WILL-BURT

MILITARY ELEVATION SOLUTIONS AND TACTICAL TRAILERS







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MIL - STD 810
CERTIFIED
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INDEPENDENT LABORATORY TESTED

The Will-Burt Company offers a broad selection of mobile telescopic masts, lattice towers, pan and tilt positioners and accessories to elevate a variety of mission critical payloads. Each family of elevation solutions is designed and manufactured with a unique set of characteristics tuned to optimize payload performance and meet the most stringent performance criteria. High performance tactical trailers round out the military offerings of The Will-Burt Company.

The ability of Will-Burt to deliver superior elevation solutions is attributed to its worldwide leadership in the industry for over 50 years. Teams of experienced research and development engineers, design engineers and ISO 9001:2015 quality systems certified manufacturing experts are backed by a sales and marketing support structure focused on delivering the correct customer solution on time, every time.

Whether your program requires a commercial off-the-shelf solution or a highly engineered customized product, The Will-Burt Company has the experience, design know-how and manufacturing capabilities to meet your unique requirements.

THE ADVANTAGES OF THE WILL-BURT COMPANY

- **Worldwide elevation leader since 1946**
- **Wide array of elevation products designed for specific missions**
- **MIL-STD 810 Certified**
- **ISO 9001:2015 quality certified manufacturing**
- **Innovative custom solutions designed by experienced engineers**
- **Superior customer support**

Portable Telescopic Masts and Towers Height and Payload Capabilities

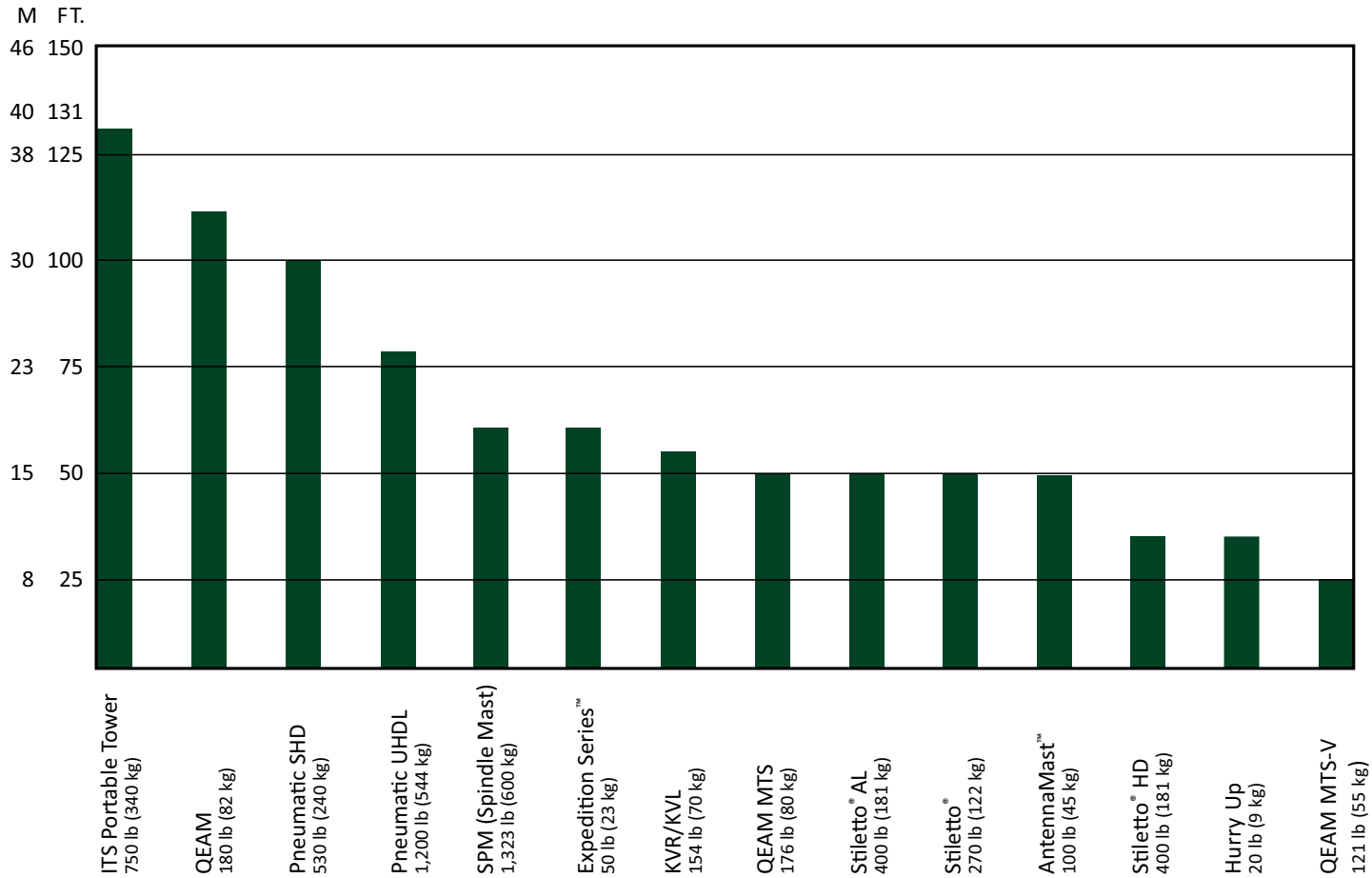


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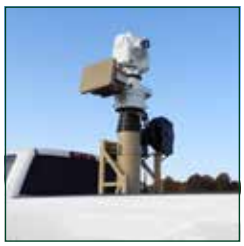
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SURVEILLANCE / SECURITY / ON-THE-MOVE

STILETTO®



High performance composite telescoping mast
The revolutionary Will-Burt Stiletto carbon fiber composite, electro-mechanical mast features the best combination of high strength, low weight and great stability in the industry. With its low nested height and small space claim, Stiletto is the lightweight mobile solution for applications requiring rapid automatic deployment, maximum reliability and high directional pointing accuracy.

ESSENTIAL FEATURES

- **High pointing accuracy and low wind deflection**
  - Internal keys and rigid design maintain azimuth and eliminate the need for guylines
- **High weight lifting capacity**
  - Greater safety and payload accommodations
- **Higher strength for lighter weight**
  - Lightweight carbon fiber construction driven by stainless steel electro-mechanical drive screw
- **Advanced safety**
  - Automatic sectional locking assures personnel and payload safety
- **Low maintenance costs**
  - Easy, routine field and depot maintenance
- **Use in harsh environments including ice and high wind**
  - Positive retraction



STILETTO™ HD





High performance composite telescoping mast
The Will-Burt Stiletto® HD offers additional benefits over the standard Stiletto® design

ESSENTIAL FEATURES

- **Greater pointing accuracy**
  - Greater strength and rigidity, lower wind deflection
- **48% lower linear deflection**
- **Greater lifting capacity**
  - Higher load drive system capacity for heavier payloads
- **Increased stability**
  - Due to additional tube overlap
- **Increased safety**
  - Three locks on heavy-duty collars
- **On-The-Move****
  - Persistent surveillance

SURVEILLANCE / SECURITY / ON-THE-MOVE

SPECIFICATIONS

Stiletto®	3 meter	4 meter	6 meter	10 meter	15 meter
Extended Height (+4 in. / –0 in.) (ft. / m)	9.8 / 3.0	13.5 / 4.1	19 / 5.79	32.5 / 9.9	49.2 / 15
Nested Height (+1 in. / -0 in.) (ft. / m)	41 / 1.0	39 / 1.0	46 / 1.17	67 / 1.7	94.5 / 2.4
Payload Capacity (lb / kg)	270 / 122	250 / 113	250 / 113	250 / 113	200 / 91
Weight (Including Control Box and Cables) (lb / kg)	176 / 80	196 / 89	209 / 95	267 / 121	320 / 145
Number of Sections	5	9	9	9	9
Tube Diameter (in. / cm)	10.3 to 7.3 / 26.2 to 8.5	10.31 to 4.31 / 26.2 to 11	10.31 to 4.31 / 26.2 to 11	10.31 to 4.31 / 26.2 to 11	10.31 to 4.31 / 26.2 to 11
Survival Wind Speed (mph / km/h)		110 / 177	100 / 160	80 / 129	65 / 105
Deployment Wind Speed (mph / km/h)		50 / 80	40 / 60	34 / 55	33 / 53
Erection Time with Power (seconds)	45	60	90	162	240
Rotation Accuracy (Twist)	+/–1°	+/–1°	+/–1°	+/–1°	+/–1°
Voltage (MIL-STD 1275)	28 VDC	28 VDC	28 VDC	28 VDC	28 VDC
Footprint (in. / cm)	11.25 x 17.63 / 28.6 to 44.8		17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5
**Typical Payload Sail Area (sq. ft. / sq. m)	8 / .74 CD=1.5	8 / .74 m CD=1.5	8 / .74 m CD=1.5	6 / .56 m CD=1.5	4 / .37 CD=1.5

Stiletto® HD	4 meter	6 meter	8.6 meter	10 meter
Extended Height (+4 in. / –0 in.) (ft. / m)	12.5 / 3.8	19.7 / 6	28.2 / 8.6	32.9 / 10
Nested Height (+1 in. / -0 in.) (ft. / m)	43.3 / 1.1	58.2 / 1.5	76.8 / 1.95	79 / 2
Payload Capacity (lb / kg)	350 / 158	400 / 181	400 / 181	400 / 181
*On-The-Move Capability		x		
Weight (Including Control Box and Cables) (lb / kg)	265 / 120	340 / 154	384 / 175	395 / 180
Number of Sections	7	9	8	9
Tube Diameter (in. / cm)	9.56 to 5.06 / 24.3 to 12.9	11.06 to 5.06 / 28.1 to 12.9	11.06 to 5.81 / 28.1 to 14.8	11.06 to 5.06 / 28.1 to 12.9
Survival Wind Speed (mph / km/h)	100 / 160	100 / 160	90 / 144	80 / 129
Deployment Wind Speed (mph / km/h)	40 / 64	40 / 64	40 / 64	34 / 55
Erection Time with Power (seconds)	20	35	50	60
Rotation Accuracy (Twist)	+/–1°	+/–1°	+/–1°	+/–1°
Voltage (MIL-STD 1275)	28 VDC	28 VDC	28 VDC	28 VDC
Footprint (in. / cm)	15.59 x 9.71 / 39.6 x 24.7	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5
**Typical Payload Sail Area (sq. ft. / sq. m)	11 / 1 CD=1.5	11 / 1 CD=1.5	8 / .74 CD=1.5	8 / .74 CD=1.5

*Consult factory for OTM payload capacity – 6 m HD model only. **Consult factory for larger sail area as payload and wind capacities may be reduced.

Stiletto® MIL-STD-810F Qualifications
Altitude: Sea level to 15,000 feet per MIL-STD-810F, Method 500.4
Transportation Altitude: Sea level to 15,000 feet (unpressurized) MIL-STD-810F, Method 500.4
Operating Temperature Ranges: -40°C to +55°C, MIL-STD-810F, Method 501.4 and 502.4
Storage Temperature Ranges: -40°C to +71°C, MIL-STD-810F, Method 501.4 and 500.4
Solar Radiation: Per MIL-STD-810F, Method 505.4
Rain: Per MIL-STD-810F, Method 506.4
Humidity: Per MIL-STD-810F, Method 507.4
Fungus: Per MIL-STD-810F, Method 508.4
Salt Fog: Per MIL-STD-810F, Method 509.4
Sand and Dust: Per MIL-STD-810F, Method 510.4
Ice and Freezing Rain: Per MIL-STD-810F, Method 521.2
Vibration and Shock: Per MIL-STD-810F, Method 514.5 and 516.5 (nested position)
MIL-STD-461E Qualifications: CS101, CS114, CS115, CS116, RS103

Stiletto® HD MIL-STD-810F Qualifications
*Altitude: Sea level to 15,000 feet per MIL-STD-810F, Method 500.4
*Transportation Altitude: Sea level to 15,000 feet (unpressurized) MIL-STD-810F, Method 500.4
Operating Temperature Ranges: -40°C to +55°C, MIL-STD-810F, Method 501.4 and 502.4
Storage Temperature Ranges: -40°C to +71°C, MIL-STD-810F, Method 501.4 and 500.4
*Solar Radiation: Per MIL-STD-810F, Method 505.4
*Rain: Per MIL-STD-810F, Method 506.4
*Humidity: Per MIL-STD-810F, Method 507.4
Fungus: Per MIL-STD-810F, Method 508.4
*Salt Fog: Per MIL-STD-810F, Method 509.4
*Sand and Dust: Per MIL-STD-810F, Method 510.4
Ice and Freezing Rain: Per MIL-STD-810F, Method 521.2
*The Stiletto HD design was qualified by similarity to the standard Stiletto design
MIL-STD-461E Qualifications: 461E, CS101, CS114, CS115, CS116, RS103
MIL-STD-461E Qualifications: CE102, RE102, RS101 with optional equipment

SURVEILLANCE / COMMUNICATIONS

STILETTO® AL

High accuracy electro-mechanical telescoping mast

The Stiletto AL delivers an extremely stable and compact elevation platform for sensors and antennas that require a high degree of pointing accuracy. This high strength alloy electro-mechanical telescoping mast with patented automatic locks does not require guying and safely deploys payloads at any height. The Stiletto AL is a cost-effective elevation platform designed to meet today's stringent program requirements.



ESSENTIAL FEATURES

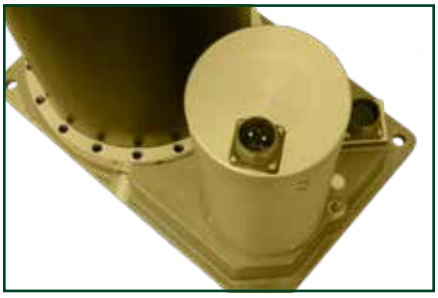
- **No guying required, self-supporting mast**
- **Minimal mast twist**
  - Energized keyway guides in accessory-ready collars
- **Low wind deflection**
  - Mast sections are held tight by constricting wear bands
- **Quiet Operation**
  - Direct-drive system powered by environmentally sealed 600 watt DC motor with manual over ride
  - Patented Quiet Locks designed for heavy payloads
- **Reduced maintenance**
  - Clean air filter system prevents dirt from entering mast
  - Integrated dirt / dust wipers and ice-breakers built into collars
- **High strength alloy construction**
- **Integrated PC control**
- **MIL-STD 810G certified**

High Strength Alloy Construction



Patented Quiet Locks Designed for Heavy Payloads

Quiet Sealed Direct-Drive System





Integrated Dust Wipers and Ice-Breakers

SPECIFICATIONS

Stiletto AL	4 meter	6 meter	8.5 meter	10 meter	15 meter
Extended Height (+4 in. / –0 in.) (ft. / m)	13.1 ft. / 4 m	19.6 ft. / 6 m	28 ft. / 8.54 m	32.8 ft. / 10 m	49.2 ft. / 15 m
Nested Height (+1 in. / -0 in.) (ft. / m)	50.4 in. / 1.28 m	62.2 in. / 1.58 m	74.02 in. / 1.88 m	82.68 in. / 2.10 m	104.4 in. / 2.65 m
Payload Capacity	400 / 181	400 / 181	400 / 181	400 / 181	350 / 158
Weight (Including Control Box and Cables) (lb / kg)	265 / 120	314 / 143	364 / 165	395 / 179	350 / 158
Number of Sections	5	6	7	7	8
Tube Diameter (in. / cm)	9.85 to 6.7 / 25 to 17	9.85 to 5.91 / 25 to 15	9.85 to 5.12 / 25 to 13	9.85 to 5.12 / 25 to 13	9.85 to 4.33 / 25 to 11
Survival Wind Speed (mph / km/h)	130 / 209	115 / 185	80 / 129	80 / 129	62 / 100
Deployment Wind Speed (mph / km/h)	40 / 64	40 / 64	35 / 56	35 / 56	30 / 48
Erection Time with Power (seconds)	Less than 35	Less than 60	Less than 100	Less than 100	Less than 150
Rotation Accuracy (Twist)	+/–1°	+/–1°	+/–1°	+/–1°	+/–1°
Voltage (MIL-STD 1275)	28 VDC	28 VDC	28 VDC	28 VDC	28 VDC
Footprint (in. / cm)	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5	17.56 x 11.19 / 44.6 x 28.5
**Typical Payload Sail Area (sq. ft. / sq. m)	17 / 1.58 CD=1.5	12 / 1.11 CD=1.5	11 / 1.02 CD=1.5	11 / 1.02 CD=1.5	8 / 0.74 CD=1.5

Paint option only available for base tube, all other tubes will be black anodize. *Consult factory for larger sail area as payload and wind capacities may be reduced.

PNEUMATIC HD AND SHD NON-LOCKING MASTS

The Will-Burt Pneumatic Heavy-Duty Non-Locking (HDNL) and Super Heavy-Duty Non-Locking (SHDNL) Masts offer a light-weight solution with a high payload lifting capacity. Our Pneumatic Non-Locking Masts also feature high pointing accuracy and long mast life for high performance and dependability. The pneumatic heavy-duty design makes it inherently safe – the payload sits on a "cushion of air" enabling it to better absorb shocks for on-the-move applications*. What's more, the Pneumatic Non-Locking Masts have controlled exhausting of air for smooth and safe retraction. Locking models are available for extended deployments.





ESSENTIAL FEATURES

- **Maintains azimuth - minimal twist deflection**
  - Reliable full-length external keyways
- **Operates in extreme environments**
  - External wipers protect against sand and dust
- **Low maintenance and life-cycle costs**
  - Easy to operate and maintain low friction synthetic bearings
- **Long life**
  - Black hardcoat protects against salt fog corrosion







SPECIFICATIONS

Heavy-Duty	7.5 meter	10 meter	12.5 meter	15 meter	17 meter
Extended Height (ft. / m)	25 / 7.6	32.8 / 10	41.2 / 12.5	48.6 / 14.8	56.17 / 17.1
Nested Height (ft. / m)	6 / 1.8	6.7 / 2	7.3 / 2.1	8.7 / 2.7	9.6 / 2.9
Payload Capacity (lb / kg)	200 / 91	300 / 136	200 / 91	300 / 136	300 / 136
Approximate Mast Weight (lb / kg)	110 / 50	200 / 90	235 / 107	275 / 125	296 / 135
Tube Diameter (in. / mm)	6.75-3 / 171-76	9-3.75 / 229-95	9-3 / 229-76	9-3.75 / 229-95	9-3.75 / 229-95
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

Super Heavy-Duty	10 meter	12 meter	72' Patriot
Extended Height (ft. / m)	32.8 / 10	39.4 / 12	72 / 22
Nested Height (ft. / m)	8 / 2.5	9.3 / 2.8	18 / 5.5
Payload Capacity (lb / kg)	980 / 445	680 / 308	700 / 318
Approximate Mast Weight (lb / kg)	375 / 170	430 / 195	1,500 / 680
Tube Diameter (in. / mm)	11.25-6.75 / 285-171	11.25-6 / 285-152	11.03-6.5 / 280-165
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

LONG-TERM DEPLOYMENT

PNEUMATIC HD AND SHD LOCKING MASTS



Will Burt's locking pneumatic masts are ideal for military communications, elevated testing and mobile radar applications. When a mast deployment is needed for extended periods, locking collars allow the mast to remain extended indefinitely without air pressure. Guying is optional on Vehicle-mounted heavy-duty locking (HDL) models up to 60 feet (18 meters). Commercial-off-the-shelf (COTS) heavy-duty models are available. Super heavy-duty locking (SHDL) and ultra heavy-duty locking (UHDL) models feature greater unguyed heights and larger payload capacities. Standard models are shown below. Custom height and payload capacities are available upon request.

ESSENTIAL FEATURES

- **Two full-length external keys on mast sections with matching machined keyways on collars**
  - Maintains directional azimuth
- **Low friction synthetic bearings**
  - Protects mast sections and collars for smooth operation and long life
- **Mechanical Locking Collars**
  - Supports high guying forces
- **Black Hardcoat and sealed aluminum surfaces**
  - Meets MIL-A-8625 Type III, Class II & Extends life of mast and protects against salt fog corrosion
- **External Wipers**
  - Protects against sand and dust
- **Ruggedized Options**
  - Optional finishes and features for military applications



SPECIFICATIONS

Heavy-Duty	10 meter	12.5 meter	15 meter	18 meter
Extended Height (ft. / m)	32.8 / 10	41 / 12.5	49.2 / 15	59 / 18
Nested Height (ft. / m)	7.5 / 2.3	7.5 / 2.3	8 / 2.5	10.4 / 3.2
Payload Capacity (lb / kg)	200 / 91	200 / 91	200 / 91	300 / 136
Approximate Mast Weight (lb / kg)	125 / 57	235 / 107	240 / 109	330 / 150
Tube Diameter (in. / cm)	6.75-3" / 171-76 mm	9-3" / 229-76 mm	9-3" / 229-76 mm	9-3.75" / 229-95 mm
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

Super Heavy-Duty	15 meter	18 meter	23 meter	30 meter
Extended Height (ft. / m)	49.2 / 15	59.1 / 18	76 / 23.2	98.4 / 30
Nested Height (ft. / m)	9.2 / 2.8	10.5 / 3.2	11.1 / 3.4	15.4 / 4.7
Payload Capacity (lb / kg)	530 / 240	530 / 240	300 / 136	530 / 240
Approximate Mast Weight (lb / kg)	450 / 205	550 / 227	550 / 249	790 / 361
Tube Diameter (in. / cm)	11.25-5.25 / 288-135	11.25-5.25 / 288-135	11.25-3.75 / 288-96	11.25-5.25 / 288-135
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

Pneumatic HD Locking Mast MIL-STD-810F Qualifications
Solar Radiation: Per MIL-STD-810E, Method 505.3
Rain: Per MIL-STD-810E, Method 506.3
Humidity: Per MIL-STD-810E, Method 507.3
Salt Fog: Per MIL-STD-810E, Method 509.3
Sand and Dust: Per MIL-STD-810E, Method 510.3
The Pneumatic SHD and Pneumatic Non-Locking HD and SHD masts are qualified by similarity to the Pneumatic HD locking mast design.

LONG-TERM DEPLOYMENT

PNEUMATIC ULTRA HEAVY-DUTY LOCKING MASTS

Higher payload capacity with shorter nested height.

The Ultra Heavy-Duty Pneumatic Mast with Locking Collars delivers an unparalleled combination of strength and rigidity in a design that delivers the performance of a hydraulic mast at less weight and without the need for environmentally dangerous fluids.The Ultra Heavy-Duty mast was specifically designed for mobile communications providing better unguyed performance at lower nested heights – eliminating the need for an expensive tilt system.

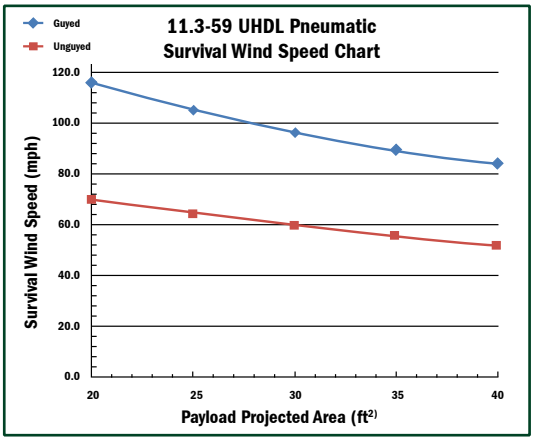


ESSENTIAL FEATURES

- **Strong**
  - Elevates heavier loads with greater wind sail area
    Greater unguyed performance
- **Fast & Efficient**
  - Lower nested height eliminates the need for costly and complicated tilt systems
  - Easier to deploy in urban areas
  - Safe long-term deployment with easy to operate positive locking pins
- **Reliable**
  - No maintenance required
  - No hydraulic fluid concerns







SPECIFICATIONS

Ultra Heavy-Duty	12m	18m	20m	21.3m	24.3m
Payload Capacity* (lb / kg)	980 / 444	1200 / 544	530 / 240	1200 / 544	1200 / 544
Extended Height (ft. / m)	39.3 / 12	59 / 18	65.6 / 20	70 / 21.3	80 / 24.3
Nested Height (ft. / m)	7.9 / 2.4	11.3 / 3.4	9.8 / 3	13 / 4	14.4 / 4.4
Approximate Mast Weight (lb / kg)	607 / 275	814 / 369	852 / 387	920 / 417	1078 / 489
Number of Sections	8	7	10	7	7
Tube Diameter (in. / cm)	13.5 / 34.29 through 6.75 / 17.15	13.5 / 34.29 through 7.5 / 19.05	13.5 / 34.29 through 5.25 / 13.34	13.5 / 34.29 through 7.5 / 19.05	13.5 / 34.29 through 7.5 / 19.05
Collar Type	Locking with Super Pins	Locking with Super Pins	Locking with Super Pins	Locking with Super Pins	Locking with Super Pins
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

Dimensions provided are for reference only and are not intended for vehicle design purposes. *Capacity will be affected by wind sail area. Consult factory.

REMOTE LOCKING SYSTEM FOR PNEUMATIC MASTS

Will-Burt's patent pending Remote Locking System for pneumatic masts allows an operator to lock and unlock the mast from an assured distance. No manual interaction is required to raise or lower the mast. Operation of the system is intuitive, requiring less training and reducing the risk of operator error. The Remote Locking System is available on any Heavy-Duty pneumatic mast system or larger up to 80 ft. / 24m.



FEATURES AND SPECIFICATIONS

- Ability to stand clear from payload during deployment and retraction
- Easy to understand and operate control
- Super pins for longer lock life and increased wind survival speed in guyed applications
- Close azimuth design and two full-length keys on every mast section reduces mast movement and twist
- No routine maintenance required
- Pneumatic operation requires no fluids



Locks and Controls Included



Unlocked Pneumatic Actuator



Locked Pneumatic Actuator



Control Box Included



Optional Handheld Controller

PNEUMATIC SYSTEMS

Will-Burt offers a variety of low maintenance oil-less air compressor systems, all specifically designed for optimal performance for use with Will-Burt Telescoping Masts. These pneumatic systems include only the highest quality components available to ensure the system provides years of trouble-free service.

AC COMPRESSOR ESSENTIAL FEATURES

- Mast pressure gauge
- Pressure regulator
- Hand-held remote control with mast up/down switch
- Protective enclosure
- Up to 185 liters/minute (4.4 cfm)
- 110VAC (50Hz & 60Hz) and 230VAC (50Hz & 60Hz) models
- Operating Temperature: -20°C to 50°C (-4°F to 122°F)
- Oil-less to reduce maintenance
- Check valve prevents leakage
- ⅜" air hose

DC COMPRESSOR ESSENTIAL FEATURES

- Mast pressure gauge
- Adjustable pressure switch
- Hand-held remote control with mast up/down switch
- Protective enclosure
- 12 VDC model - up to 173 liters/minute (6.1 cfm)
- 24 VDC model - up to 191 liters/minute (6.7 cfm)
- Operating Temperature: -20°C to 50°C (-4°F to 122°F)
- Oil-less to reduce maintenance
- Check valve prevents leakage
- ⅜" air hose

MAST ACCESSORIES

AC COMPRESSORS



DC COMPRESSORS

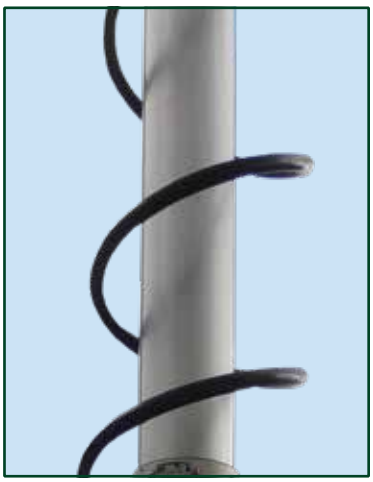


EXTERNAL CABLE MANAGEMENT

NYCOIL® is a coiled conduit used to house wiring, antenna coax and positioner cable that is too large to fit inside the mast. NYCOIL® easily fits around the mast and extends neatly and compactly retracts when the mast is nested.

A variety of sizes is available from 0.5 in. / 1.27 cm to 1.25 in. / 3.2 cm in diameter with lengths available up to 100 ft. / 30 m.





WILL-BURT ALSO OFFERS STANDARD OFF THE SHELF AND CUSTOM MOUNTING AND INTEGRATION HARDWARE AND DESIGN SOLUTIONS.

COMMUNICATIONS / SURVEILLANCE

KVL AND KVR TELESCOPIC CABLE-DRIVE MASTS

Will-Burt Germany's Family of light duty Telescopic Cable Drive Masts is characterized by lightweight construction in addition to superior stability, reliability and long life. The GEROH KVL and GEROH KVR mast systems are in use in military and commercial applications such as communications testing, surveillance and lighting and are designed for vehicle, trailer, shelter or field deployment. The mast sections consist of close tolerance precision mast profiles which ensure precise pointing accuracy. Safe deployment and retraction is assured, even with ice or heavy wind conditions.

ESSENTIAL FEATURES

- **Automatic locking system (KVR)**
  - Deploy at any height
- **Precision tube fit**
  - Maintains azimuth
- **Powerful cable drive system**
  - Deploy and retract in extreme weather conditions
- **Optional motor drive system**
  - Designed for trailer, shelter, vehicle or field mounting
- **MIL-STD 810–F certified**
- **MIL-STD 810–G certified**
- **Field Deployment Kit Optional**

SPECIFICATIONS

MIL STD TESTS	
High Temperature Operation (+44C)	MIL-STD-810G, Method 501.5, Procedure II
Low Temperature Operation (-32C)	MIL-STD-810G, Method 502.5, Procedure II
High Temperature Storage (+63C)	MIL-STD-810G, Method 501.5, Procedure I
Low Temperature Storage (-51C)	MIL-STD-810G, Method 502.5, Procedure II
Humidity	MIL-STD-810G, Method 507.5, Procedure II (Aggravated cycle Figure 507.5-7, %95 uncondensed humidity)
Rain	MIL-STD-810G, Method 506.5, Procedure II
Vibration	MIL-STD-810G, Method 514.6, Procedure I, Category 20, Table 514.6C-VI, Figure 514.6C-3 (composite wheeled vehicle)
	MIL-STD-810G, Method 514.6, Procedure I, Category 11 (Rail Road-Train), Figure 514.6C-10
	MIL-STD-810G, Method 514.6, Procedure I, Category 8 (Aircraft-Propeller), Figure 514.6C-7
Shock	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock, according to Table 516.6-II, 20g 11ms sawtooth (terminal)
Low Pressure	MIL-STD-810G, Method 500.5, Procedure II (3000m,-4.5° and 4572 m), Rapid decompression Procedure III
Solar Radiation	MIL-STD-810G, Method 505.5
Sand/Dust	MIL-STD-810G Method 510.5, Procedure I
Icing	MIL-STD-810G, Method 521.3, Procedure I (Ice thickness: 13mm)
EMI	MIL-STD 461F: CE102, RE102, CS101, CS114, CS115, CS116, RS103
Hazardous Chemicals	MIL STD 810 F Method 504.1
Salt Fog	MIL-STD 810F Method 509.4





KVL	120 - 2.5 KVL 3	120 - 4 KVL 4	120 - 6 KLV 5	120 - 8 KVL 5	145 - 10 KVL 6	145 - 12 KVL 6
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	32.8 / 10	39.4 / 12
Nested Height (ft. / m)	3.5 / 1.1	4.3 / 1.3	5.1 / 1.5	6.4 / 1.9	6.9 / 2.1	8.0 / 2.4
Payload Capacity (lb / kg)	55 / 25	55 / 25	55 / 25	44 / 20	33 / 15	33 / 15
Approximate Mast Weight (lb / kg)	37 / 17	46 / 21	57 / 26	68 / 31	95 / 43	106 / 48
Number of Sections	3	4	5	5	6	6

KVR	145 - 2.5 KVR 3	145 - 4 KVR 3	145 - 6 KVR 5	145 - 8 KVR 5	170 - 10 KVR 6	170 - 12 KVR 6	170 - 14 KVR 6	170 - 18 KVR 6	170 - 20 KVR 6
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.0 / 7.9	32.8 / 10	39.4 / 12	45.9 / 14	59.1 / 18	65.6 / 20
Nested Height (ft. / m)	4.1 / 1.2	5.7 / 1.7	5.7 / 1.7	6.9 / 2.1	7.5 / 2.3	8.6 / 2.6	9.7 / 3.0	11.9 / 3.6	13.0 / 4.0
Payload Capacity (lb / kg)	154 / 70	154 / 70	154 / 70	154 / 70	110 / 50	110 / 50	88 / 40	88 / 40	88 / 40
Approximate Mast Weight (lb / kg)	82 / 37	95 / 43	119 / 54	139 / 63	183 / 83	205 / 93	271 / 123	271 / 123	289 / 131
Number of Sections	3	3	5	5	6	6	6	6	6

SPM SPINDLE DRIVE MAST

Will-Burt Germany's Family of Telescopic Spindle Masts is used by the German Army and other international forces to enhance capabilities like communication, security, surveillance, reconnaissance and detection of targets throughout the battlefield.

The GEROH Spindle Mast Systems are developed for the highest requirements in precision and heavy payloads. The spindle drive system guarantees environmental independent operation – also in extreme inclines.

High precision with very close tolerances is guaranteed by our specially machined aluminum mast sections. For this reason the GEROH SPM masts are optimized for optical / electronic intelligence, monitoring and target recognition as well as electronic warfare systems.





ESSENTIAL FEATURES

- Designed for heavy payloads with large windsail areas
- Precision tolerances maintain azimuth and minimize deflection
- Precise pointing accuracy excellently suited for optical electronic intelligence, monitoring, and target recognition
- Designed for inside and outside vehicle installation
- Electronic and Manual Operation
- MIL-STD 810–F certified

SPECIFICATIONS

Standard SPM	180–2 SPM 2	230–3 SPM 5	230–6 SPM 5	260–8 SPM 6	260–10 SPM 6	260–12 SPM 6	300–15 SPM 6	360–18 SPM 6
Extended Height	6.9 ft. / 2.1 m	9.9 ft. / 3 m	19.7 ft. / 6 m	26.2 ft. / 8 m	32.8 ft. / 10 m	39.4 ft. / 12 m	49.2 ft. / 15 m	59.1 ft. / 18 m
Nested Height	4.0 ft. / 1.2 m	3.5 ft. / 1.1 m	5.5 ft. / 1.7 m	5.9 ft. / 1.8 m	7.1 ft. / 2.2 m	8.1 ft. / 2.5 m	11.2 ft. / 3.4 m	12.8 ft. / 3.9 m
Payload Capacity	220 lbs. / 100 kg	661 lbs. / 300 kg	551 lbs. / 250 kg	551 lbs. / 250 kg	551 lbs. / 250 kg	551 lbs. / 250 kg	551 lbs. / 250 kg	551 lbs. / 250 kg
Approximate Mast Weight	163 lbs. / 74 kg	212 lbs. / 96 kg	309 lbs. / 140 kg	573 lbs. / 260 kg	639 lbs. / 290 kg	672 lbs. / 305 kg	1,323 lbs. / 600 kg	1,488 lbs. / 675 kg
Tube Diameter	7.1 in. / 18 cm	9.1 in. / 23 cm	9.1 in. / 23 cm	10.2 in. / 26 cm	10.2 in. / 26 cm	10.2 in. / 26 cm	14.2 in. / 36 cm	14.2 in. / 36 cm
Number of Sections	2	5	5	6	6	6	6	6

Low Profile SPM	280-2.5 SPM 7	280-3 SPM 7	280-4 SPM 7	280-6 SPM 7	280-8 SPM 7	280-10 SPM 7
Extended Height	8.2 ft. / 2.5 m	9.8 ft. / 3.0 m	13.1 ft. / 4.0 m	19.7 ft. / 6.0 m	26.2 ft. / 8.0 m	32.8 ft. / 10.0 m
Nested Height	2.3 ft. / 0.70 m	2.5 ft. / 0.78 m	3.0 ft. / 0.92 m	3.9 ft. / 1.20 m	4.9 ft. / 1.49 m	5.8 ft. / 1.78 m
Payload Capacity	309 lbs. / 140 kg	287 lbs. / 130 kg	265 lbs. / 120 kg	220 lbs. / 100 kg	176 lbs. / 80 kg	132 lbs. / 60 kg
Approximate Mast Weight	265 lbs. / 120 kg	353 lbs. / 160 kg	419 lbs. / 190 kg	485 lbs. / 220 kg	540 lbs. / 245 kg	639 lbs. / 290 kg
Tube Diameter	11.0 in. / 28 cm	11.0 in. / 28 cm	11.0 in. / 28 cm	11.0 in. / 28 cm	11.0 in. / 28 cm	11.0 in. / 28 cm
Number of Sections	7	7	7	7	7	7

Other heights and payload capacities available.

POWERED TILT SYSTEM FOR STILETTO AND PNEUMATIC MASTS

Will-Burt's Stiletto Tilt System is ideal for applications where nested height and rapid deployment are critical factors. The robust design enables rapid tilting and locking of the mast. The low height of the Stiletto Tilt meets C-130 transportability requirements and situations requiring a low center of gravity or concealment of the mast payload. The palletized configuration also makes the system suitable for installation on various mission configured vehicle platforms such as trailers, pick-up trucks and flat bed transports including the FMTV.



ESSENTIAL FEATURES

- **Provides additional stability and structure**
  - Designed for Stiletto's from 4m to 10m and Pneumatics up to 15m
- **Pallet allows for easy installation**
  - Using standard D-ring on a flat bed cargo or can be customized to fit any platform
- **Manual backup operation**
  - Allows for deployment or retraction in the event of a power loss
- **Exclusive black hard coat finish**
  - Offers a more durable finish and prevents salt fog corrosion



MANUAL TILT OPTIONS FOR PNEUMATIC AND KVR

Manual tilt system with winch and automatic brake

MAST TILT

Mast Tilt is ideal for securing payloads onto a vehicle-mounted pneumatic mast. The mast tilt system lowers the top of the mast to a reachable height so that a payload can be mounted in place. The mast is then tilted back to a vertical position and can then be extended.





EXPEDITION SERIES

The lightest, most stable, single-man portable field mast in the world.



The Will-Burt Expedition Series offers a variety of added features for increased performance and convenience. The system can be deployed guyed or un-guyed depending on mission profile. It includes a 6 in. (150 mm) diameter payload adapter. The Ranger™ Mast has a large tripod base, making the mast very stable. It is erected with 4 ft. (1.2m) tube sections to heights from 8 to 60 ft. (2.5 to 18.3 m). A custom payload interface can be designed to fit specific needs. The Expedition Series tripod and mast are constructed of carbon composite material.

ESSENTIAL FEATURES

- **Lighter weight than aluminum**
  - Easier to transport and deploy
- **Stronger**
  - More durable - won't bend or break
- **Stiffer**
  - More stable for payloads
- **Quicker, easier set-up and retraction**
  - Faster deployment
- **Easier transportability**
- **Two compact transport pack options allow you to select the best one to fit your deployment needs**
- **Large, adjustable tripod**
- **Friction Locks for height adjustment**
- **Ergonomic Tube Lifter**
- **Two Highly Visible Bubble Levels**

EXPEDITION SERIES RANGER PACK



Incorporating the same stable tripod as the Ranger Mast, the Ranger Pack is designed to fit into a custom designed backpack. The total system weighs 65 lb (30 kg) and can be quickly deployed by extending 3 ft. (1 m) tube sections to heights from 8 to 24 ft. (2.5 to 7.3 m).

ESSENTIAL FEATURES

- Easily transportable by 1 person
- Elevates up to 24 ft. (7.3 m)
- Lifts up to 50 lb (23 kg) payload

HURRY-UP MAST

The Hurry-Up mast is ideal for fast deployment of lightweight antennas and equipment. This mast can be extended to a full height of 30 feet (9 meters) in one minute or less. The Hurry-Up mast features quick lock/release collars to extend the mast manually by pushing up the sections and fixing them in position.



See willburt.com for complete model range

ESSENTIAL FEATURES

- **Portable & Lightweight**
  - Allows for easy transportation
- **Payload Capacity**
  - Allows for payloads up to 20 lb / 9 kg
- **Rigid azimuth locking collar**
  - Quick direction adjustments
- **Black anodized finish**
  - Corrosion resistant

OPTIONAL FEATURES

- **Drive-on plate mounting**
  - No guylines required
- **Removable payload extension stub**
- **Easy payload mounting**
  - External support brackets
- **Vehicle mounting**

COMMUNICATIONS

ANTENNAMAST™

The AntennaMast model AM2 is a rugged, lightweight, man-portable, aluminum tripod mast designed for rapid payload deployment. The AM2 is extremely flexible and reliable and is capable of elevating multiple devices on a single mast.



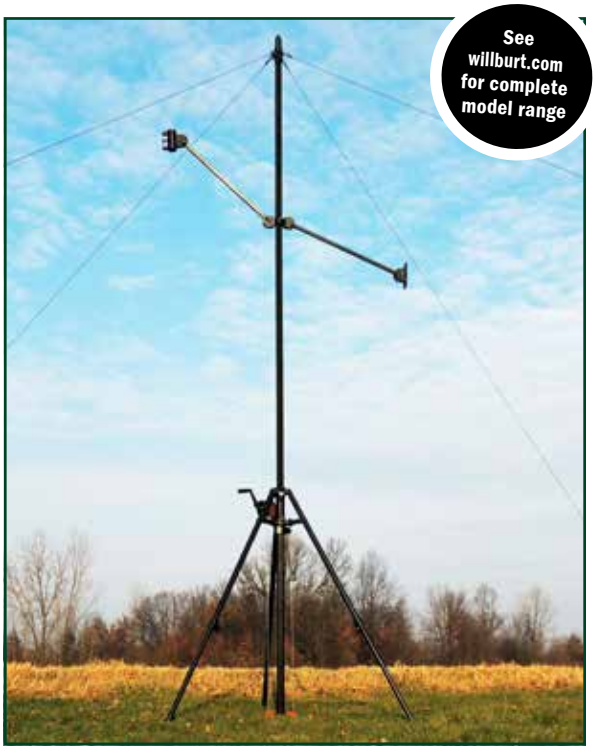
AM2 with EZ Raze Payload Elevation System
Easily elevate and lower multiple antennas and sensors

PAYLOAD DEPLOYMENT OPTIONS

1. The EZ Raze™ system with cable winching device and safety brake enables the user to lift and lower heavier payloads in a safe and controlled manner without disassembling the mast system.
2. The mast tube lift winch provides a mechanical assist for the lifting of the mast tubes for heavier payloads.
3. The user is also able to elevate the mast tubes and payload by breach loading the tubes through the tripod center collar.

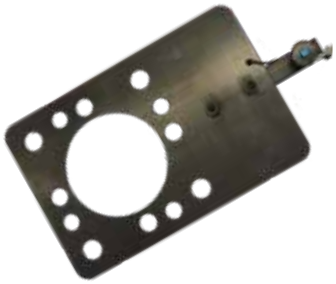
ESSENTIAL FEATURES

- **Rapid set-up**
  - Includes a tripod with two (2) built-in levels and large no-slip adjustment knobs that are easy to operate. Interlocking mast tubes allow for directional adjustment of the payload.
- **Flexible**
  - A variety of payload adaptors and accessories are available to accomplish diverse missions.
- **Simple**
  - No tools or special training are needed for deployment.
- **Rugged**
  - Designed to meet MIL-STD-810 for use in a variety of harsh environments.
- **Durable**
  - Components are constructed of aluminum and stainless steel and are covered by a two (2) year warranty.
- **Complete system**
  - AM2 system includes all components needed to safely deploy rated payload at selected height.
- **Transportable**
  - Every mast system comes with a rugged wheeled transport bag designed for easy unloading and loading.



AM2 with Mast Tube Lift Winch

A full range of interchangeable accessories and payload adaptors are available for the Expedition Series and AntennaMast



NATO PLATE



EZ-RAZE



DUAL, TRI & QUAD ARM COLLAR



BOLSTER PLATE

Q★E★A★M

QUICK ERECTING ANTENNA MAST

QUICK ERECTING ANTENNA MAST (QEAM)

Designed for manual or motorized operation, Will-Burt's QEAM (Quick Erecting Antenna Mast) Family of lightweight composite or aluminum masts elevate light payloads for ground-mounted or vehicle, trailer and shelter deployment.



Will-Burt's Screw Drive QEAM is a lightweight, high strength telescopic mast that offers a rigid, stable platform for elevating critical payloads.

SCREW DRIVE ESSENTIAL FEATURES

- **Easy manual crank up**
  - Reliable deployment without power
- **Automatic locking collars**
  - Locks at any desired height
  - Patented latch mechanism
- **Standard ground mounting kits with guylines and transport bag included**
- **Optional vehicle and shelter mounting kits available**

The Strap Driven QEAM uses an internal strap wound between tube sections for mast elevation. Designed for manual operation, The Strap Drive QEAM has heavier payload weight-lifting capability, and is available in 21, 25, 30 and 34 meter heights.



STRAP DRIVE ESSENTIAL FEATURES

- **Maintains azimuth - minimal twist deflection**
  - Reliable full-length external keyways
- **Positions payload at any height**
  - Automatic locking collars - patented latch system
- **Manual mechanical drive**
  - Reliable deployment without power
- **Automatic locking collars**
  - Locks at any desired height with patented latch mechanism
- **Mechanical stops**
  - Prevents over-extension
- **Full length keys on sections**
  - Prevents twist
- **Maintenance free**
  - Polymer drive nuts require no greasing
- **Built in cable management**
  - Cable loops added at collars
- **Corrosion resistant**
  - All parts are anodized aluminum & stainless steel
  - Drive crank is a completely sealed mechanism

SPECIFICATIONS

QEAM	TM 10 (Aluminum)	TM 21	TM 25	TM 30	TM 34
Nested Height	2.4 m / 8 ft.	4.45 m / 14.6 ft.	4.5 m / 14.8 ft.	5.9 m / 19.3 ft.	5.8 m / 19 ft.
Extended Height	10 m / 32.8 ft.	21 m / 68.9 ft.	25 m / 82 ft.	30 m / 98.4 ft.	34 m / 112 ft.
Guying	2 level / 3 way	4 level / 4 way	5 level / 4 way	5 level / 4 way	5 level / 4 way
Number of Sections	5	6	7	6	7
Weight (Mast Only)	42 lb. / 19 kg	90 kg / 197 lb.	100 kg / 220 lb.	114 kg / 250 lb.	121 kg / 265 lb.
Weight (Accessory Kit)	52 lb. / 24 kg	111 kg / 245 lb.	125 kg / 275 lb.	125 kg / 275 lb.	125 kg / 275 lb.
Payload Capacity	15 lb. / 7 kg	80 kg / 180 lb.	68 kg / 150 lb.	68 kg / 150 lb.	50 kg / 110 lb.
Maximum Sail Area	0.6msq / 6 sq. ft. CD=1.5	0.6msq / 6 sq. ft. CD=1.5	0.6msq / 6 sq. ft. CD=1.5	0.6msq / 6 sq. ft. CD=1.5	0.6msq / 6 sq. ft. CD=1.5
Ice load	0.5 in. / 12 mm	12 mm / 0.5 in.	12 mm / 0.5 in.	12 mm / 0.5 in.	12 mm / 0.5 in.
Maximum Erection Wind*	25 mph / 40 km/h	40 km/h / 25 mph	40 km/h / 25 mph	40 km/h / 25 mph	40 km/h / 25 mph
Operational Wind	60 mph / 97 km/h	97 km/h / 60 mph	97 km/h / 60 mph	97 km/h / 60 mph	97 km/h / 60 mph
Survival Wind	80 mph / 128 km/h	128 km/h / 80 mph	128 km/h / 80 mph	128 km/h / 80 mph	128 km/h / 80 mph
Surface Mounting	±15° slope	±15° slope	±15° slope	±15° slope	±15° slope
Deployment Time	2 persons, 7.5 min	3 persons, 25 min	3 persons, 30 min	3 persons, 30 min	3 persons, 30 min
Drive System	Screw Drive	Strap Drive	Strap Drive	Strap Drive	
Finish	CARC Green	MIL-A-8625 Type II, CL 2 Black	MIL-A-8625 Type II, CL 2 Black	MIL-A-8625 Type II, CL 2 Black	MIL-A-8625 Type II, CL 2 Black

Specifications are for reference only and subject to change. Please contact Will-Burt Engineering for current and exact specifications. *Must be guyed for wind speeds over 25 mph / 40km/h

COMMUNICATIONS

CARBON/GLASS FIBER STRAP DRIVE MODEL - FIELD DEPLOYED

Q★E★A★M
QUICK ERECTING ANTENNA MAST
MTS

The QEAM MTS Series from Will-Burt is a highly transportable field mast ideally suited for antennas and other payloads that require stable elevation from 3 to 15 meters. High pointing accuracy is assured with vertical keyways built into the carbon/glass fiber tubes. The MTS is elevated and retracted by strong straps that are driven manually with a manual crank system or an optional motorized system.

The QEAM MTS meets the environmental requirements of MIL-STD-810 and will exceed the requirements of the mission.

MIL - STD 810 CERTIFIED



ESSENTIAL FEATURES

- **Lightweight Telescopic Mast System**
  - Composite mast sections
- **Minimal payload twist**
  - Keyways improve pointing accuracy
- **Fast and safe deployment**
  - Hand-operated lift system
  - Optional electric lift system
- **Position payload at any height**
  - Winch locks mast in place
- **Complete Elevation System**
  - Includes all items needed to deploy
- **Meets MIL-STD-810 Environmental**
- **Voltage - 24 VDC**

Automatic Electric Motor



Manual Hand Crank



Accessory Kit



Optional Cable Management



SPECIFICATIONS

Automatic Electric Motor	3MTS-A3-1.3	4MTS-A4-1.45	6MTS-A5-1.75	8MTS-A6-2	10MTS-A7-2.2	12MTS-A7-2.45	15MTS-A7-2.9
Extended Height	3m	4m	6m	8m	10m	12m	15m
Nested Height	1.3m	1.45m	1.75m	2m	2.2m	2.45m	2.9m
Number of Sections	3	4	5	6	7	7	7
Payload Capacity	70 kg	65 kg	60 kg	55 kg	45 kg	40 kg	30 kg
Maximum Wind Area	0.8m²	0.8m²	0.8m²	0.8m²	0.8m²	0.8m²	0.8m²
Maximum Survival Wind Speed	160 km/h	160 km/h	160 km/h	160 km/h	160 km/h	160 km/h	160 km/h
Outer Section Diamter	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm
Voltage	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC
Mast Only Weight	19 kg	24 kg	29 kg	34 kg	39 kg	43 kg	49 kg
Accessories Weight with Motor	34 kg	34 kg	34 kg	34 kg	43 kg	43 kg	43 kg

Manual Hand Crank	3MTS-M3-1.3	4MTS-M4-1.45	6MTS-M5-1.75	8MTS-M6-2	10MTS-M7-2.2	12MTS-M7-2.45	15MTS-M7-2.9
Extended Height	3m	4m	6m	8m	10m	12m	15m
Nested Height	1.3m	1.45m	1.75m	2m	2.2m	2.45m	2.9m
Number of Sections	3	4	5	6	7	7	7
Payload Capacity	70 kg	65 kg	60 kg	55 kg	45 kg	40 kg	30 kg
Maximum Wind Area	0.8m²	0.8m²	0.8m²	0.8m²	0.8m²	0.8m²	0.8m²
Maximum Survival Wind Speed	160 km/h	160 km/h	160 km/h	160 km/h	160 km/h	160 km/h	160 km/h
Outer Section Diamter	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm
Mast Only Weight	19 kg	24 kg	29 kg	34 kg	39 kg	43 kg	49 kg
Accessories Weight (Including Manual Assembly)	32 kg	32 kg	32 kg	32 kg	41 kg	41 kg	41 kg

COMMUNICATIONS

VEHICLE DEPLOYED

Q★E★A★M
QUICK ERECTING ANTENNA MAST
MTS-V

The QEAM MTS-Vehicle Series from Will-Burt is a highly transportable telescopic mast ideally suited for deploying antennas and other payloads directly from a vehicle or trailer platform. High pointing accuracy is assured with 4 vertical keyways built into the carbon/glass fiber tubes. The MTS-V is elevated and retracted by strong straps that are driven manually with a manual crank system or a motorized system. Added flexibility is available with optional field deployment kits.

The QEAM MTS-V meets the environmental requirements of MIL-STD-810 and will exceed the requirements of the mission.

Not to be used for On-The-Move Applications.



ESSENTIAL FEATURES

- Designed for Vehicle / Trailer Installation
- The QEAM MTS-V Series assures high pointing accuracy with 4 vertical keyways built into the carbon/glass fiber tubes
- Composite mast sections
- Minimal payload twist
- Keyways improve pointing accuracy
- Fast and safe deployment
- Hand-operated lift system
- Optional electric lift system
- Position payload at any height
- Winch locks mast in place
- Includes all items needed to deploy
- Meets MIL-STD-810 Environmental
- Voltage – 28V (20-32V)

Automatic Electric Motor



Manual Hand Crank



Bubble Level & Adjustable Base Plate



Strong Straps



QEAM MTS-V Accessory Kit



Optional Cable Management



SPECIFICATIONS

Automatic Electric Motor	3MTSV-A6-1.1	4MTSV-A6-1.3	5MTSV-A7-1.45	6MTSV-A7-1.6	8MTSV-A7-1.8
Extended Height	2.9m	3.9m	4.9m	5.9m	7.9m
Nested Height	1.1m	1.3m	1.45m	1.6m	1.8m
Number of Sections	6	6	7	7	7
Payload Capacity	55 kg	55 kg	50 kg	45 kg	40 kg
Maximum Wind Area	0.25m^2	0.25m^2	0.25m^2	0.25m^2	0.25m^2
Maximum Survival Wind Speed	120 km/h	120 km/h	120 km/h	120 km/h	120 km/h
Outer Section Diamter	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm
Voltage	28V (20-32V)	28V (20-32V)	28V (20-32V)	28V (20-32V)	28V (20-32V)
Mast Only Weight	29 kg	34 kg	38 kg	43 kg	49 kg
Accessories Weight with Motor	34 kg	34 kg	34 kg	34 kg	34 kg

Manual Hand Crank	3MTSV-M6-1.1	4MTSV-M6-1.3	5MTSV-M7-1.45	6MTSV-M7-1.6	8MTSV-M7-1.8
Extended Height	2.9m	3.9m	4.9m	5.9m	7.9m
Nested Height	1.1m	1.3m	1.45m	1.6m	1.8m
Number of Sections	6	6	7	7	7
Payload Capacity	55 kg	55 kg	50 kg	45 kg	40 kg
Maximum Wind Area	0.25m^2	0.25m^2	0.25m^2	0.25m^2	0.25m^2
Maximum Survival Wind Speed	120 km/h	120 km/h	120 km/h	120 km/h	120 km/h
Outer Section Diamter	ø126mm	ø126mm	ø126mm	ø126mm	ø126mm
Mast Only Weight	27 kg	32 kg	36 kg	40 kg	46 kg
Accessories Weight	6 kg	6 kg	6 kg	6 kg	6 kg

POSITIONERS / CONTROLLERS

POSITIONIT®

PositionIt by Will-Burt is a maintenance-free pan and tilt positioner designed to provide years of trouble-free service. An IP68 rating delivers dust and water protection. The gear box is designed to minimize backlash and provides higher gear ratios for lower speeds along with mechanical braking. Long-life potentiometers are standard with PositionIt.





ESSENTIAL FEATURES

- **Designed for mobile applications**
  - MIL-STD 810 certified
- **Strong lightweight construction**
  - Die-cast aluminum casing
- **Minimal backlash**
  - Precision turned and milled components with ball races on major axes
- **Built to last**
  - Stainless steel fasteners
- **Weatherproof**
  - IP 68 rating
- **Simple to install**
- **Universal mounting plate**
  - Suitable for most common payloads
- **Corrosion resistant finish**
  - Black
- **Regenerative braking**
  - On motor shaft
- **Long operational life**
- **Flexible connection**
  - Bottom or side
- **Pelco-D RS-485 Communications**
- **We also offer a complete range of positioners for fixed applications and camera enclosures.**

SPECIFICATIONS

Model	PI-150	PI-75	PI-35
Payload Capacity* (ft lb / Nm)	150 / 202	75 ft / 101	35 / 47
Height (in. / mm)	11.32 / 287.7	11.32 / 287.7	9.7 / 246
Width (in. / mm)	12.4 / 314	9.21 / 234	10.8 / 273
Depth (in. / mm)	6.8 / 171	6.8 / 171	5.7 / 144
Weight (lb / kg)	37 / 16.8	35 / 16	19.5 / 8.9
Operating Temperature	-20°C to 50°C / -4°F to 122°F		
IP Rating	IP68 - Waterproof (immersion) and Dustproof		
Pan Axis	400° (± 200°)		
Pan Speed (proportional)	0.02 to 6.5° / second		1° to 12° / second
Tilt Axis	180° (± 90°)		
Tilt Speed (proportional)	0.02 to 5.5° / second		1° to 12° / second
Backlash	≤ 0.15°		
Repeatability	≤ 0.3°		
Maximum Continuous Power	44 W		
Maximum Running Current	1.85 amps		
Input Voltage	24 VDC - Converters available for 12 VDC and AC power sources		

*Capacity measured at 12 inches or less from the tilt axis. *Dimensions and weights are for reference only and are subject to change. Contact Will-Burt for current engineering specifications.*

POSITIONER CONTROLLERS

The latest positioner controller from Will-Burt is loaded with new features. You will always know the status of the positioner with real-time positional, speed, and status feedback. Control multiple positioners and third-party equipment with a single controller. This controller is optimized for positioners with stow and deploy buttons located on the front panel.

The new Positioner Controller from Will-Burt will simplify deployment and operation of communications and video equipment.





The Pelco-D compatible handheld controller with LCD screen has all of the features necessary to optimize the performance of the PositionIt positioner. Precision joystick controller flawlessly controls the pan and tilt functions. Includes LCD screen, keyboard and programmable presets that simplify operation. The positioner handheld controller can also be optionally used in conjunction with the pan and tilt positioner controller.



COMMUNICATIONS / SURVEILLANCE

INTEGRATED TOWER SYSTEMS

Integrated Tower Systems-ITS, a Will-Burt Company, is a global leader in the manufacture and sales of an extensive line of rapid-deployment Portable Tower & Mast Systems; Tower & Mast Integrated Trailers, Trucks, Communication-Site-on-Wheels (COWs), and Mast-, Satellite- and Tower-Integrated Mobile Command and Communication Centers.

In an ongoing effort to support National Security, Public Safety, Emergency Response and Military Initiatives world-wide, ITS' affordable and innovative rapid response systems are manufactured to both civilian and military specifications and built to withstand many of the world's most demanding environments. Whether designed for the seamless installation of common or client-specific technologies, or pre-integrated with an ITS or client-furnished Communications or Surveillance Solution, ITS' rapidly deployed equipment are proven key components in establishing the flow of vital information from remote and urban areas of need. **For additional information, please visit our website at www.itstowers.com or contact an ITS Representative Toll Free at 1-(800)-850-8535.**

SPECIFICATIONS

	MOBILE TOWER SOLUTIONS	MOBILE MAST SOLUTIONS
Self-Support & Guyed Heights	±38', 55', 72', 89', 106' & 130' / 11.6m, 16.8m, 21.9m, 27.1m, 32.3m & 40m	30' - 100' / 9m - 30m
Tower Capacity	Standard Payloads: Up to: ±550 lb. / 250 kg Upgraded Payloads: Up to: ±750 lb. / 340 kg	Payloads Up To: 1,200 lb. / 544 kg

INTEGRATED SURVEILLANCE SYSTEM - ULTRA MAST






SRS-C SERIES – PORTABLE TOWER TRAILER






SKD SERIES – SKID MOUNTED




REP / MT / RD-S / RD-T SERIES – TRAILER MOUNTED MAST






SURVEILLANCE

MOBILE ELEVATION SYSTEMS

Will-Burt's mobile elevation systems are specifically designed for the complex missions facing today's defense organizations. Our elevation products, platforms, and systems are designed to Maintain the Advantage in Strategic Competition. All Will-Burt products are MIL-STD 810 certified and capable of overcoming the environmental challenges that exist today and new ones that will arise tomorrow.

The ability of Will-Burt to deliver superior elevation solutions is attributed to its worldwide leadership in the industry for over 75 years. Teams of experienced engineers design new products to fit today's requirements. We also offer custom designed solutions to meet program specifications. Our vertically integrated manufacturing systems are backed by an ISO 9001:2015 quality management system. Finally, all of this is backed by a worldwide sales, marketing, and service support structure focused on delivering the correct customer solution on time, every time.

Flexibility and superior performance are two keys for mission success. Will-Burt's Compact Elevation Systems (CES) for pickup trucks and small trailers and the Rapid Deployment Elevation System (RDES) for large trailers deliver fast and precise elevation for a variety of sensors. These systems are designed for easy operation with little training and most importantly can have a sensor deployed in as little as 30 seconds. Available heights range from 13.1 ft. / 4m to 120 ft. / 36.5 m. Will-Burt's powerful telescopic masts with automatic locks can lift the payloads into place – no need for an auxiliary crane to place the payload on top like some systems. Payload capabilities range from 400 lb. / 181 kg to 1,200 lb. / 544 kg.

For additional details, download our Mobile Elevation Systems brochure or visit willburt.com.



COMPACT ELEVATION SYSTEM^{TRK}



COMPACT ELEVATION SYSTEM^{TLR}

RAPID DEPLOYMENT ELEVATION SYSTEM



TACTICAL MILITARY TRAILERS

Will-Burt Germany's Family of Light and Medium-Weight Tactical Trailers is used by the German Army and other international forces to enhance mobility and logistics capabilities throughout the battlefield. These trailer systems are especially designed for missions involving extraordinary burdens in extreme and arduous terrain.

The Will-Burt Germany development department is able to fulfil the special requirements of military customers and deliver high-capacity standard solutions as well as special customized trailer systems.

Years of experience in producing trailer systems as well as close cooperation with international forces and procurement agencies makes it possible to offer the best possible trailer solutions. High payloads by low basic weights, maximum cross-country mobility, long life-expectancy and low maintenance requirements are the characteristics of all Will-Burt Germany Tactical Trailers.





ESSENTIAL FEATURES

- Maximum mobility - Developed for the most difficult off-road terrain
- Maximum payloads
- Maximum mechanical load capacities
- "Off-the-shelf" solutions as well as special customized trailer solutions
- Designed for Power Generators, Water Preparation Systems, Communication Systems, Mast Systems, NBC-equipment, ATV's, Command Post Equipment
- Long life expectancy and minimal maintenance costs
- Scenario optimized and mission tested by German Army and other forces





SPECIFICATIONS

	1.0 MT 2-wheeled	1.7 MT 2-wheeled	5 MT 4-wheeled
Transport Platform	8.9 ft. x 4.9 ft. / 2.7 m x 1.5 m	7.2 ft. x 6.2 ft. / 2.2 m x 1.9 m	x
Weight	2,976 lb / 1,350 kg	3,747 lb / 1,700 kg	13,228 lb / 6,000 kg
Air Transport	CH-53 / C-160	CH-53 / C-160	x

CONTACT YOUR SALES REPRESENTATIVE TODAY

WILL-BURT

WILL-BURT NORTH AMERICA
WORLD HEADQUARTERS
401 Collins Boulevard, Orrville, OH USA 44667
Telephone: +1 330 682 7015
Mast Customer Service: +1 330 684 4000
Fax: +1 330 684 1190
Email: info@willburt.com

INTEGRATED TOWER SYSTEMS
A WILL-BURT COMPANY
2703 Dawson Road, Tulsa, OK 74110
Telephone: +1 800 850 8535
Fax: +1 918 749 8537
Email: programs@itstowers.com

WILL-BURT
GERMANY
Fischergasse 25
D-91344 Waischenfeld
Germany
Telephone: +49 9202 180
Fax: +49 9202 1811 / Email: info@willburt.com

WILL-BURT ASIA
SINGAPORE SALES OFFICE
1 Fullerton Road, #02-01 One Fullerton,
Singapore 049213
Telephone: +65 6832 5689
Fax: +65 6722 0664 / Email: info@willburt.com

WILL-BURT
UNITED KINGDOM
Unit 5b, Station Approach
Four Marks, Alton Hampshire,
GU34 5HN, United Kingdom
Telephone: +44 (0) 1403 265532
Fax: +44 (0) 1403 259072 / Email: info@willburt.com

WILL-BURT
TURKEY
Ahi Evran OSB Mahallesi,
Nahcivan Caddesi, No: 8/2,
Sincan, Ankara 06935
Email: info@willburt.com

The Will-Burt Company, headquartered in Orrville, Ohio, USA, is the world's premier manufacturer of mobile telescoping masts, towers and pan and tilt positioners. We offer virtually every mobile payload elevation and integration solution for defense, government, first responders, cellular and mobile, broadcast, energy production and other markets. Will-Burt also offers contract manufacturing, metal fabrication, powder-coating, and rapid prototyping services. Will-Burt is an international company with offices and manufacturing in the USA, England, and Germany along with offices in Singapore and a joint venture in Turkey. All Will-Burt Company manufacturing locations are backed by a certified ISO 9001:2015 Quality Management System. Incorporated in 1918, Will-Burt is 100% employee-owned and is classified as a small business.

ISO 9001:2015

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