66	45 99	70 154	85 187	110 242	138 304
Wind speed survival (m/s), mph	36 79	44 98	35 78	25 56	25 56	25 56
Max vertical topload (kg), lbs	30 66	90 200	90 200	148 325	148 325	148 325
Time for elevation (s)	-	20	40	30	55	80
Voltage (VDC)	Option	28	28	28	28	28
Max. slope of vehicle (degrees)	Option	10°	10°	10°	5°	5°
Power consumption (W)	Option	300	300	600	600	600

Composite Telescopic Masts



IDTM Series

- The IDTM is a composite telescopic mast series capable of supporting top loads up to 100kg*
- Fully extended heights up to 24 metres.
- Retracted heights from 1.8 metres.
- Suitable for supporting heavy headloads such as line-of-sight (LOS) antennas, omni-directional antennas, electronic warfare (EW) antennas, optronic equipment etc.
- Mast tube sections are manufactured from either glass composite or carbon composite depending on the top load requirement. Glass fibre version is invisible to radio frequency.
- All metal parts are plated or painted aluminium or 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 bracket options available.
- Azimuth rotation is possible from the ground to orientate directional top loads such as antennas and cameras.
- Meets MIL-STD-810F environmental standard for operation in extreme conditions.

LMT Series

- The LMT is a heavy duty composite telescopic mast series capable of supporting heavier top loads up to 300kg*
- Fully extended heights up to 12.5 metres.
- Retracted heights from 0.75 metres.
- Suitable for supporting heavy headloads such as line-of-sight (LOS) antennas, omni-directional antennas, electronic warfare (EW) antennas, optronic equipment etc.
- Mast tube sections are manufactured from carbon/glass composite tubes
- All metal parts are plated or painted aluminium or stainless steel.
- Automatic deployment with integrated motorised winch.
- Particularly suited to vehicle/shelter integration.
- Meets MIL-STD-810F environmental standard for operation in extreme conditions.



* Subject to wind surface area of headload

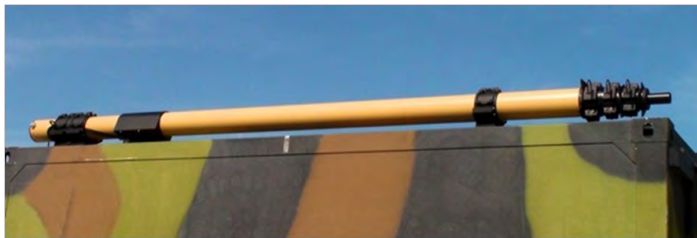
Composite Mast Accessories

► Mast accessories are designed and manufactured to resist external forces and to ensure quick and safe deployment by a two person crew. With a wide range of accessories and the adaptability of meeting the customers needs.



VEHICLE/SHELTER BRACKETS

► Attachments are available for various shelters, trailers and military vehicles.
► Can also be tailored to your specific requirement.
► One or two operators can quickly and safely deploy telescopic mast systems with heavy top loads.



VEHICLE INTEGRATION

► LMT heavy duty masts are particularly suited to full vehicle or shelter integration
► Fully automated deployment from within the vehicle/shelter



WINCH OPTIONS (IDTM)

► Winches are available for hand crank operation or motorised 24V DC



Manual winch assembly



Motorised winch assembly (optional)

Medium Duty - IDTM-C Hand Crank or Electric Powered 24V

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 184/20-3.8	IDTM-C 184/24-4.6
Elevated length overall (m), ft	6 20	8 26	10 33	12 40	15 49	20 65	24 79
Retracted length overall (m), ft	2.2 7	2.6 8.5	2.8 9	3.2 10.5	3.2 10.5	3.8 12.5	4.6 15
Max antenna area CxA (m ²), ft²	1.0 11	1.0 11	1.0 11	1.0 11	1.0 11	1.0 11	1.0 11
Stay Radius (m), ft	7 23	7 23	7 23	10 33	15 33	14 46	16 53
Number of sections	4	4	5	5	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
Wind speed survival (km/h), mph	130 81	130 81	130 81	130 81	130 81	133 81	130 81
Max vertical top load (kg), lbs	100 220	100 220	100 220	100 220	100 220	100 220	100 220
Antenna attachment (mm)	Ø50	Ø50	Ø50	Ø50	Ø50	Ø50	Ø50
Weight: Mast (kg), lbs	39 86	42 92	55 121	59 130	85 187	97 213	112 246
Accessories (kg), lbs							

Heavy Duty - LMT Electric Powered 24V or 220V

Mast Type	LMT 283/2-0.75	LMT 283/4-1.2	LMT 403/5-1	LMT 362/5.8-1.4	LMT 362/6.5-3	LMT 283/9-2	LMT 283/12.5-2
Elevated length overall (m), ft	2 6.5	4 13	5 16	5.8 19	6.5 21	9 30	12.5 41
Retracted length overall (m), ft	0.75 2.5	2 7	1 3.3	1.4 4.6	3 10	2 6.5	2 6.5
Max antenna area CxA (m ²), ft²	0.5 5.4	1 11	0.5 5.4	1 11	1 11	0.5 5.4	0.5 2.7
Number of sections	4	4	8	6	3	6	12
Weight: Mast (kg), lbs	85 187	100 220	125 275	140 310	100 220	125 275	145 319
Wind speed survival (km/h), mph	160 100	140 87	140 87	100 62	120 75	120 75	120 75
Max vertical top load (kg), lbs	40 88	100 220	100 220	140 310	150 330	80 176	91 200
Time for elevation (s)	45	90	120	120	120	180	240
Voltage (VDC)	24	24	24	24	24	24	24
Max. slope of vehicle (degrees)	15° (full load)	15° (full load)	15° (full load)	15°(full load)	20° (full load)	10°(full load)	15° (full load)
Power consumption (W)	300	400	400	400	400	500	700W