

### OVERVIEW

Comrods new generation of self-supporting telescopic masts incorporate an electrical drive for high speed extension/retraction. The mast fits most vehicular and shelter platforms, and supports applications ranging from radio link communications to unmanned radar systems for border surveillance. The system allows for rapid deployment and reduced vulnerability. The optional computer control system enables an operator to raise and lower the mast from a remote location.



- Automatic operation using wired or optional wireless remote control; manual emergency operation using hand crank
- Optional computer control (patent pending) over CAN bus DS402
- Ruggedised design for use in extreme environments
- Positive retraction option for deployment slopes up to 15°
- 220Vac or 28Vdc drive system
- Customer specified extended/retracted heights available on request
- Optional cable management system for top load
- Standard and customised top load mounting interfaces

The mast is made of extruded hexagonal aluminium alloy tubes of progressively smaller size and tracked telescopic action, with fittings in stainless steel. The hexagonal sections move inside each other on plastic guide-ways which ensures excellent torsional resistance. The mast is elevated by an electric motor connected to a ball-screw that lifts section 2. The other sections are hoisted by steel cables. The mast is fully self supporting and requires no additional staying, however the addition of top guys will further increase the mast performance. In the event of power failure the mast can be manually deployed/retracted.

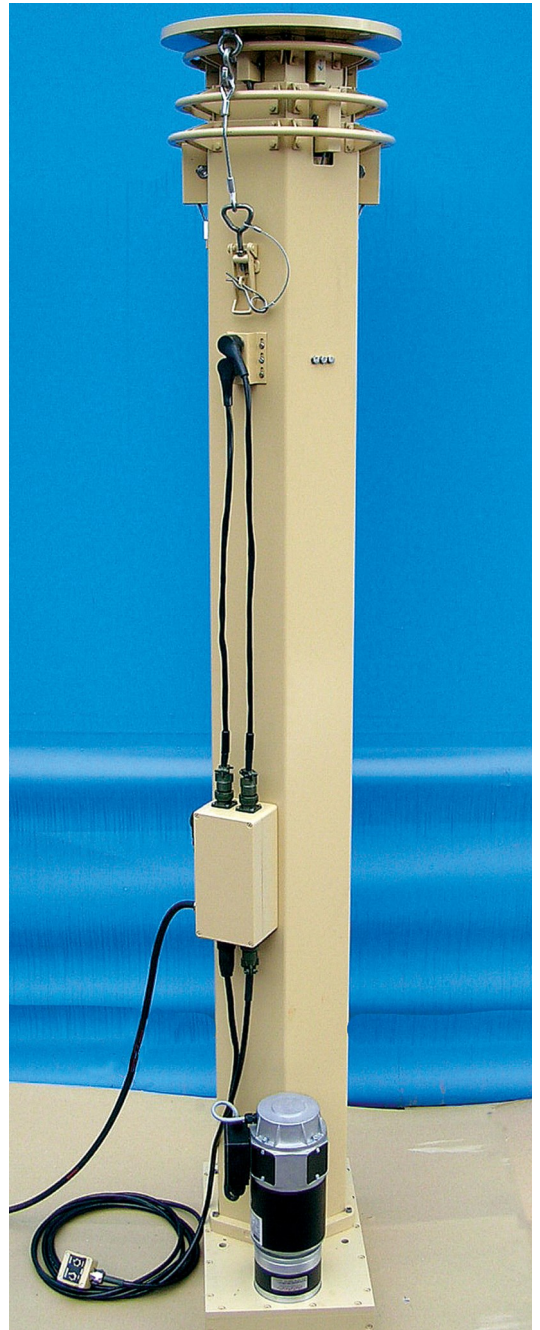
**TM210 series masts are fully qualified to MIL-STD-810G**

MAST TYPE	TM 210/4.8-1.1	TM 210/10-1.95	TM 210/15-2.7
Elevated Height	4.8m (16ft)	10m (33ft)	15m (49ft)
Retracted Height	1.1m (43in)	1.95m (77in)	2.7m (106ins)
Max. Headload Area	0.7m <sup>2</sup> (7.5ft <sup>2</sup> )	0.5m <sup>2</sup> (5.4ft <sup>2</sup> )	0.3m <sup>2</sup> (3.2ft <sup>2</sup> )
Number of Sections	7	7	7
Wind Speed Operational	25m/s (56mph)	21m/s (47mph)	18m/s (59ft/s)
Wind Speed Survival	33m/s (74mph)	30m/s (67mph)	25m/s (82ft/s)
Max Vertical Topload	148kg (325lbs)	148kg (325lbs)	100kg (220lbs)
Mast Weight	85kg (187lbs)	110kg (242lbs)	138kg (303lbs)
Elevation Time	30sec	55sec	80sec
Retraction Time	23sec	40sec	60sec
Voltage	220Vac or 28Vdc	220Vac or 28Vdc	220Vac or 28Vdc
Power Consumption	600W	600W	600W

\* Typical data. Exact performance will be determined by payload weight, shape and dimension.

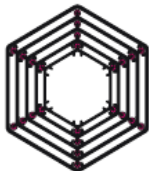


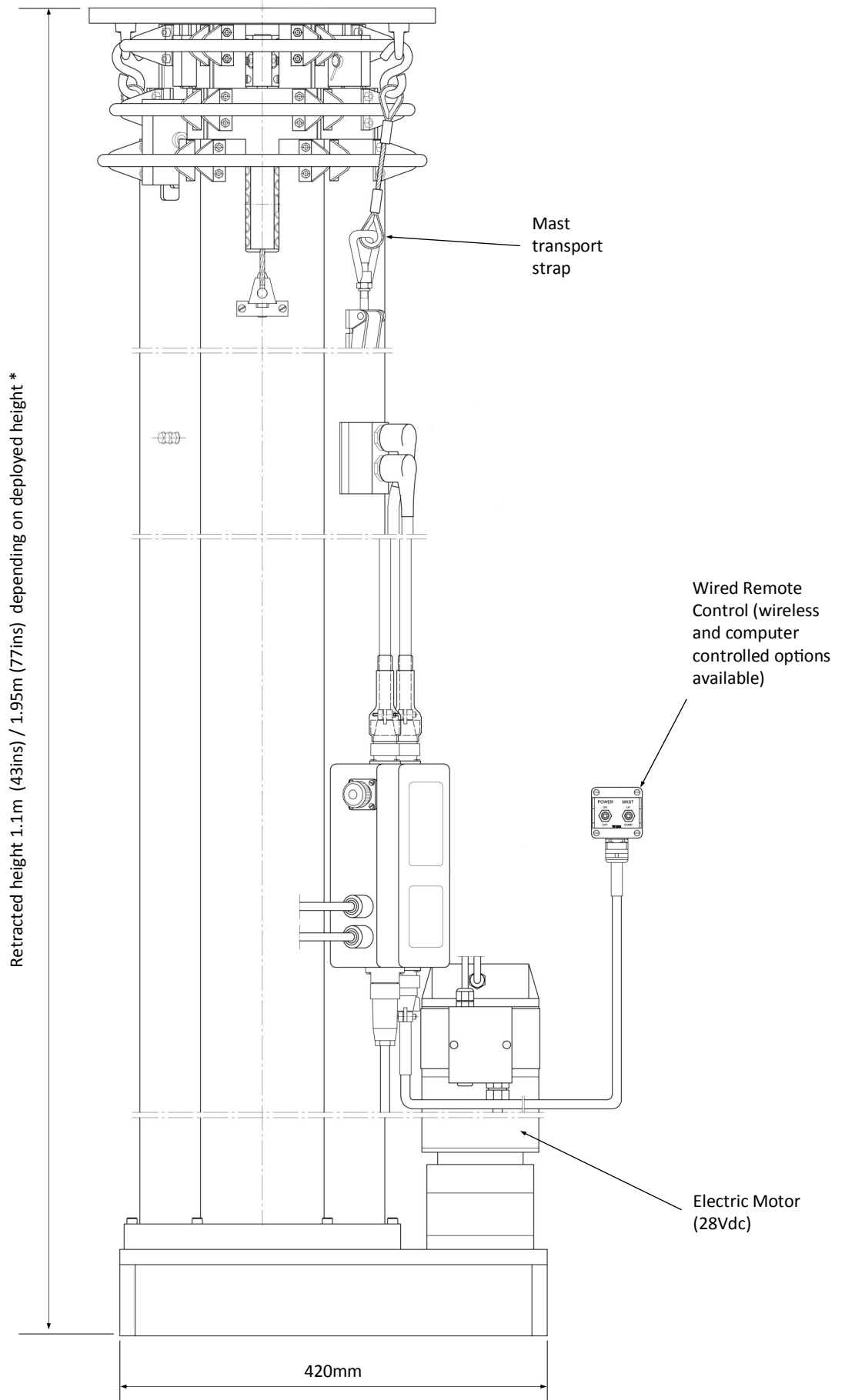
Fully deployed un-guyed mast



Mast in retracted position

The hexagonal sections move inside each other on plastic guideways which provide the masts with excellent stability and torsional resistance.





\* Customer specific deployed and retracted heights available on request