

# Saber Masts

Saber is one of the most revolutionary telescoping mast systems available in the world. The compact design of the mechanical drive takes up only one cubic foot, thin foil technology provides exceptional strength, and the mast can be raised and locked at precisely the desired height, up to 42 feet. The result is a light weight telescoping mast with a large payload capacity and positive extension and retraction. Saber masts are available in free standing heights from 5 to 12.5 meters with topload capacities up to 450 lbs.

- SELF-SUPPORTING SO NO GUY WIRES ARE REQUIRED
- DIELECTRIC TOP SECTION
- ELECTRO-MECHANICAL DRIVE CAN BE STOPPED AND HELD AT ANY HEIGHT
- CARBON FIBER COMPOSITE MAST SECTIONS PROVIDE LIMITED SMALL ARMS BALLISTIC SURVIVABILITY
- POSITIVE RETRACTION
- MANUAL BACKUP TO EXTEND/RETRACT
- INTERMEDIATE LOCKING WITHOUT POWER AND PROGRAMMABLE INTERMEDIATE HEIGHTS
- LIGHTWEIGHT FOR MOBILE INSTALLATIONS
- INTELLIGENT SERVO CONTROLLER WITH BUILT-IN TEST AND DIGITAL HEIGHT DISPLAY
- DESIGNED AND TESTED TO STRINGENT ENVIRONMENTAL CLIMATIC REQUIREMENTS OF MIL STD 810, STANAG, DEF (AUST) 5168 AND OTHERS
- ADVANCED MODULAR DESIGN OF THE DRIVE COMPONENTS SIMPLIFIES SERVICE BY MAKING ALL KEY COMPONENTS ACCESSIBLE THROUGH THREE REMOVABLE PANELS
- CHEMICAL AGENT RESISTANT COATING (CARC) FINISH

• **SUGGESTED APPLICATIONS:**  
 Surveillance  
 Target Acquisition

| MODEL NAME                       | 9 Meter Saber                    | 10 Meter Saber                   | 12.4 Meter Saber                 |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| PAYLOAD CAPACITY                 | 450 LBS (204 kg)                 | 450 LBS (204 kg)                 | 250 LBS(113kg)                   |
| EXTENDED HEIGHT                  | 29'-5"                           | 32'-10"                          | 40'-10"                          |
| NESTED HEIGHT                    | 9m                               | 10m                              | 12.4m                            |
|                                  | 4'-6"                            | 5'-7"                            | 6'-1"                            |
| MAST WEIGHT*                     | 1400mm                           | 1675mm                           | 1825mm                           |
|                                  | 271 LBS.                         | 260 LBS.                         | 325 LBS.                         |
| NUMBER OF SECTIONS               | 10                               | 9                                | 10                               |
| TUBE DIAMETER RANGE              | 11" -4.5"                        | 10" - 4.5"                       | 11" - 4.5"                       |
| COLLAR MATERIAL                  | ALUMINUM                         | STEEL                            | STEEL                            |
| COLLAR TYPE                      | NON-LOCKING                      | NON-LOCKING                      | NON-LOCKING                      |
| MAX DEPLOYMENT TIME WITH PAYLOAD | 90 SECONDS AT AMBIENT TEMP.      | 76 SECONDS WITH 450 LBS.         | 120 SECONDS                      |
| MAX RETRACTION TIME WITH PAYLOAD | 90 SECONDS                       | 60 SECONDS                       | 120 SECONDS                      |
| MAST FOOTPRINT                   | 11.3" X 21.3"<br>(283mm X 533mm) | 11.3" X 21.3"<br>(283mm X 533mm) | 11.3" X 21.3"<br>(283mm X 533mm) |

**ELECTRICAL SPECIFICATIONS**

Voltage: 28 Vdc

Motor Amperage (continuous): 50 amps operating, 167 amps maximum (other Voltage Drive Motors available).  
 EMI emissions per Mil Std 461 C both emitted or conducted

**ENVIRONMENTAL SPECIFICATIONS**

(Reference Mil Std 810)

**Operational Altitude Range:**

Sea Level to 10,000 feet

**Transport Altitude Range:**

Up to 40,000 feet (in a pressurized aircraft)

**Operating Temperature Range:**

-55 C to +55 C

**Storage Temperature Range:**

-51 C to +71 C

**Humidity:**

Up to 100% without condensation at temperatures from 30 C to 60 C per Mil Std 810, method 507.3

**Deployment in Winds:**

Varies with Payload, consult factory

**Operational in Winds:**

Varies with Payload, consult factory.

**Fungus Resistant Method 508.4**

**Salt Fog (Operational):**

During and after, Method 509.3 Procedure 1

**Sand and Dust (Operational):**

Method 510.3, Procedure 1 and II

**Vibration Method 514.3,**

Procedure 1 with payload

hold-down lock

**Shock:**

20 g shocks. Method 516.4,

Procedures 1 & VI with payload

hold-down lock

**Solar Radiation**

Per Mil Std 810, method 505.3

**Rain:**

0 to 4 in (10cm) per hour with intermediate winds of 0 to 40 MPH (60 KPH) per Mil Std 810, method 506.3

**Survivability in Winds:**

Varies with Payload,

consult factory.

**Operational with Radial Ice:**

.25" Method 521.1, Procedure 1



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