

VMS-M Series

TekMast™



Mechanically Extended Tubular Sectional Light-Weight Field Mast

“TekMast” is a new light-weight tactical field mast, rapid deployable in less than 20 minutes with only 2 or 3 operators. Guy ropes and antennas are attached to the mast at ground level resulting in a simultaneous lifting of the antenna as well as the tubular aluminium mast sections in one operation with a mechanical or electrical removable winch.

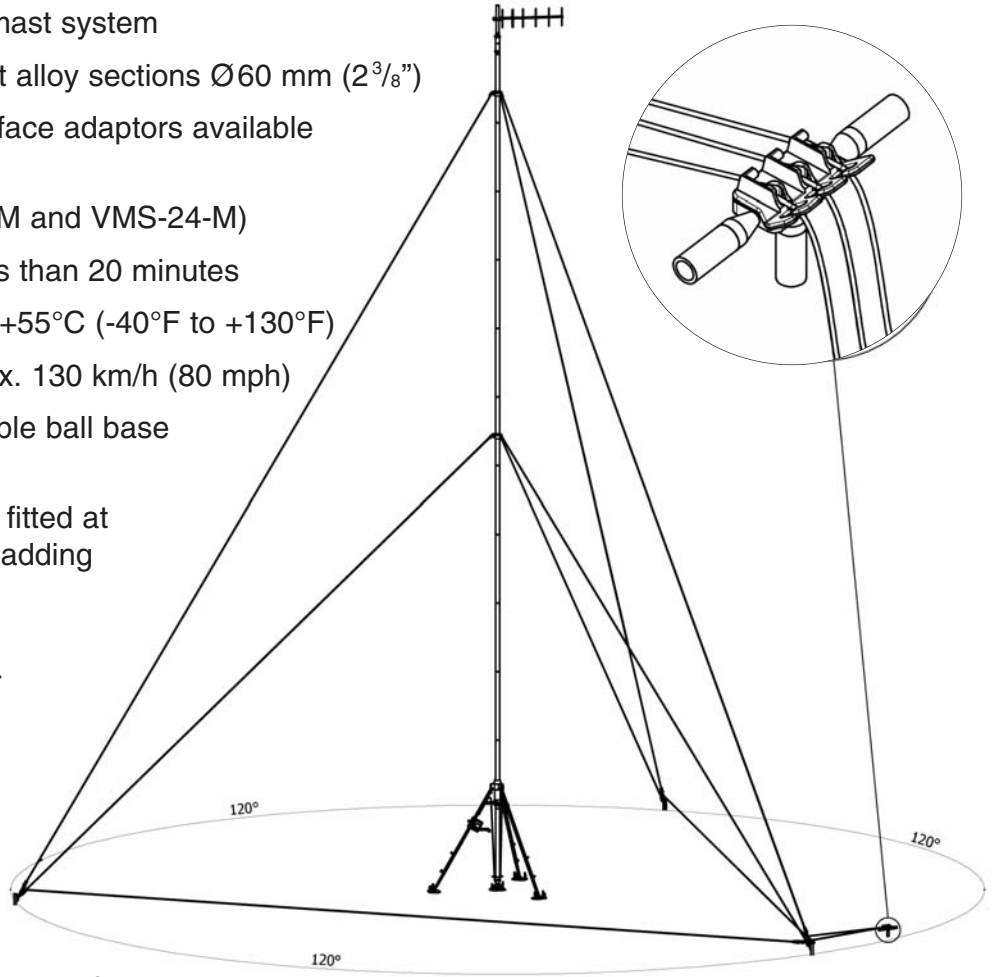
An easy erection communications mast for short period applications from Teksam Company

TekMast™ - Tactical Field Mast

Suitable for antennas from wire HF to highly directional VHF

TekMast™ Characteristics of Standard Mast

- Portable sectional tubular mast system
- Mechanically extended light alloy sections Ø60 mm (2³/₈")
- Various antenna/mast interface adaptors available
- Number of operators : 2
(3 for VMS-18-M, VMS-21-M and VMS-24-M)
- Average erection time : less than 20 minutes
- Operating temp. : -40°C to +55°C (-40°F to +130°F)
- Operating wind speed : max. 130 km/h (80 mph)
- Mast rotatable with clampable ball base on the ground
- Antenna and feeder cables fitted at ground level and raised by adding mast sections
- Extension by manual mechanical winch on leg or by optional electrical winch drive device kit
- Mast section torsional play virtually eliminated by accurate tooth/notch joint
- Supporting documentation
- Construction based on 40 years of experience in manufacturing of light-weight mast systems according to military standards
- MIL-STD-810G qualified : high temperature, low temperature, solar radiation, humidity, salt fog, blowing sand and dust, vibration and transit drop



Standard TekMast™ Field Mast Kits *(international patents & registered designs)*

| TekMast Kit Model | Cat. No. | Ext. Height (m) (ft) | | Number of Sections | Max. vertical Headload (kg) (lb) | | Guying Levels | Number of Guy Controllers | Number of Bags | Total Weight of Mast Kit (kg) (lb) | |
|-------------------|----------|----------------------|----|--------------------|----------------------------------|-----|---------------|---------------------------|----------------|------------------------------------|-----|
| VMS-6-M | 33906/MM | 6 | 20 | 6 | 50,0 | 110 | 1 | 1 | 3 | 69 | 152 |
| VMS-8-M | 33890/MM | 8 | 25 | 8 | 50,0 | 110 | 2 | 1 | 3 | 75 | 165 |
| VMS-10-M | 33892/MM | 10 | 33 | 10 | 50,0 | 110 | 2 | 1 | 3 | 80 | 176 |
| VMS-12-M | 33894/MM | 12 | 39 | 12 | 35,0 | 75 | 2 | 1 | 3 | 84 | 185 |
| VMS-15-M | 33897/MM | 15 | 49 | 15 | 22,5 | 50 | 3 | 1 | 4 | 99 | 218 |
| VMS-18-M | 33900/MM | 18 | 59 | 18 | 22,5 | 50 | 3 | 2 | 5 | 112 | 247 |
| VMS-21-M | 33903/MM | 21 | 69 | 21 | 10,0 | 22 | 4 | 2 | 5 | 123 | 271 |
| VMS-24-M | 33907/MM | 24 | 79 | 24 | 10,0 | 22 | 4 | 2 | 5 | 131 | 289 |

Maximum wind speed during erection : 50 km/h (30 mph)
Maximum projected wind load area of headload : 0,3 m²

General Description

TekMast is built around special designed and machined aluminium alloy tube sections, 60 mm (2 $\frac{3}{8}$ ") diameter by 1 metre (39.37 inch) effective length. These plug into each other with a generous overlap and are finally rotationally locked by tightening a wing nut on the field base plate.

The erection gear consists of a mast guide unit on three folding legs which are fitted with large feet for soft ground. Tube sections are introduced into the mast guide unit from underneath and lifted by a hand cranked winch fitted with automatic brake. A battery powered electrical winch drive device kit is available as an option. Guy collars and antenna are attached to the mast at ground level before erection which results in simultaneous lifting of antenna as well as tubular mast sections in one operation.

A unique manually operated guy control system allows a safe erection/retraction of the mast in a very simple and easy way, even in windy conditions.

All the equipment is carried in a set of canvas bags. The heaviest individual bag has a weight of approx. 30 kg (65 lb). All materials and finishes are to military standards of quality. Only materials proved to be totally reliable in a military environment are used.

Many features of TekMast are patented.

Customised antenna attachments are available on request.



TekMast VMS-12-M Field Mast Kit

TekMast™ - Accessories

24/40/50 mm Socket Adaptor



Models

24 mm Socket Adaptor
Cat. No. 33943/NG

40 mm Socket Adaptor
Cat. No. 37704/NG

50 mm Socket Adaptor
Cat. No. 37705/NG

GP NATO Top Flange with 4/6/8 Holes Pattern



Model

GP NATO Top Flange with 4/6/8
Holes Pattern - Cat. No. 33942/NG

NATO Top Flange with 4/6/8 Holes Pattern



Model

NATO Top Flange with 4/6/8 Holes
Pattern - Cat. No. 37892/NG

Round Mast Top Flange Ø 140 mm



Models

Round Mast Top Flange without
Holes - Cat. No. 37708/NG

Round Mast Top Flange with 4/6/8
Holes Pattern - Cat. No. 37709/NG

Square Mast Top Flange 135 x 135 mm



Models

Square Mast Top Flange without
Holes - Cat. No. 37713/NG

Square Mast Top Flange with 4
Holes Ø11 mm - Cat. No. 37714/NG

24/40/50/60 mm Antenna Spigot Flange



Models

24 mm Antenna Spigot Flange
Cat. No. 37718/NG

40 mm Antenna Spigot Flange
Cat. No. 37719/NG

50 mm Antenna Spigot Flange
Cat. No. 37720/NG

60 mm Antenna Spigot Flange
Cat. No. 37675/NG

TekMast™ - Accessories

Halyard Adaptor



Model

Halyard Adaptor
Cat. No. 33941/NG

Halyard Rope Assembly



Models

Halyard Rope Assembly 9 m
Cat. No. 33995/NG

Halyard Rope Assembly 12 m
Cat. No. 33996/NG

Halyard Rope Assembly 15 m
Cat. No. 33997/NG

Halyard Rope Assembly 18 m
Cat. No. 33998/NG

Halyard Rope Assembly 21 m
Cat. No. 33999/NG

Halyard Rope Assembly 24 m
Cat. No. 51858/NG

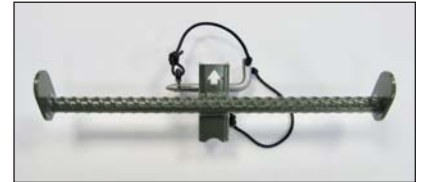
Side Mounting Antenna Adaptor



Model

Side Mounting Antenna Adaptor
Cat. No. 37232/NG

Step Assembly



Model

Step Assembly Cat. No. 51183/NG

Feeder Cable Strap



Model

Feeder Cable Strap
Cat. No. 37587/NG

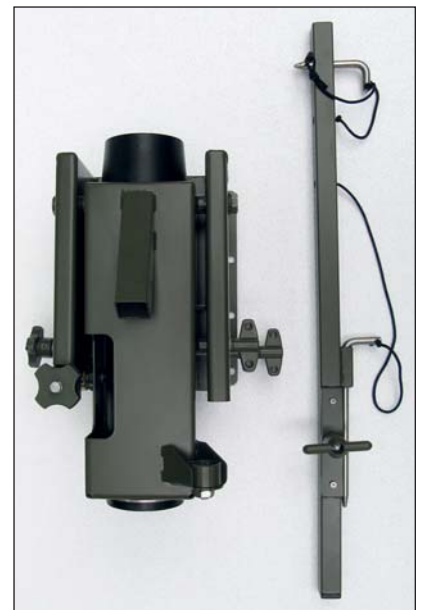
Graduated Collar Assembly



Model

Graduated Collar Assembly
Cat. No. 50942/BK

Vehicle/Shelter Mounting Bracket Kit

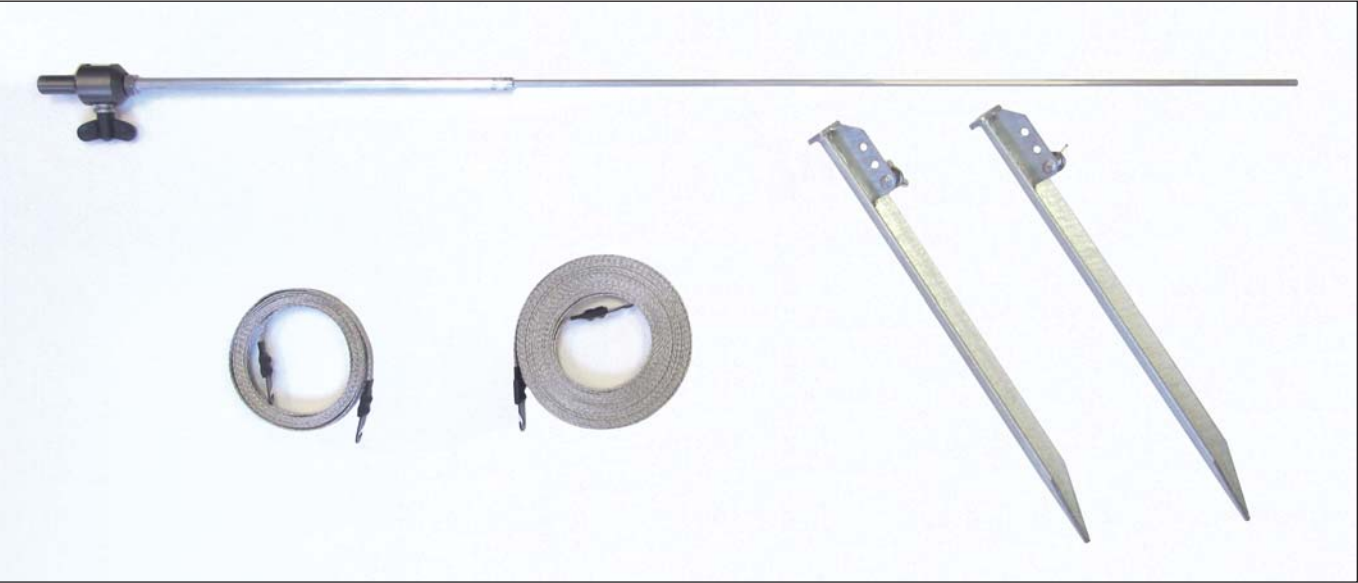


Model

Vehicle/Shelter Mounting Bracket Kit
Cat. No. 50950/NG

TekMast™ - Accessories

Lightning Protection Kit



Models

| | |
|-------------------------------|-------------------|
| 6 m Lightning Protection Kit | Cat. No. 37723/NG |
| 8 m Lightning Protection Kit | Cat. No. 37724/NG |
| 10 m Lightning Protection Kit | Cat. No. 37725/NG |
| 12 m Lightning Protection Kit | Cat. No. 37726/NG |

| | |
|-------------------------------|-------------------|
| 15 m Lightning Protection Kit | Cat. No. 37727/NG |
| 18 m Lightning Protection Kit | Cat. No. 37728/NG |
| 21 m Lightning Protection Kit | Cat. No. 37729/NG |
| 24 m Lightning Protection Kit | Cat. No. 51871/NG |

Antenna Turning Unit



Models

| | |
|--|-------------------|
| Antenna Turning Unit 6-15 m (24 mm Socket) | Cat. No. 37575/NG |
| Antenna Turning Unit 6-15 m (40 mm Socket) | Cat. No. 37576/NG |

Side Mounting Arm (length 300 mm)



Model

| | |
|-------------------|-------------------|
| Side Mounting Arm | Cat. No. 37918/NG |
|-------------------|-------------------|

TekMast™ - Accessories

Picket Extractor



Model

Picket Extractor (35 mm)

Cat. No. 37550/NG

Electrical Winch Drive Device Kit

Battery powered, standard foreseen with:

- a) 230 Volt AC Charger
- b) 12/24 Volt DC Car Charger



Model

Electrical Winch Drive Device Kit

Cat. No. 36973/NG

Antenna Tilt Unit (15°)



Models

Antenna Tilt Unit 6-12 m

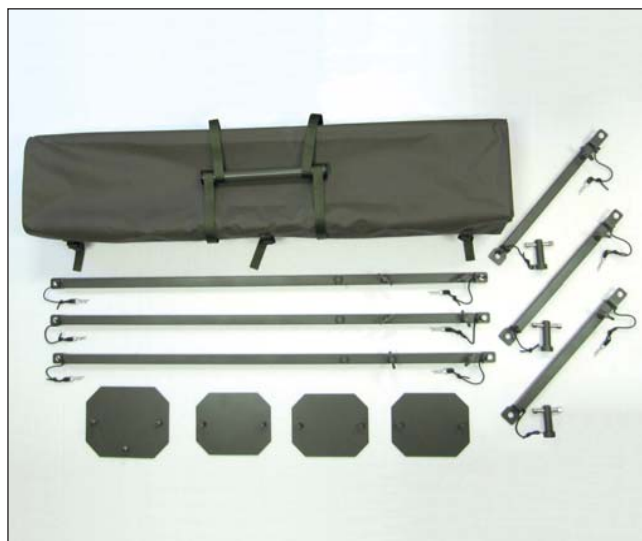
Cat. No. 37595/NG

Antenna Tilt Unit 15-18 m

Cat. No. 36705/NG

Tripod Support Kit with Carrying Bag

To install TekMast on hard surfaces (e.g. concrete, asphalt, flat roof, ...)



Model

Tripod Support Kit with Carrying Bag Cat. No. 37698/NG



The policy of **Teksam Company** is to use only materials whose long life is assured beyond all doubt. In addition, all products are designed to enable repairs to be carried out using only standard tools. Availability of spare parts is guaranteed.

TekMastTM

All details given in this publication are approximate and may be subject to change without notice.

Distributor :

TEKSAM COMPANY NV, Woudstraat 21, 3600 Genk, Belgium

Tel : +32 (0)89 38 44 72 Fax : +32 (0)89 38 61 41 E-mail : info@teksamco.com Website : www.tekmast.com

TekMast is a division of Teksam Company NV

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