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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.



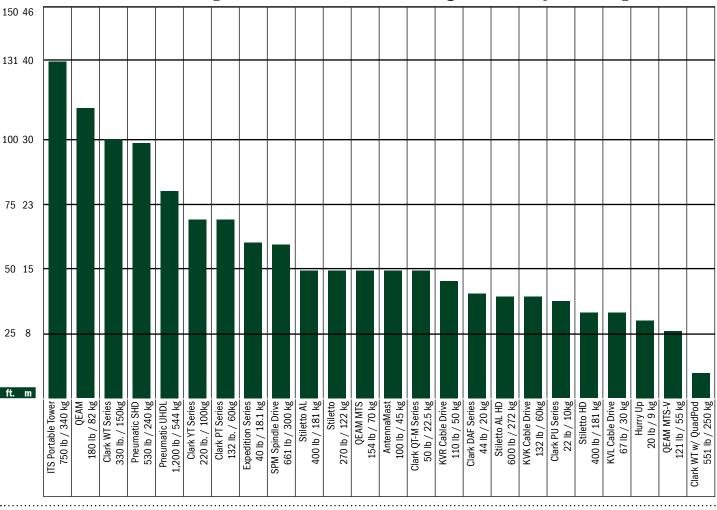
The ability of Will-Burt to deliver superior elevation solutions is attributed to its worldwide leadership in the industry for over 50 years. Teams of experienced research and development engineers, design engineers and ISO 9001:2015 quality systems certified manufacturing experts are backed by a sales 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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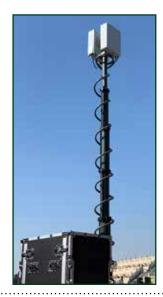
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# SURVEILLANCE / SECURITY / COUNTER UAS

# **STILETTO**<sup>®</sup>

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



#### High performance composite telescoping mast

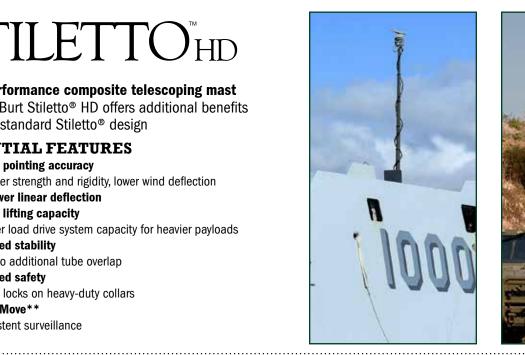
The Will-Burt Stiletto® HD offers additional benefits over the standard Stiletto® design

#### **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 / COUNTER UAS

# **SPECIFICATIONS**

<b>Stiletto</b> ®	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) (Ib / 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) (VDC)	28	28	28	28	28
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 (ft. <sup>2</sup> / m <sup>2</sup> )	8 / .74 CD=1.5	8 / .74 CD=1.5	8 / .74 CD=1.5	6 / .56 CD=1.5	4 / .37 CD=1.5

Stiletto <sup>®</sup> HD	4 meter	6 meter	8.6 meter	10 meter
Extended Height (+4 in. / -0 in.) (in. / m)	12.5 / 3.8	19.7 / 6	28.2 / 8.6	32.9 / 10
Nested Height (+1 in. / -0 in.) (in. / 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		х		
Weight (Including Control Box and Cables) (Ib / 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) (VDC)	28	28	28	28
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 (ft. <sup>2</sup> / m <sup>2</sup> )	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.

Stile	Stiletto <sup>®</sup> 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					
Icing / 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	CS101, CS114, CS115, CS116, RS103					

Stilett	Stiletto <sup>®</sup> 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					
Icing / Freezing Rain	Per MIL-STD-810F, Method 521.2					
MIL-STD-461E	461E, CS101, CS114, CS115, CS116, RS103, (CE102, RE102, RS101 with optional equipment)					

\*The Stiletto HD design was qualified by similarity to the standard Stiletto design

# SŢILETTO<sup>®</sup> 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 accessoryready 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 icebreakers built into collars
- High strength alloy construction
- Integrated PC control
- MIL-STD 810G certified

# **SPECIFICATIONS**



Patented Quiet Locks and High Strength Alloy Construction Designed for Heavy Payloads





**Quiet Sealed Direct-Drive System** 



Integrated Dust Wipers and Ice-Breakers

Stiletto AL	4 meter	6 meter	8.5 meter	10 meter	15 meter
Extended Height (+4 in. / -0 in.) (ft. / m)	13.1 / 4	19.6 / 6	28 / 8.54	32.8 / 10	49.2 / 15
Nested Height (+1 in. / -0 in.) (ft. / m)	50.4 / 1.28	62.2 / 1.58	74.02 / 1.88	82.68 / 2.10	104.4 / 2.65
Payload Capacity (lb / kg)	400 / 181	400 / 181	400 / 181	400 / 181	350 / 158
Weight (Including Control Box and Cables) (Ib / 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) (VDC)	28	28	28	28	28
Footprint (in. / cm)	17.56 x 11.19 / 44.6 x 28.5				
**Typical Payload Sail Area (ft. <sup>2</sup> / m <sup>2</sup> )	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.

# SŢILETTO AL HEAVY DUTY

The Stiletto® AL HD is designed to successfully manage the forces that today's sophisticated radar and video systems can exert on a mobile elevation system and deliver the required stability and accuracy needed for optimized data delivery. The Stiletto AL HD's multi-spindle design and internal key minimizes mast twist.

Stiletto AL HD is designed to meet the most demanding program requirements.

# **ESSENTIAL FEATURES**

# • Powerful lifting capacity

- Up to 600 pounds / 272 kg
- Automatic Locking at Any Height
- Secure and Safe
- Maximum Strength Deployment and Retraction
   All mast sections extend and retract in unison
- Minimal mast twist optimized for radars
   Less than 1°
- Low-nested height
  - · Internal collars with built-in dust and ice scrapers
- Precise positioning at any height • Digitally controlled brushless DC motor
- Minimal maintenanceRetraction
  - No belts or chains Direct drive power
  - Ultra long-life Multi-spindle system
  - Full tube seals prevent water intrusion
- High strength alloy construction
- No guy wires required
- Digital control with LED display
- · Accurate height readout even with loss of power
- MIL-STD 810G design



Internal Collars with Built-

in Dust and Ice Scrapers



Digital Control with LED Display



Multi-Spindle Design





# **SPECIFICATIONS**

Stiletto AL HD	4 meter	6 meter	8.54 meter	10 meter	12 meter
Extended Height (ft. / m) (-0 + .79 / -0 + 20 (in. / mm)	13.1 / 4	19.6 / 6	28 / 8.54	32.8 / 10	39.3 / 12
Nested Height (ft. / m) -0 in. + .79 / -0 + 20 (in. / mm)	4.2 / 1.28	5.18 / 1.58	6.54 / 2	7.33 / 2.24	8.43 / 2.57
Payload Capacity (lb / kg)	600 / 272	600 / 272	600 / 272	600 / 272	600 / 272
Mast Weight (Ib / kg)	-	-	-	490 / 222	-
Number of Sections	6	6	6	6	6
Tube Diameter Range: Base Tube - Top Tube (in. / mm)	9.85 - 5.9 / 250 - 150	9.85 - 5.9 / 250 - 150	9.85 - 5.9 / 250 - 150	9.85 - 5.9 / 250 - 150	9.85 - 5.9 / 250 - 150
*Survival Wind Speed (mph / km/h)	130 / 209	115 / 185	95 / 153	80 / 129	62 / 100
Deployment Wind Speed (mph / km/h)	40 / 64	40 / 64	40 / 64	40 / 64	40 / 64
Approximate Extension Time with Power (seconds)	<45	<65	<90	<105	<130
Rotation Accuracy (Twist)	+/-0.7°	+/-0.7°	+/-0.7°	+/-0.7°	+/-0.7°
Input Voltage	28 VDC				
Running Current (Max)	40 Amps				
Base Footprint (in. / cm)	17.56 x 11.22 / 44.6 x 28.5				
Max Deployment Angle	10°	10°	10°	10°	5°
*Typical Payload Sail Area (ft. <sup>2</sup> / m <sup>2</sup> )	17 / 1.58	12 / 1.11	11 / 1.02	11 / 1.02	8 / .74

\* All survival wind load payloads assume a payload center of pressure position 1 meter above the top of the mast and payload drag coefficient (CD) of 1.5.

# 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	1	5 meter	17 meter
Extended Height (ft. / m)	25 / 7.6	32.8 / 10	41.2 / 12.5	4	8.6 / 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	3	800 / 136	300 / 136
Approximate Mast Weight (lb / kg)	110 / 50	200 / 90	235 / 107	2	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 F	PSIG (2.4 bar)	35 PSIG (2.4 bar)
Super Heavy-Duty	10 mete	r	12 meter		7	'2' 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	1,500 / 680
Tube Diameter (in. / mm)	11.25-6.75 / 285-171		11.25-6 / 285-152		11.03	3-6.5 / 280-165
Maximum Operating Pressure	35 PSIG (2.4 bar)		35 PSIG (2.4 bar)		35	PSIG (2.4 bar)

# 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-offthe-shelf (COTS) heavy-duty models are available. Super heavyduty 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 (Ib / kg)	125 / 57	235 / 107	240 / 109	330 / 150
Tube Diameter (in. / cm)	6.75-3 / 171-76	9-3" / 229-76	9-3" / 229-76	9-3.75" / 229-9
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 (Ib / kg)	530 / 240	530 / 240	300 / 136	530 / 240
Approximate Mast Weight (Ib / kg)	450 / 205	550 / 227	550 / 249	790 / 361
	11.25-5.25 / 288-135	11.25-5.25 / 288-135	11.25-3.75 / 288-96	11.25-5.25 / 288-1
Tube Diameter (in. / cm)	,			

.....

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**

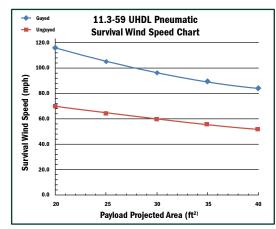
#### Strong

- 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
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
Payload Capacity* (Ib / kg)	980 / 444	1200 / 544	530 / 240	1200 / 544	1200 / 544
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



MAST ACCESSORIES





**Unlocked Pneumatic Actuator** 



# **Control Box Included**





**Locks and Controls Included** 

Locked Pneumatic Actuator

#### **Optional Handheld Controller**

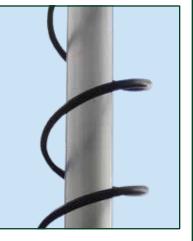
# **MAST ACCESSORIES**

# EXTERNAL CABLE MANAGEMENT

NYCOIL<sup>®</sup> is a coiled conduit used to house wiring, antenna coax and positioner cable that is too large to fit inside the mast. NYCOIL<sup>®</sup> 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.

# **POWERED TILT SYSTEM**

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
- es rapid eets ed



- 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

# KVR MANUAL TILT OPTIONS

# Manual tilt system with winch and automatic brake

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.





# **PNEUMATIC SYSTEMS**

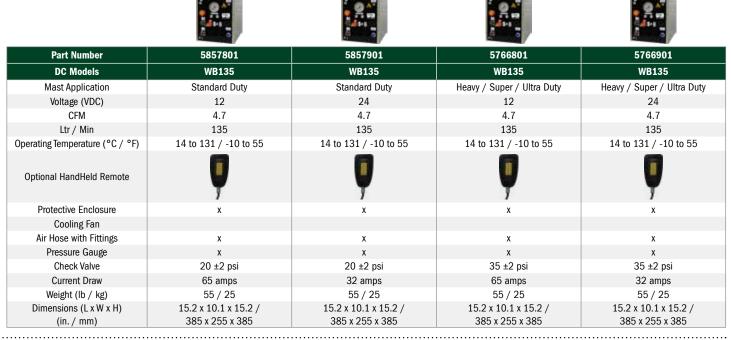
Will-Burt offers a variety of low-maintenance pneumatic systems and hand pumps, all specifically designed for optimal performance for use with Will-Burt Telescoping Masts.

Each system is shipped completely assembled, tested and factory preset.



**MAST ACCESSORIES** 

					61		GI
Part Number	5766701	5857701	5802201 / 5766301	5802301	902404	903193	912361
AC Models	WB135	WB135	WB280	WB280			
Mast Application	Standard Duty	Standard Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty
Voltage	110VAC 60Hz	220VAC 50Hz	110VAC 60Hz	220VAC 50Hz	110VAC / 60Hz	220VAC 50Hz	220VAC 60Hz
CFM	4.7	4.7	9.8	9.8	4.4	2.01	4.4
Ltr / Min	135	135	280	280	125	57	101
Operating Temperature (°C / °F)	14 to 131 / -10 to 55	14 to 131 / -10 to 55	14 to 131 / -10 to 55	14 to 131 / -10 to 55	50 to 104 / 10 to 40	-4 to 131 / -20 to 55	50 to 104 / 10 to 40
Optional HandHeld Remote	Ţ	Ţ	Ţ	Ţ	7	7	7
Protective Enclosure	x	х	х	x			
Cooling Fan					x	x	х
Air Hose with Fittings	х	х	х	х	х	х	х
Pressure Gauge	x	x	х	x	x	x	х
Pressure Switch	20 ±2 psi	20 ±2 psi	35 ±2 psi	35 ±2 psi	32 ±2 psi	32 ±2 psi	32 ±2 psi
Current Draw	7 amps	3.5 amps	14 amps	7 amps	10.6 amps	4.1 amps	5.3 amps
Weight (lb / kg)	55.2 / 25	55.2 / 25	62 / 28	62 / 28	45 / 20.4	55 / 24.95	45 / 20.4
Dimensions (L x W x H) (in. / mm)	15.2 x 10.1 x 15 / 385 x 255 x 380	15.2 x 10.1 x 15 / 385 x 255 x 380	16.6 x 11.7 x 15.1 / 420 x 295 x 380	16.6 x 11.7 x 15.1 / 420 x 295 x 380	18.33 x 11.61 x 8.91 / 466 x 295 x 227	16.4 x 12.6 x 9.0 / 417 x 320 x 229	18.33 x 11.61 x 8.91 / 466 x 295 x 227



# **COMMUNICATIONS / SURVEILLANCE**

# GEROH 🖄

# LIGHT / MEDIUM-DUTY TELESCOPIC **CABLE-DRIVE MASTS**

# For payloads up to 132 lbs. (60 kg)

Will-Burt Germany's Family of light and medium-duty Telescopic KVL and KVK Masts are characterized by their lightweight construction in addition to superior stability, reliability, and long life. Both mast systems are available with manual crank deployment or motorized operation. The GEROH KVL and KVK mast systems are in use in military and commercial applications such as communications, surveillance, and lighting. The masts are designed for vehicle, trailer, shelter, or field deployment. The mast sections consist of precision mast profiles which ensure exact adjustment. Safe deployment and retraction is assured, even with ice or in heavy wind conditions. such as communications, surveillance, and lighting. The masts are designed for vehicle, trailer, shelter, or field deployment. The mast sections consist of precision mast profiles which ensure exact adjustment. Safe deployment and retraction is assured, even with ice or in heavy wind conditions.

# **ESSENTIAL FEATURES**

- Payloads up to 132 lbs. (60 kg)
- Heights up to 40 ft (12 m)
- Available as a manual crank mast or with optional motor drive and controller • MIL-STD 810-G
- Optimal for light surveillance systems, radio monitoring, and mobile, light measuring stations
- Designed for vehicle, trailer, shelter, or field deployment

# **QUALIFICATIONS**

KVL / KVK / KVR MIL-STD TESTS					
High Temperature Operation (+44° C)	MIL-STD-810G, Method 501.5, Procedure II				
Low Temperature Operation (-32° C)	MIL-STD-810G, Method 502.5, Procedure II				
High Temperature Storage (+63° C)	MIL-STD-810G, Method 501.5, Procedure I				
Low Temperature Storage (-51° C)	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 I				
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				
(I)	(Rail Road-Train), Figure 514.6C-10				
	MIL-STD-810G, Method 514.6, Procedure I, Category 8 (Aircraft-Propeller), Figure 514.6C-7				

MIL-STD TESTS (cont.)				
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, Procedure II			
Sand/Dust	MIL-STD-810G Method 510.5, Procedure I & II			
lcing	MIL-STD-810G, Method 521.3, Procedure I (Ice thickness: 13mm)			
EMI	MIL-STD 461F: CS101, CS114, CS115, CS116, RS103			
Hazardous Chemicals	MIL STD 810 F Method 504.1			
Salt Fog	MIL-STD 810F Method 509.4			

# **SPECIFICATIONS**

14

KVL	120 - 2.5 KVL 3	120 - 4 KVL 4	120 - 6 KVL 5	120 - 8 KVL 5	145 - 8 KVL 6	145 - 10 KVL 6
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	26.2 / 8	32.8 / 10
Nested Height (ft. / m)	3.5 / 1.1	4.3 / 1.3	5.1 / 1.5	6.4 / 2.0	5.75 / 1.75	6.9 / 2.1
Payload Capacity (Ib / kg)	67 / 30	67 / 30	55 / 25	44 / 20	44 / 20	33 / 15
Approximate Mast Weight (lb / kg)	62 / 28	71 / 32	82 / 37	95 / 43	106 / 48	122 / 55
Number of Sections	3	4	5	5	6	6
KVK	120 - 2.5 KVK 3	120 - 4 KVK 4	145 - 6 KVK 4	145 - 8 KVK 5	170 - 10 KVK 5	170 - 12 KVK 6
<b>KVK</b> Extended Height (ft. / m)	<b>120 - 2.5 KVK 3</b> 8.2 / 2.5	<b>120 - 4 KVK 4</b> 13.1 / 4	<b>145 - 6 KVK 4</b> 19.7 / 6	<b>145 - 8 KVK 5</b> 26.2 / 8	<b>170 - 10 KVK 5</b> 32.8 / 10	<b>170 - 12 KVK 6</b> 39.3 / 12
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	32.8 / 10	39.3 / 12
Extended Height (ft. / m) Nested Height (ft. / m)	8.2 / 2.5 3.5 / 1.14	13.1 / 4 4.3 / 1.34	19.7 / 6 6.3 / 1.9	26.2 / 8 6.9 / 2.1	32.8 / 10 8.2 / 2.5	39.3 / 12 8.2 / 2.5

Additional sizes available. Specifications are for reference only and are subject to change. Please contact Will-Burt for current and exact specifications. In addition to its masts, Will-Burt Germany also engineers and manufactures its own line of specialty single and double-axle military trailers, designed for maximum mobility with high payload capability and low curb weight.



# GEROH KVR

# HEAVY-DUTY TELESCOPIC CABLE-DRIVE MASTS

# For payloads up to 110 lbs. (50 kg)

Will-Burt Germany's family of heavy-duty KVR Telescopic Masts are specially qualified for mobile use and heavy payloads. Heavy payloads in conjunction with heights up to 45 ft. (14 m) distinguish the GEROH KVR Heavy-Duty Telescopic Crank Mast. The GEROH KVR mast systems are available with manual crank deployment or motorized operation.

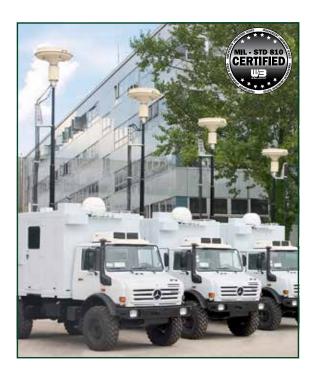
The automatic locking system between the mast sections ensures failure-free operation and allows the mast to be guyed for added stability allowing it to perform under extreme environmental conditions at -60° F (- 50° C) and wind speeds up to 80 mph (130 km/h)

In addition, special guidance systems guarantee exact adjustment – despite heavy payloads. The KVR Heavy-Duty model range is in use for military and commercial applications. The range of applications is various: complex communication systems, surveillance, position location and target acquisition systems. The masts are qualified for vehicle, trailer, shelter, or field deployment.

# **ESSENTIAL FEATURES**

- Payloads up to 110 lbs. (50 kg)
- Heights up to 45 ft (14 m)
- Available as a manual crank mast or with optional motor drive and controller
- Suited for heavy communication systems, monitoring solutions and position location
- · Designed for vehicle, trailer, shelter, or field deployment
- MIL-STD 810-G







#### **SPECIFICATIONS**

KVR	145 - 8	145 - 10	145 - 12	170 - 8	170 - 10	170 - 12	170 - 14	170 - 8	170 - 10	170 - 12	170 - 14
RVK	KVR 5	KVR 6	KVR 6	KVR 6	KVR 6						
Extended Height (ft. / m)	26 / 8	32 / 10	39 / 12	26 / 8	32 / 10	39 / 12	45 / 14	26/8	32 / 10	39 / 12	45 / 14
Nested Height (ft. / m)	7.2 / 2.2	8.5 / 2.6	9.9 / 3.0	7.2 / 2.2	8.5 / 2.6	9.9 / 3.0	11.2 / 3.4	6.6 / 2.0	7.6 / 2.3	8.9 / 2.7	9.9 / 3.0
Payload Capacity (Ib / kg)	110 / 50	99 / 45	88 / 40	110 / 50	110 / 50	99 / 45	88 / 40	110 / 50	99 / 45	88 / 40	88 / 40
Approximate Mast Weight (lb / kg)	148 / 67	163 / 74	176 / 80	181 / 82	201 / 91	220 / 100	240 / 109	176 / 80	194 / 88	212 / 96	229 / 104
Number of Sections	5	5	5	5	5	5	5	6	6	6	6

Additional sizes available. Specifications are for reference only and are subject to change. Please contact Will-Burt Germany Engineering for current and exact specifications. In addition to its masts, Will-Burt Germany also engineers and manufactures its own line of specialty single and double-axle military trailers, designed for maximum mobility with high payload capability and low curb weight.

# **COMMUNICATIONS / COUNTER UAS**



# SPM SPINDLE DRIVE MASTS

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

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

# **SPECIFICATIONS**

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

Other heights and payload capacities available.

# COMMUNICATIONS



# 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 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

# **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.

#### **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



The AntennaMast model AM2 is a rugged, lightweight, manportable, 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.

# **PAYLOAD DEPLOYMENT OPTIONS**

- 1. The EZ Raze<sup>™</sup> 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 EZ Raze Payload Elevation System

Easily elevate and lower multiple antennas and sensors



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** 

.....



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

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

# SPECIFICATIONS

- Full length keys on sections
   Prevents twist
- Maintenance free
   Delymer drive pute require
- Polymer drive nuts require no greasingBuilt in cable management
- Cable loops added at collars
- Corrosion resistant
- All parts are anodized aluminum & stainless steel
- Drive crank is a completely sealed mechanism





QEAM	TM 10 (Aluminum)	TM 21	TM 25	TM 30	TM 34
Extended Height (ft. / m)	32.8 / 10	68.9 / 21	82 / 25	98.4 / 30	112 / 34
Nested Height (ft. / m)	8 / 2.4	14.6 / 4.45	14.8 / 4.5	19.3 / 5.9	19 / 5.8
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) (lb / kg)	42 / 19	197 / 90	220 / 100	250 / 114	265 / 121
Weight (Accessory Kit) (lb / kg)	52 / 24	245 / 111	275 / 125	275 / 125	275 / 125
Payload Capacity (lb / kg)	15 / 7	180 / 80	150 / 68	150 / 68	110 / 50
Maximum Sail Area (ft. <sup>2</sup> / m <sup>2</sup> )	6 / 0.6 CD=1.5	6 / 0.6 CD=1.5	6 / 0.6 CD=1.5	6 / 0.6 CD=1.5	6 / 0.6 CD=1.5
Ice load (in. / mm)	0.5 / 12	0.5 / 12	0.5 / 12	0.5 / 12	0.5 / 12
Maximum Erection Wind* (mph / km/h)	25 / 40	25 / 40	25 / 40	25 / 40	25 / 40
Operational Wind (mph / km/h)	60 / 97	60 / 97	60 / 97	60 / 97	60 / 97
Survival Wind (mph / km/h)	80 / 128	80 / 128	80 / 128	80 / 128	80 / 128
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			

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

# COMMUNICATIONS

# CARBON/GLASS FIBER STRAP DRIVE MODEL - FIELD DEPLOYED

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.

#### **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**





Accessory Kit

**Optional Cable Management** 

Q\*E\*A\*M

**MTS** 



#### **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 (ft. / m)	9.8 / 3	13.1 / 4	19.7 / 6	26.3 / 8	32.8 / 10	39.4 / 12	49.2 / 15
Nested Height (ft. / m)	4.3 / 1.3	4.8 / 1.45	5.7 / 1.75	6.6 / 2	7.4 / 2.2	8 / 2.45	9.5 / 2.9
Payload Capacity (lb / kg)	154 / 70	143 / 65	132 / 60	121 / 55	99 / 45	88 / 40	66 / 30
Number of Sections	3	4	5	6	7	7	7
Maximum Wind Area (ft. <sup>2</sup> / m <sup>2</sup> )	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8
Maximum Survival Wind Speed (mph / km/h)	99 / 160	99 / 160	99 / 160	99 / 160	99 / 160	99 / 160	99 / 160
Outer Section Diamter (in. / mm)	ø5/ 126	ø5/ 126	ø5/ 126	ø5/ 126	ø5/ 126	ø5/ 126	ø5/ 126
Voltage (VDC)	24	24	24	24	24	24	24
Mast Only Weight (lb / kg)	42 / 19	53 / 24	64 / 29	75 / 34	86 / 39	95 / 43 kg	108 / 49
Accessories Weight with Motor (lb / kg)	75 / 34	75 / 34	75 / 34	75 / 34	95 / 43	95 / 43	95 / 43
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
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Extended Height (ft. / m)	9.8 / 3	13.1 / 4	19.7 / 6	26.3 / 8	32.8 / 10	39.4 / 12	49.2 / 15
Nested Height (ft. / m)	4.3 / 1.3	4.8 / 1.45	5.7 / 1.75	6.6 / 2	7.4 / 2.2	8 / 2.45	9.5 / 2.9
Payload Capacity (lb / kg)	154 / 70	143 / 65	132 / 60	121 / 55	99 / 45	88 / 40	66 / 30
Number of Sections	3	4	5	6	7	7	7
	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8	2.6 / 0.8
Maximum Wind Area (ft. <sup>2</sup> / m <sup>2</sup> )	2.0 / 0.0	2.0 / 0.0	2.0 / 0.0				
Maximum Wind Area (ft. <sup>2</sup> / m <sup>2</sup> ) Maximum Survival Wind Speed (mph / km/h)	99 / 160	99 / 160	99 / 160	99 / 160	99 / 160	99 / 160	99 / 160
	,	,	,	99/160 ø5/126	99/160 ø5/126	99/160 ø5/126	99/160 ø5/126
Maximum Survival Wind Speed (mph / km/h)	99 / 160	99 / 160	99 / 160	,	,	,	,

# **VEHICLE DEPLOYED**

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)



#### **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 (ft. / m)	9.5 / 2.9	12.8 / 3.9	16 / 4.9	19 / 5.9	26 / 7.9
Nested Height (ft. / m)	3.6 / 1.1	4.3 / 1.3	4.8 / 1.45	5.2 / 1.6	5.9 / 1.8
Payload Capacity (Ib / kg)	121 / 55	121 / 55	110 / 50	99 / 45	88 lb / 40
Number of Sections	6	6	7	7	7
Maximum Wind Area (ft. <sup>2</sup> / m <sup>2</sup> )	0.8 / 0.25	0.8 / 0.25	0.8 / 0.25	0.8 / 0.25	0.8 / 0.25
Maximum Survival Wind Speed (mph / km/h)	75 / 120	75 / 120	75 / 120	75 / 120	75 / 120
Outer Section Diamter (in. / mm)	ø5/ 126	ø5/ 126	ø5 in. / 126mm	ø5/ 126	ø5/ 126
Voltage (V)	28 (20-32)	28 (20-32)	28 (20-32)	28 (20-32)	28 (20-32)
Mast Only Weight ( lb / kg)	64 / 29	75 / 34	84 / 38	95 / 43	108 / 49
Accessories Weight with Motor (lb / kg)	20 / 9	20 / 9	20/9	20 / 9	20 / 9
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 (ft. / m)	9.5 / 2.9	12.8 / 3.9	16 / 4.9	19 / 5.9	26 / 7.9
Nested Height (ft. / m)	3.6 / 1.1	4.3 / 1.3	4.8 / 1.45	5.2 / 1.6	5.9 / 1.8
Payload Capacity (lb / kg)	121 / 55	121 / 55	110 / 50	99 / 45	88 lb / 40
Number of Sections	6	6	7	7	7
Maximum Wind Area (ft. <sup>2</sup> / m <sup>2</sup> )	0.8 / 0.25	0.8 / 0.25	0.8 / 0.25	0.8 / 0.25	0.8 / 0.25
Maximum Survival Wind Speed (mph / km/h)	75 / 120	75 / 120	75 / 120	75 / 120	75 / 120
Outer Section Diamter (in. / mm)	ø5/ 126	ø5/ 126	ø5/ 126	ø5/ 126	ø5 / 126
March Orchy March + (lb / loc)	60 / 27	71 / 32	79 / 36	88 / 40	101 / 46
Mast Only Weight (lb / kg)	00/21				

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COMMUNICATIONS

Clark has been dedicated to the design and manufacture of fast-erecting pneumatic telescopic and sectional mast systems for both civilian and military use since the late 1950's. Many thousands of the company's masts have been purchased by authorities around the world.

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Clark now becomes a brand within the Will-Burt portfolio that will maintain its heritage of quality, performance, and world-class customer service. Clark masts are known for robust performance in the most severe environments – these masts have been tested and approved to the rigors of MIL STD 810F.

The Clark range of field / vehicle / shelter lightweight and man-portable pneumatic masts are the logical choice for missions that require quick deployment of communications and surveillance equipment up to 150 kg and 30 meters.

# **ESSENTIAL FEATURES:**

- High strength / Lightweight Aluminum Alloy
- Locking or Non-locking collars
- Rotatable or Non-rotatable masts
- Field / Vehicle / Shelter Mounting Options
- Full range of accessories
- · Worldwide service and support from Will-Burt



#### **CLARK MASTS QT-M SERIES**

Extended Heights up to 15m / Payload Capacity up to 22.5 kg Quick-deploy lightweight pneumatic mast with attached handpump. Thousands of QT masts have been deployed over the years. QT masts are keyless for easy payload rotation.

#### **MAST OPTIONS:**

(3.5" Only) • Rotatable / Non/Rotatable

#### MAST ACCESSORIES:

(Field / Vehicle / Shelter Mount)

- Tripod Mk VI
- External Mounting
- Internal Mounting
- Field Guy Kit
- Drive-on Stand





#### **SPECIFICATIONS**

QT-M Series			Height Ra	nge - m	eters (Paylo	ad Cap		Standard Color	Optional Color(s)			
QTL-M 2.0"	1.35-4.00	(4.5)	1.65-5.00	(4.5)	1.90-6.00	(4.5)	-	-	-	-	Green Anodized & Painted	Natural Anodized / Yellow Paint
QT-M	1.10-4.25	(4.5)	1.40-5.00	(6.0)	1.50-6.10	(4.5)	1.90-6.10	(10.0)	1.95-9.00	(4.5)	Green Anodized & Painted	Natural Anodized / Yellow Paint
2.5"	2.10-10.00	(4.5)	-	-	-	-	-	-	-	-	Green Anouizeu & Painteu	
	1.05-3.00	(22.5)	1.35-4.00	(22.5)	1.10-4.30	(12.5)	1.65-5.00	(22.5)	1.20-5.90	(2.5)		
SQT-M 3.0"	1.90-6.00	(20.0)	1.80-7.95	(10.0)	1.95-8.80	(10.0)	2.25-9.00	(18.0)	2.20-10.15	(10.0)	Green Anodized & Painted	Natural Anodized / Yellow Paint
0.0	2.00-11.55	(2.5)	2.70-12.20	(10.0)	2.80-15.00	(2.5)	-	-	-	-		
071/ 14	1.05-4.00	(20.0)	1.20-6.05	(10.0)	1.50-6.10	(20.0)	1.50-7.00	(18.0)	1.80-7.95	(20.0)		
QTX-M 3.5"	1.95-8.80	(18.0)	2.25-9.00	(22.5)	2.20-10.15	(18.0)	2-11-7.00	(10.0)	2.65-12.20	(15.0)	Green Anodized & Painted	Natural Anodized / Yellow Paint
	2.50-12.90	(10.0)	2.80-15.00	(10.0)	-	-	-	-	-	-		

#### **CLARK MASTS DAF SERIES**

**Extended Heights up to 12.35m / Payload Capacity up to 20 kg** THE DAF (Deployable Antenna Field Kit) Series of telescopic masts is based on the ST (3" base tube) and NT (3.5" base tube) Series masts. They are sold as a field kit complete with guy kit and field legs that when folded in, the mast can be easily carried by one or two persons depending upon the model. ST and NT masts are keyed to limit unwanted rotation. Optional Internal Extension Warning Switch available.

#### **Mast Kit Contains:**

#### (Field Mount)

- DAF mast with tripod
- Accessory bag
- Guy Assembly
- Hammer
- Spikes
- Pickets



#### **SPECIFICATIONS**

DAF Series		Height Range - m	eters (Payload Cap	Standard Color	Optional Color(s)		
ST 4 - 3"	1.60-4.50 <b>(20.0)</b>	1.86-5.50 <b>(20.0)</b>	2.12-6.50 <b>(15.0)</b>	2.82-9.00 <b>(15.0)</b>	4.00-12.35 <b>(10.0)</b>	White Base with Anodized Sections	All RAL Colors Available
NT 4 - 3.5"	1.60-4.50 <b>(20.0)</b>	1.86-5.50 <b>(20.0)</b>	2.12-6.50 (15.0)	2.82-9.00 (15.0)	4.00-12.35 <b>(10.0)</b>	White Base with Anodized Sections	All RAL Colors Available
NT 5 - 3.5"	1.78-6.00 <b>(20.0)</b>	2.44-9.00 <b>(15.0)</b>	2.65-10.00 ( <b>12.0</b> )	3.20-12.00 <b>(10.0)</b>		White Base with Anodized Sections	All RAL Colors Available

# **CLARK MASTS PT SERIES**

Extended Heights up to 21m / Payload Capacity up to 60 kg PT Series masts are medium duty telescopic pneumatic masts for communications, antenna, radars, cameras, and more. Many models are available with an internal electrical or video cable. PT masts are keyed to limit unwanted rotation.

#### **MAST OPTIONS:**

- Rotatable / Non/Rotatable
- Locking / Non-locking collars
- Foot pump / Hand pump / Compressor
- Internal Extension Warning Switch

#### MAST ACCESSORIES:

#### (Field / Vehicle / Shelter Mount)

- Four leg field set
- External Mounting
- Internal Mounting
   In
- Guying
- Wheel handleGraduated collar
- Internal Cable (some models)
- Roof Trolley



#### **SPECIFICATIONS**

PT Series		Height	Range - m	ieters (Paylo		Standard Color	Optional Color(s)					
PT-NP 4 4.5"	1.19-3.00 (60 2.07-6.12 (55		. ,		(55.0)	1.69-5.00	(55.0)	1.82-2.07	(55.0)	White Base with Anodized Sections	All RAL Colors Available	
	1.35-4.00 (50	,	. ,		(40.0)	1.55-5.50	(40.0)	1.82-6.72	(40.0)			
4.5"	PT-NP 5 4.5" 2.00-7.50 (3) 4.84-18.23 (2)		0 <b>(35.0)</b>	2.30-9.00	(35.0)	3.40-12.00	(25.0)	4.30-15.00	(25.0)	White Base with Anodized Sections	All RAL Colors Available	
PT-NP 6	1.45-5.00 <b>(30</b>	,	2 <b>(30.0)</b>	1.80-7.52	(25.0)	2.00-9.00	(25.0)	2.28-10.02	(25.0)	White Base with	All RAL Colors Available	
	2.74-12.32 (20	,	. ,		-	-	-	-	-	Anodized Sections		
PT-NP 7 4.5"	1.35-4.00 (20 2.15-10.62 (12	·	. ,		. ,		. ,		. ,		All RAL Colors Available	

#### **CLARK MASTS YT SERIES**

Extended Heights up to 21m / Payload Capacity up to 100 kg

The YT Series of telescopic masts combine high payload capacity, high extended heights in relation to the retracted length. Ideal for communications offering a competitive alternative to much larger masts. YT masts are keyed to limit unwanted rotation and are coated in PTFE for optimized operation in a variety of conditions.

Guying

#### **MAST OPTIONS:**

- Rotatable / Non/Rotatable
- Locking / Non-locking collars
- Foot pump / Hand pump / Compressor
- SuperTork for increased torsional stability
- Internal Extension Warning Switch

#### **SPECIFICATIONS**

# MAST ACCESSORIES:

(Field / Vehicle / Shelter Mount)

• Four leg field set

- Wheel handle • External Mounting
  - · Graduated collar
- Internal Mounting Roof Trollev



YT Series		Height R	tange - n	neters (Paylo		Standard Color	Optional Color(s)				
YT-NP 4 - 5"	1.47-4.12 <b>(100</b>	<b>0)</b> 1.69-5.00	(95.0)	2.07-6.12	(90.0)	2.29-7.00	(90.0)	-	-	White Base with Anodized Sections	All RAL Colors Available
YT-NP 5 - 5"	1.35-4.00 (75.	<b>D)</b> 1.68-6.00	(65.0)	2.20-8.00	(55.0)	2.50-10.00	(55.0)	3.40-12.00	(50.0)	White Base with Anodized Sections	All RAL Colors Available
TI-INF 0 - 0	4.84-18.00 <b>(50</b> .	5) -	-	-	-	-	-	-	-	while base with Anouized Sections	All RAL COIOIS Available
YT-NP 6 - 5"	1.56-6.00 (40	<b>D)</b> 1.90-8.00	(40.0)	2.30-10.00	(40.0)	2.70-12.00	(40.0)	3.91-18.00	(30.0)	White Base with Anodized Sections	All RAL Colors Available
	4.24-21.00 <b>(20</b> .	D) -	-	-	-	-	-	-	-	White base with Anouized Sections	All IAL COOLS AVAILABLE
YT-NP 7 - 5"	1.75-8.00 <b>(25</b> .	<b>D)</b> 1.85-9.00	(25.0)	2.12-10.52	(25.0)	2.50-12.02	(20.0)	3.00-15.00	(15.0)	White Base with Anodized Sections	All RAL Colors Available
11 - NF T = J	3.50-18.00 <b>(15</b> .				-	-	-	-	-	white base with Anouized Sections	All IAL COOLS AVAILABLE
YT-NP 8 - 5"	1.67-8.52 <b>(15</b>	<b>0)</b> 2.16-12.02	(12.0)	2.58-15.02	(10.0)	3.65-21.00	(10.0)	-	-	White Base with Anodized Sections	All RAL Colors Available

# **CLARK MASTS WT SERIES**

Extended Heights up to 30.5m / Payload Capacity up to 150 kg The WT Series range of heavy duty pneumatic telescopic masts have a base tube diameter of six inches and a maximum of nine telescopic sections. This is an ideal telescoping communications mast.

#### **MAST OPTIONS:**

- Rotatable / Non/Rotatable
- Locking / Non-locking collars • Foot pump / Hand pump /
- Compressor
- SuperTork for increased torsional stability
- Internal Extension Warning Switch

#### **SPECIFICATIONS**

#### MAST ACCESSORIES:

- (Field / Vehicle / Shelter Mount) • Wheel handle
- Four leg field set
- External Mounting Graduated collar
- Internal Mounting Roof Trolley
- Guying



WT Series		Height R	ange - n	neters (Paylo		Standard Color	Optional Color(s)				
WT-NP 4 - 6"	1.30-3.42 <b>(150.0</b> )	2.15-6.00	(140.0)	2.80-8.00	(120.0)	3.20-10.00	(100.0)	-	-	White Base with Anodized Sections	All RAL Colors Available
WT-NP 5 - 6"	1.62-5.72 <b>(85.0)</b>	2.52-8.02	(120.0)	3.39-12.02	(90.0)	4.06-15.00	(65.0)	-	-	White Base with Anodized Sections	All RAL Colors Available
WT-NP 6 - 6"	1.50-5.00 <b>(100.0)</b>	1.57-6.00	(100.0)	1.80-7.50	(90.0)	2.10-9.00	(80.0)	2.30-10.00	(75.0)	White Base with Anodized Sections	All RAL Colors Available
WI-INF 0 - 0	2.70-12.00 <b>(75.0)</b>	3.66-15.32	(70.0)	3.97-18.32	(70.0)	4.57-21.42	(60.0)	-	-	while base with Anoulzed Sections	All RAL COIOIS Available
WT-NP 7 - 6"	1.80-6.50 <b>(65.0)</b>	2.10-9.00	(55.0)	2.46-12.00	(50.0)	3.10-15.00	(50.0)	4.00-18.00	(50.0)	White Base with Anodized Sections	All RAL Colors Available
	4.02-21.32 <b>(40.0)</b>	-	-	-	-	-	-	-	-	white base with Anouzeu Sections	All IAL COIDIS Available
YT-NP 8 - 6"	1.90-7.50 <b>(45.0)</b>	2.14-9.22	(45.0)	2.31-12.02	(40.0)	3.20-15.00	(35.0)	3.40-18.00	(30.0)	White Base with Anodized Sections	All RAL Colors Available
11-INF 0 - U	3.52-20.02 <b>(30.0)</b>	-	-	-	-	-	-	-	-	white base with Anoulzed Sections	All RAL COIOIS Available
YT-NP 9 - 6"	1.90-9.00 <b>(20.0)</b>	2.10-12.00	(20.0)	2.37-13.82	(15.0)	3.00-18.00	(15.0)	4.11-26.02	(15.0)	White Base with Anodized Sections	All RAL Colors Available
11-11-11-9-0	4.95-30.52 <b>(15.0)</b>	-	-	-	-	-	-	-	-	White base with Allouized Sections	All IAL COULS AVAILABLE

# **CLARK MASTS WT SERIES QUADPOD with MAST KIT**

Extended Heights up to 3m / Payload Capacity up to 250 kg QuadPod provides a rugged, infinitely torsionally stable platform for long range EO, laser, and radar equipment deployment for the field.

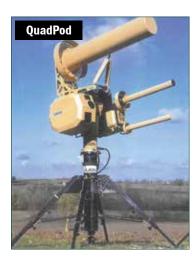
The QuadPod Mast Kit is a highly portable telescopic mast system based on our QuadPod system using a WT Series telescopic mast for field deployment.

#### **QUADPOD CONTAINS:**

- QuadPod with bag
- Leg assembly and bag

#### **QUADPOD MAST KIT CONTAINS:**

- WT Mast: 1.13- 3.0 m / 120 kg
- QuadPod
- Hand pump
- Guy kit
- Storage bags



#### **SPECIFICATIONS**

QuadPod with Mast Kit	Height Range - meters (Payload Capacity - kilograms)		Standard Color	Optional Color(s)
QuadPod	1.07-1.07	(250.0)	Black	All RAL Colors Available
QuadPod with Mast Kit	1.13-3.00	(120.0)	Black	All RAL Colors Available



# **CLARK MASTS PU SERIES**

Extended Heights up to 11.4m / Payload Capacity up to 10 kg

The PU (Push-Up Mast) family of lightweight telescopic masts have been in service with defense forces worldwide since 1970. The principle of manual extension and cross pin locking is extremely simple and reliable. All may be vehicle mounted and used unguyed or fully guyed when erected as a field mast.

> • Upper Guy Assembly • Equipment Box or

Equipment Bag Canvas Cover

Spare Cross Pins

Set of Tools

#### PU MAST KIT CONTAINS:

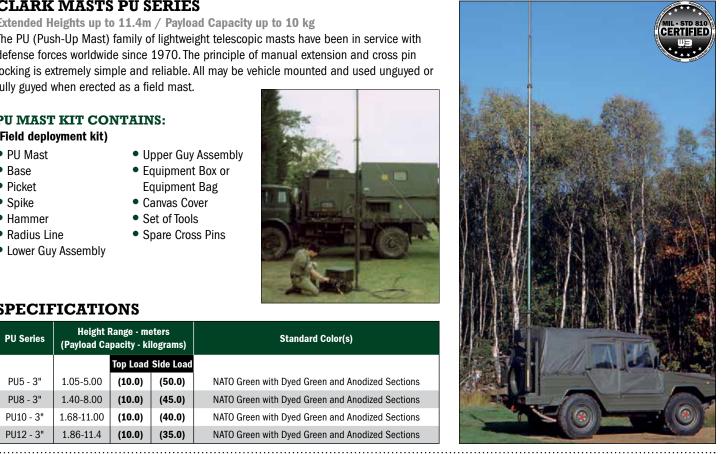
#### (Field deployment kit)

- PU Mast
- Base
- Picket
- Spike
- Hammer
- Radius Line
- Lower Guy Assembly

**SPECIFICATIONS** 



Height Range - meters (Payload Capacity - kilograms)			Standard Color(s)
	Top Load Side Load		
1.05-5.00	(10.0)	(50.0)	NATO Green with Dyed Green and Anodized Sections
1.40-8.00	(10.0)	(45.0)	NATO Green with Dyed Green and Anodized Sections
1.68-11.00	(10.0)	(40.0)	NATO Green with Dyed Green and Anodized Sections
1.86-11.4	(10.0) (35.0)		NATO Green with Dyed Green and Anodized Sections
	(Payload Ca 1.05-5.00 1.40-8.00 1.68-11.00	Top Load           1.05-5.00         (10.0)           1.40-8.00         (10.0)           1.68-11.00         (10.0)	(Payload Capacity - kilograms)           Top Load Side Load           1.05-5.00         (10.0)         (50.0)           1.40-8.00         (10.0)         (45.0)         (40.0)         (40.0)         (40.0)         (40.0)         (40.0)         (40.0)         (40.0)         (40.0)         (40.0)         (40.0)         (10.0)



# **POSITIONERS / CONTROLLERS**

**POSITION** 

Introducing the new PositionIt range of positioners with improved, next-generation control electronics and software while retaining the rugged reliability of the original PositionIt range. The new PositionIt series is dimensionally and electrically identical to the first generation with fully backwards compatible electronics and software. Improved motor control is assured with higher resolution speed control, slower minimum speeds, and user adjustable minimum speeds and speed ramps. The new GUI for configuring and commissioning allows users to set and adjust many features that were originally factory set only. It also boasts many new features such as the ability to receive positional feedback, set home position and limit stops and fault diagnostics.



PI-35

# **ESSENTIAL FEATURES**

- Designed, Manufactured, and Tested to excel in **Mobile Applications** 
  - · Hardened metal gears
  - MIL-STD 810 certified by independent laboratory
- Strong, lightweight construction Die-cast aluminum housing
  - Stainless steel fasteners
- New Graphical User Interface (GUI)
- · Greater level of control with user set features
- Faster set-up
- Positional feedback
- More precise than ever
  - Higher level of motor control
  - Greater positional accuracy
- Regenerative Braking
  - On motor shaft
- Flexible Connection
- Bottom or side • Universal mounting plate
- Suitable for most common payloads
- Pelco-D over RS-485 Communications
- Weather-proof IP 68 Rated
- Long Operational Life
  - 2-year warranty
- Backwards compatible

# **POSITIONER CONTROLLERS**

The latest positioner controller from Will-Burt is loaded with new features. You will always know the status of the positioner with realtime 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.

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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.



	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		-40°C to 60°C / -40°F to 140°F			
	IP Rating	IP68 - Waterproof (immersion) and Dustproof			
Pan Axis		400° (± 200°)			

**SPECIFICATIONS** 

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 - Converters available for 12 VDC	

\*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.

and AC power sources

# **INTEGRATED TOWER SYSTEMS**

Integrated Tower Systems-ITS, a Will-Burt Company, is a global leader in the manufacture, sales and rental of an extensive and affordable line of rapid-deployment Mobile Tower & Mast Systems; Tower & Mast Integrated Trailers, Trucks, Communication-Site-on-Wheels (COWs), and Mast-, Satellite- and Tower-Integrated Mobile Command and Communication Centers. This state-of-the-art equipment is designed specifically to support a global contingent of ITS clientele representing the following industries:

- Telecommunications, Infrastructure Development/Restoration; Tower Owners/Operators Multi-media, Broadcasting
- First Responder, Public Safety and Emergency Management; Law Enforcement, Incident Command, Search & Rescue
- Homeland Defense/National Security, Domestic and Foreign Military Initiatives; Tactical and Support Functions
- Immigration and Customs Enforcement, Border Security; Disaster Preparedness/Emergency Response
- Geophysical, Oil & Gas and Alternative Energy; Meteorological, Frequency and Weapon Systems Testing
- Transportation, Aviation, Aerospace and Construction; Entertainment, Logistics, Engineering, Municipal & Corporate Programs
- Global Support of Special Events; Political, Commercial, Industrial, Sporting, Civic and Numerous other Industries

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 <u>www.itstowers.com</u> or contact an ITS Representative Toll Free at 1-(800)-850-8535.



#### **SPECIFICATIONS**

	Mobile Tower Solutions	Mobile Mast Solutions	
Self-Support & Guyed Heights (ft. / m)	±38, 55, 72, 89, 106, 120 & 130 (11.6, 16.8, 21.9, 27.1, 32.3, 36.6 & 39.6)	30 - 120 / 9 - 36	
Tower Capacity (lb / kg)	Standard Payloads: Up to: $\pm 550$ / $250$   Upgraded Payloads: Up to: $\pm 625$ / $284$	Payloads Up To: 1,200 / 544	
Power	120-220 VAC / 60-50 Hz Configurations		
Common Use	Border Security • Broadcasting • Disaster Recovery / Emergency Response • Lighting • Remote Communications Site Security • Surveillance • Energy Exploration / Production Sites • Sensor Applications • Systems Testing • Telecommunications • Temporary Cell Site		



**SURVEILLANCE / COMMUNICATIONS** 

A WILL-BURT COMPANY



ULTRA MAST – INTEGRATED SURVEILLANCE SYSTEM





# MT SERIES – TRAILER MOUNTED MAST

## SRS-C SERIES – PORTABLE TOWER TRAILER



# SKD SERIES – SKID MOUNTED







RD-S SERIES – TRAILER MOUNTED MAST





#### RD-T SERIES – TRAILER MOUNTED MAST









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# 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 lifeexpectancy 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	х
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

TRANSPORT

# 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.



# RAPID DEPLOYMENT ELEVATION SYSTEM



COMPACT ELEVATION SYSTEM



COMPACT ELEVATION SYSTEM<sup>7LF</sup>



# **MOBILE ELEVATION SYSTEMS**

# SURVEILLANCE

# COMPACT ELEVATION SYSTEM

Will-Burt's truck based Compact Elevation System with integrated CAN-bus controls and cable management is a rugged and precise mobile elevation platform that provides rapid deployment of a wide variety of sensors from a compact position in a standard 2.4m pickup truck bed. The compact design provides up to .7 m<sup>3</sup> for the sensor payload with the tailgate in the closed position. Available with an electro-mechanical or pneumatic elevation system at 4- or 6-meter heights with a payload capacity of 241 kg, payload stability is assured with section keys and keyways that minimize rotational movement.





# **RAPID DEPLOYMENT ELEVATION SYSTEM**

Will-Burt's Rapid Deployment Elevation System (RDES) with fully integrated CAN-bus controls is designed for expeditious deployment when significant heights are required for sensors and antennas. The RDES includes a mast tilt system that delivers a compact transport envelope. The system is available in heights of 24m or 36m. The powerful telescopic mast can elevate a 544kg payload - no need for crane assistance. An automatic lock system maintains a consistent height for extended periods of deployment – even with the loss of power. Payload stability and pointing accuracy is assured with section keys and keyways that minimize rotational movement. Full deployment of the 24m system can be achieved in 8 minutes.

# COMPACT ELEVATION SYSTEM<sup>TLR</sup>

Will-Burt's medium trailer based Compact Elevation System with integrated CAN-bus controls and cable management is a rugged and precise mobile elevation platform that provides rapid deployment of sensors in as little as 30 seconds. The compact design allows significant room for the sensor payload and auxiliary equipment. Available with an electro-mechanical or pneumatic elevation system at 4-to-8.5-meter heights with a payload capacity of 241 kg, payload stability is assured with section keys and keyways that minimize rotational movement. This trailer-based system is customizable and can accommodate a variety of power systems as specified by the customer.



# CONTACT YOUR SALES REPRESENTATIVE TODAY





**Contact Us** Complete a Contact Form

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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.

WILL-BURT

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