WILL-BURT

DEFENSE ELECTRO-MECHANICAL TELESCOPIC MASTS

AMERICAS

INNOVATION ELEVATED®

The Will-Burt Company offers a broad selection of mobile telescopic masts, lattice towers, pan and tilt positioners, accessories, and integrated trailer systems 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.

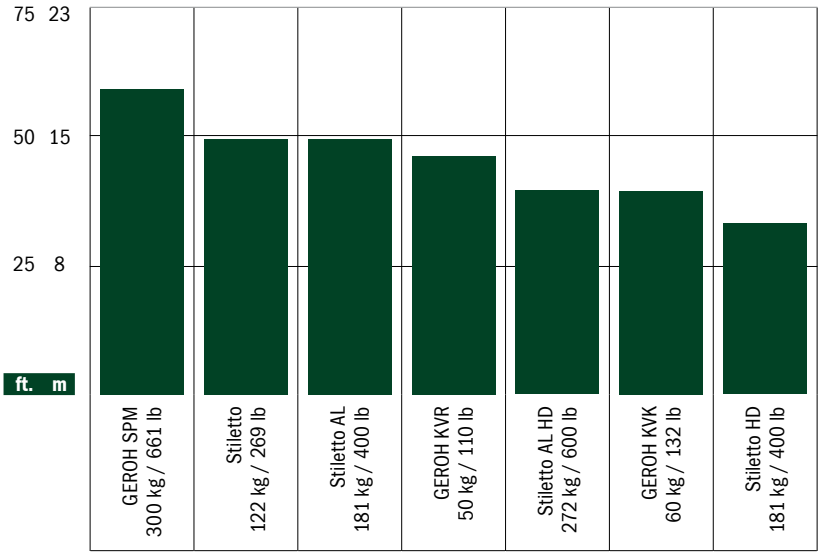
The ability of Will-Burt to deliver superior elevation solutions is attributed to its worldwide leadership in the industry for over 80 years. Teams of experienced research and development engineers, design engineers and ISO 9001:2015 quality systems certified manufacturing experts are backed by a sales 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 Products
- ISO 9001:2015 quality certified manufacturing
- Innovative custom solutions designed by experienced engineers
- Superior customer support

Electro-Mechanical & Portable Telescopic Masts Height and Payload Capabilities



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Specifications are subject to change. Consult factory for latest information.

GEROH KVK NON-LOCKING HEAVY-DUTY CABLE-DRIVE MASTS

Extended Heights up to 39 ft. | Payload Capacity up to 132 lb

The GEROH KVK Non-locking mast is a lightweight and robust mobile elevation solution, ensuring superior stability, reliability, and longevity. The KVK is available with manual crank deployment or motorized operation. The GEROH KVK is in use in defense applications such as communications, surveillance, and missile defense systems. Designed for deployment on vehicles, trailers, and shelters, they feature precision-engineered mast profiles for accurate positioning.

Equipped with two strong internal cables, powered by either a manual winch or an electric motor, these masts are protected from environmental elements. They can operate seamlessly in extreme temperatures ranging from -25°F / -32°C to +111°F / +44°C, ensuring reliable performance even in harsh conditions.

- Payloads up to 132 lb (60 kg)
- Heights up to 39 ft. (12m)
- Deploy to any height.
- Precision machined sections and collars
  - Maintain accurate pointing
- Powerful dual internal cable drive system
  - Powered deployment and retraction in extreme environments
- Available as manual crank, analog motor, or digital motor
- Designed for trailer, shelter, or vehicle deployment.
- MIL-STD 810 - F / G qualified

Photos: Diehl Defense GMBH & CO. KG

KVK (Non-locking)	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
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	32.8 / 10	39.3 / 12
Nested Height (ft. / m)	3.5 / 1.14	4.3 / 1.34	6.3 / 1.9	6.9 / 2.1	8.2 / 2.5	8.2 / 2.5
Payload Capacity (lb / kg)	132 / 60	99 / 45	132 / 60	99 / 45	110 / 50	88 / 40
Approximate Mast Weight (lb / kg)	62 / 28	78 / 35	122 / 55	139 / 63	183 / 83	194 / 88
Number of Sections	3	4	4	5	5	6

GEROH KVK MIL-STD-810F Qualifications	
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)
Vibration	MIL-STD-810G, Method 507.5, Procedure II (Aggravated cycle Figure 507.5-7, %95 uncondensed humidity)
	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 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, Procedure II
Sand/Dust	MIL-STD-810G Method 510.5, Procedure I & II
Icing	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
Rain	MIL-STD-810G, Method 506.5, Procedure I

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 LOCKING HEAVY-DUTY CABLE-DRIVE MASTS

Extended Heights up to 45.0 ft. | Payload Capacity up to 110 lb

MIL - STD 810 CERTIFIED

The GEROH KVR locking mast is a lightweight and robust mobile elevation solution, ensuring superior stability, reliability, and longevity. The KVR is available with manual crank deployment or motorized operation. The GEROH KVR is in use in defense applications such as communications, surveillance, and missile defense systems. Designed for deployment on vehicles, trailers, and shelters, they feature precision-engineered mast profiles for accurate positioning.

The internal, sectional locks maintain height regardless of the elements and allows for the mast to be guyed.

Equipped with two strong internal cables, powered by either a manual winch or an electric motor, these masts are protected from environmental elements. They can operate seamlessly in extreme temperatures ranging from -25°F / -32°C to +111°F / +44°C, ensuring reliable performance even in harsh conditions.

- Payloads up to 110 lb (50 kg)
- Heights up to 45 ft. (14m)
- Deploy to any height.
- Automatic internal sectional locks engage when section is fully deployed
  - Long-term deployment and guy line capable
- Precision machined sections and collars
  - Maintain accurate pointing
- Powerful dual internal cable drive system
  - Powered deployment and retraction in extreme environments
- Available as manual crank, analog motor, or digital motor
- Designed for trailer, shelter, or vehicle deployment
- MIL-STD 810 - F / G qualified

KVK (Non-locking)	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
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	32.8 / 10	39.3 / 12
Nested Height (ft. / m)	3.5 / 1.14	4.3 / 1.34	6.3 / 1.9	6.9 / 2.1	8.2 / 2.5	8.2 / 2.5
Payload Capacity (lb / kg)	132 / 60	99 / 45	132 / 60	99 / 45	110 / 50	88 / 40
Approximate Mast Weight (lb / kg)	62 / 28	78 / 35	122 / 55	139 / 63	183 / 83	194 / 88
Number of Sections	3	4	4	5	5	6

KVR (Locking)	145 – 6 KVR 5	145 – 8 KVR 5	145 – 10 KVR 5	145 – 12 KVR 5	170 – 8 KVR 5	170 – 10 KVR 5
Extended Height (ft. / m)	20 / 6	26 / 8	32 / 10	39 / 12	26 / 8	32 / 10
Nested Height (ft. / m)	5.9 / 1.8	7.2 / 2.2	8.5 / 2.6	9.9 / 3.0	7.2 / 2.2	8.5 / 2.6
Payload Capacity (lb / kg)	110 / 50	110 / 50	99 / 45	88 / 40	110 / 50	110 / 50
Approximate Mast Weight (lb / kg)	133 / 60	148 / 67	163 / 74	176 / 80	181 / 82	201 / 91
Number of Sections	5	5	5	5	5	5

KVR (Locking)	170 – 12 KVR 5	170 – 14 KVR 5	170 – 8 KVR 6	170 – 10 KVR 6	170 – 12 KVR 6	170 – 14 KVR 6
Extended Height (ft. / m)	39 / 12	45 / 14	26 / 8	32 / 10	39 / 12	45 / 14
Nested Height (ft. / m)	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 (lb / kg)	99 / 45	88 / 40	110 / 50	99 / 45	88 / 40	88 / 40
Approximate Mast Weight (lb / kg)	220 / 100	240 / 109	176 / 80	194 / 88	212 / 96	229 / 104
Number of Sections	5	5	6	6	6	6

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.

STILETTO® COMPOSITE ELECTRO-MECHANICAL MASTS

Extended Heights up to 49.2 ft. | Payload Capacity up to 270 lb

MIL - STD 810 CERTIFIED

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.

- 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®	3.0m	4.0m	6.0m	10.0m	15.0m
Extended Height (+4 in. / -0 in.) (ft. / m)	9.8 / 3.0	13.5 / 4.1	19.0 / 5.79	32.5 / 9.9	49.2 / 15.0
Nested Height (+1 in. / -0 in.) (ft. / m)	3.3 / 1.0	3.3 / 1.0	3.8 / 1.17	5.6 / 1.7	7.9 / 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) (VDC)	28	28	28	28	28
Footprint (in. / cm)	11.25 x 17.63 / 28.6 x 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 ($ft.^2$ / m^2)	8 / .74 CD=1.5	8 / .74 CD=1.5	8 / .74 CD=1.5	8 / .74 CD=1.5	8 / .74 CD=1.5

*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
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

STILETTO® HD COMPOSITE ELECTRO-MECHANICAL MASTS

Extended Heights up to 32.9 ft. | Payload Capacity up to 40 lb.

MIL - STD 810 CERTIFIED

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

- 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

Stiletto® HD	4.0m	6.0m	8.6m	10.0m
Extended Height (+4 in. / -0 in.) (ft. / m)	12.5 / 3.8	19.7 / 6.0	28.2 / 8.6	32.9 / 10.0
Nested Height (+1 in. / -0 in.) (ft. / m)	3.3 / 1.1	4.9 / 1.5	6.4 / 1.95	6.6 / 2.0
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	40 / 64
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 ($ft.^2$ / m^2)	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® 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)
MIL-STD-461E	CS101, CS114, CS115, CS116, RS103

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

STILETTO® AL ALUMINUM ELECTRO-MECHANICAL MAST

Extended Heights up to 49.2 ft. | Payload Capacity up to 400 lb

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 aluminum 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.

- 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
  - Due to additional tube overlap
- Increased safety
  - 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 the mast
  - Integrated dirt / dust wipers and ice-breakers built into collars
- Four accessory contact points on each collar
- High strength alloy construction
- Integrated PC control
- Support bracket and Universal control box included
- MIL-STD 810G certified

High Strength Alloy Construction

Quiet Locks Designed for Heavy Payloads

Energized Keyway Guides Reduce Mast Twist

Integrated Dust Wipers and Ice-Breakers

Quiet Sealed Direct-Drive System

Stiletto® AL	4.2-13	5.5-20	6.2-28	7-32	9-50
Extended Height (+4 in. / -0 in.) (ft. / m)	13.1 / 4.0	19.6 / 6.0	28.0 / 8.54	32.8 / 10.0	49.2 / 15.0
Nested Height (+1 in. / -0 in.) (ft. / m)	4.2 / 1.28	5.2 / 1.58	6.2 / 1.88	6.9 / 2.10	8.7 / 2.65
Payload Capacity (lb / kg)	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) (VDC)	28	28	28	28	28
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 ($ft.^2$ / m^2)	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.

Multi-Spindle Design

Digital Control with LED Display

Internal Collars with Built-in Dust and Ice Scrapers

Direct Drive Power

STILETTO® AL HD ALUMINUM ELECTRO-MECHANICAL MAST

Extended Heights up to 39.3 ft. | Payload Capacity up to 600 lb

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.

- 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
  - ±0.7°
- Low-nested height
  - Internal collars with built-in dust and ice scrapers
- Precise positioning at any height
  - Digitally controlled brushless DC motor
- Minimal maintenance
  - 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 810H design

NEW

Stiletto® AL HD	4.0m	6.0m	8.54m	10.0m	12.0m
Extended Height ±50 mm / ±1.97 in. (ft. / m)	13.7 / 4.1	19.6 / 6.0	28.0 / 8.54	32.8 / 10.0	39.3 / 12.0
Nested Height ±0.6 mm / ±0.236 in. (ft. / m)	4.02 / 1.28	5.18 / 1.58	6.54 / 2.0	7.48 / 2.28	8.46 / 2.58
Payload Capacity (lb / kg)	600 / 272	600 / 272	600 / 272	600 / 272	600 / 272
Mast Weight (lb / kg)	335 / 152	391 / 178	464 / 210	490 / 222	573 / 260
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	28 VDC	28 VDC	28 VDC	28 VDC
Running Current (Max)	40 Amps	40 Amps	40 Amps	40 Amps	40 Amps
Base Footprint (in. / cm)	17.56 x 11.22 / 44.6 x 28.5	17.56 x 11.22 / 44.6 x 28.5	17.56 x 11.22 / 44.6 x 28.5	17.56 x 11.22 / 44.6 x 28.5	17.56 x 11.22 / 44.6 x 28.5
Max Deployment Angle	10°	10°	10°	10°	5°
*Typical Payload Sail Area ($ft.^2$ / m^2)	17 / 1.58	12 / 1.11	11 / 1.02	11 / 1.02	8 / 0.74

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

GEROH SPM SUPER HEAVY-DUTY SPINDLE DRIVE MASTS

Extended Heights up to 59.1 ft. | Payload Capacity up to 661 lb

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.

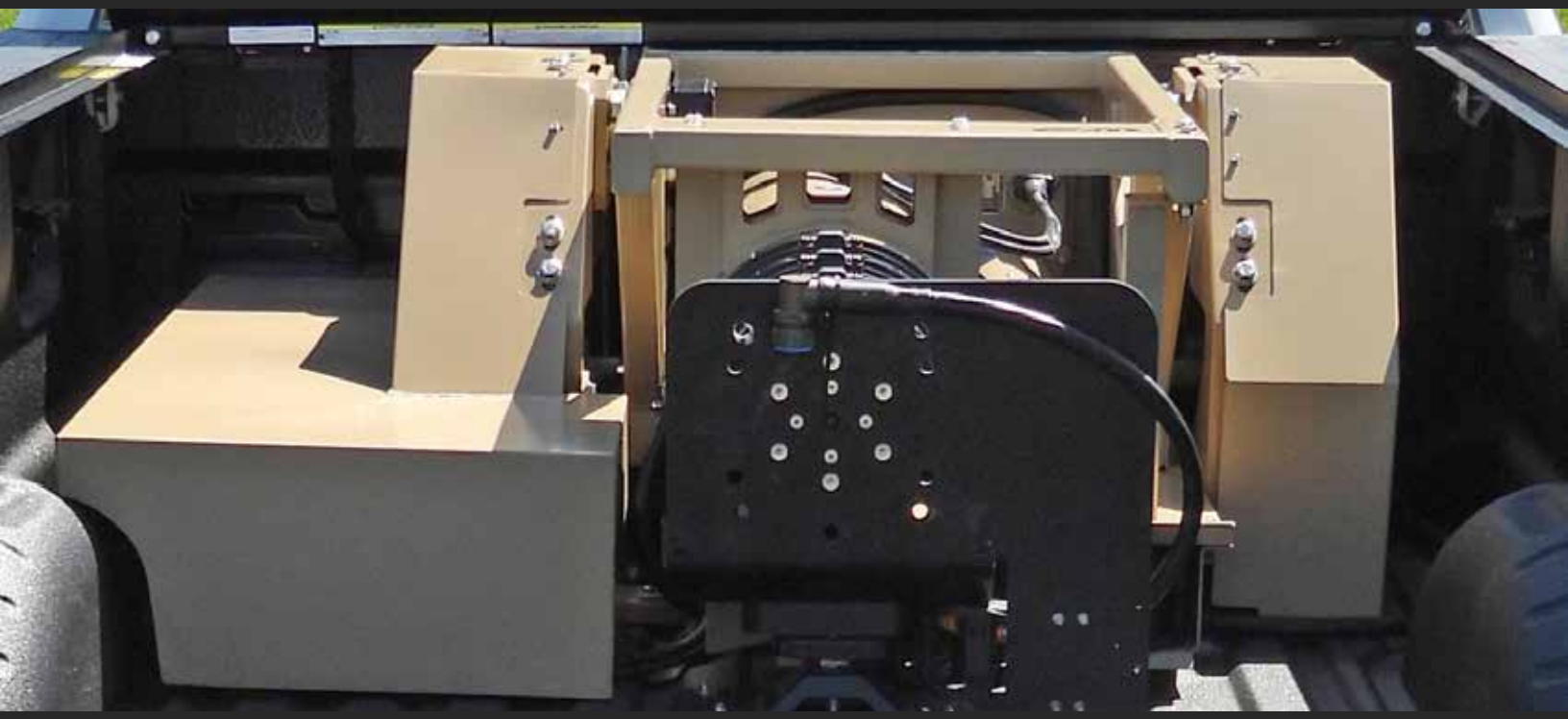
The GEROH SPM Spindle Mast is developed for the highest requirements in precision and extending the heaviest of payloads. Made of high strength aluminum, the Spindle mast maintains very close tolerances and endurance from environmental extremes making it our best telescopic mast for counter-UAS, communication, surveillance, reconnaissance and target detection.

- Best rotational accuracy (twist) of all Will-Burt masts
- 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

GEROH 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 / 3.0	19.7 / 6.0	26.2 / 8.0	32.8 / 10.0	39.4 / 12.0	49.2 / 15.0	59.1 / 18.0
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 (lb / kg)	220 / 100	661 / 300	551 / 250	55 / 250	551 / 250	551 / 250	551 / 250	551 / 250
Rotation Accuracy (Twist)	+/- 0.1°	+/- 0.4°	+/- 0.4°	+/- 0.5°	+/- 0.5°	+/- 0.5°	+/- 0.5°	+/- 0.5°
Approximate Mast Weight (lb / kg)	163 / 74	212 / 96	309 / 140	573 / 260	639 / 290	672 / 305	1,323 / 600	1,488 / 675
Base 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

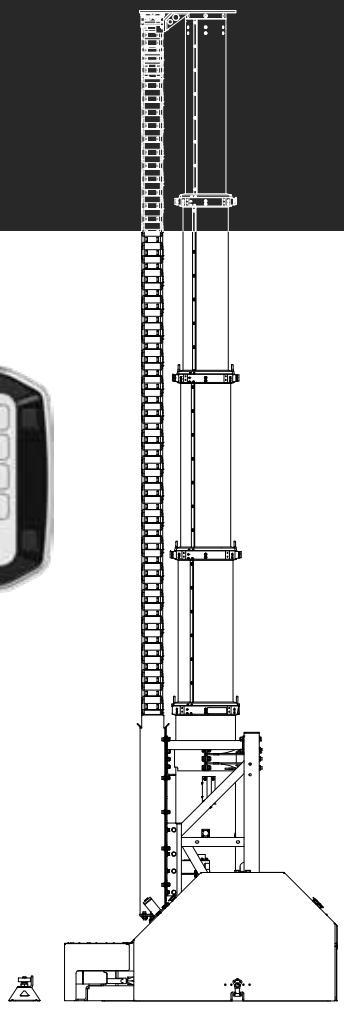
GEROH Low Profile SPM	280-2.5 SPM 7	280-3 SPM 7	280-4 SPM 7	280-6 SPM 7	280-8 SPM 7	280-10 SPM 7
Extended Height (ft. / m)	8.2 / 2.5	9.8 / 3.0	13.1 / 4.0	19.7 / 6.0	26.2 / 8.0	32.8 / 10.0
Nested Height (ft. / m)	2.3 / 0.70	2.5 / 0.78	3.0 / 0.92	3.9 / 1.2	4.9 / 1.49	5.8 / 1.78
Payload Capacity (lb / kg)	309 / 140	287 / 130	265 / 120	220 / 100	176 / 80	132 / 60
Rotation Accuracy (Twist)	+/- 0.6°	+/- 0.6°	+/- 0.6°	+/- 0.6°	+/- 0.6°	+/- 0.6°
Approximate Mast Weight (lb / kg)	265 / 120	353 / 160	419 / 190	485 / 220	540 / 245	639 / 290
Base 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

Additional heights and payload capacities available.



MAST AND TILT SYSTEMS FOR TRAILERS, TRUCKS, & SHELTERS

Heights up to 28 ft. | Payload Capacity up to 600 lb



Compact Elevation System (CES)

- Compact
  - Designed for transport while in a horizontal or vertical position
  - 50 second tilt time
  - Available space for a sensor payload up to 42" tall
- Minimized Mast twist – Full-length mast section keys / keyway
- Strong and Robust – Up to 600 lb. payload
  - No need for guying with field-proven rugged telescoping mast design
- Flexible Installation – Skid design allows for installation on a variety of platforms
  - Self managing Zig Zag cable management system is compact and consumes no payload space
- Integrated Controls
  - Fully integrated control system
  - PC control capable
    - CAN-bus J1939 / RS485 Serial

Fully Integrated Control System

Zig Zag e-Chain
Cable Management

CES Models	4.0m Stiletto AL	6.0m Stiletto AL	8.54m Stiletto AL
Stowed Dimensions (Lx W x H) (in. / mm)	54.0 x 53.1 x 21.8 / 1372 x 1349 x 555	65.8 x 53.1 x 21.8 / 1672 x 1349 x 555	77.7 x 53.1 x 21.8 / 1973 x 1349 x 555
Extended Height (ft. / m)	13.7 / 4.1	20.2 / 6.1	28.6 / 8.7
Payload Capacity (lb / kg)	400 / 181	400 / 181	390 / 176
Telescopic Mast Type	Aluminum Mechanical Screw-Drive with Patented Automatic Locks		
Survival Wind Speed (mph / km/h)	81 / 130	81 / 130	72 / 116
Deployment Wind Speed (mph / km/h)	40 / 65	40 / 65	36 / 58
Tilt Up / Mast Deploy / Mast Retract / Tilt Down / Total Cycle Time / Approximate – Payload Dependent	50 / 35 / 35 / 45 / 165 seconds	50 / 60 / 60 / 45 / 215 seconds	50 / 100 / 100 / 45 / 295 seconds
Rotation Accuracy (Twist)	+/-1°	+/-1°	+/-1°
Voltage (MIL-STD 1275)	28 VDC	28 VDC	28 VDC
*Typical Payload Sail Area (ft.² / m²)	17 / 1.58 CD=1.5	12 / 1.11 CD=1.5	11 / 1.02 CD=1.5
CES + Mast Weight (lb / kg)	1,040 / 472	1,089 / 494	1,139 / 517
Integrated System Control	CAN-bus J1939, RS485 Serial, PC Control Capable		
MIL-STD 810 Design	Yes	Yes	Yes
Optional Cable Management Available	Yes	Yes	Yes

CES Models	4.0m Stiletto AL	6.0m Stiletto AL
Stowed Dimensions (Lx W x H) (in. / mm)	54.0 x 53.1 x 21.8 /1372 x 1349 x 555	65.8 x 53.1 x 21.8 /1672 x 1349 x 555
Extended Height (ft. / m)	13.7 / 4.1	20.2 / 6.1
Payload Capacity (lb / kg)	600 / 272	550 / 249
Telescopic Mast Type	Aluminum Mechanical Screw-Drive with Patented Automatic Locks	
Survival Wind Speed (mph / km/h)	81 / 130	81 / 130
Deployment Wind Speed (mph / km/h)	40 / 65	40 / 65
Tilt Up / Mast Deploy / Mast Retract / Tilt Down / Total Cycle Time / Approximate – Payload Dependent	50 / 45 / 45 / 45 / 185 seconds	50 / 65 / 65 / 45 / 225 seconds
Rotation Accuracy (Twist)	+/-0.7°	+/-0.7°
Voltage (MIL-STD 1275)	28 VDC	28 VDC
*Typical Payload Sail Area (ft.² / m²)	17 / 1.58 CD=1.5	12 / 1.11 CD=1.5
CES + Mast Weight (lb / kg)	1,110 / 504	1,175 / 533
Integrated System Control	CAN-bus J1939, RS485 Serial, PC Control Capable	
MIL-STD 810 Design	Yes	Yes
Optional Cable Management Available	Yes	Yes

*Consult factory for larger sail area as payload and wind capacities may be reduced. Specifications subject to change.

Nycoil Cable Management

MAST AND TILT SYSTEMS FOR TRAILERS, TRUCKS, & SHELTERS

Heights up to 49.2 ft. | Payload Capacity up to 600 lb

Automatic Mast Tilt System (AMTS)

- Strong and Robust
  - Designed for transport while in horizontal or vertical positions (with mast stowed)
  - No need for guying with field-proven rugged telescoping mast design
  - 45 second tilt time
- Minimized mast twist
  - Full-length mast section keys and keyways
- Flexible Installation
  - Skid design allows for installation on a variety of platforms (truck, trailer, shelter)
  - Available with a variety of Will-Burt mechanical telescoping masts
  - Optional Zig Zag e-Chain or Nycoil cable management systems
- Integrated Controls
  - Fully integrated control system
  - PC control capable
  - CAN-bus J1939 / RS485 Serial

Integrated Control System

AMTS with Stiletto AL	4.0m Stiletto AL	6.0m Stiletto AL	8.5m Stiletto AL	10.0m Stiletto AL	15.0m Stiletto AL
Stowed Dimensions (Lx W x H) (in. / mm)	69.25 x 36.25 x 36.76 / 1758.9 x 920.7 x 933.8	69.25 x 36.25 x 36.76 / 1758.9 x 920.7 x 933.8	80.02 x 36.25 x 36.76 / 2032.5 x 920.7 x 933.8	88.68 x 36.25 x 36.76 / 2252.5 x 920.7 x 933.8	109.37 x 36.25 x 36.76 / 2777.4 x 920.7 x 933.8
Extended Height (ft. / m)	13.7 / 4.1	20.2 / 6.1	28.5 / 8.7	33.3 / 10.1	49.7 / 15.1
Payload Capacity (lb / kg)	400 / 181	400 / 181	400 / 181	400 / 181	350 / 158
Telescopic Mast Type	Electro-Mechanical				
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
Tilt Up / Mast Deploy / Mast Retract / Tilt Down / Total Cycle Time / Approximate – Payload Dependent	45 / 35 / 35 / 45 / 160 Seconds	45 / 60 / 60 / 45 / 210 Seconds	45 / 100 / 100 / 45 / 290 Seconds	45 / 100 / 100 / 45 / 290 Seconds	45 / 150 / 150 / 45 / 390
Rotation Accuracy (Twist)	+/-1°	+/-1°	+/-1°	+/-1°	+/-1°
Voltage (MIL-STD 1275)	28 VDC	28 VDC	28 VDC	28 VDC	28 VDC
*Typical Payload Sail Area ($ft.^2$ / m^2)	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 / .74 CD=1.5
AMTS + Mast Weight (lb / kg)	1075 / 489	1124 / 511	1174 / 534	1205 / 548	1315 / 598
Integrated System Control	CAN-bus J1939, RS485 Serial, PC Control Capable		CAN-bus J1939, RS485 Serial, PC Control Capable		
MIL-STD 810 Design	Yes	Yes	Yes	Yes	Yes
Optional Cable Management Available	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil

AMTS with Stiletto AL HD	4.0m Stiletto AL HD	6.0m Stiletto AL HD	8.5m Stiletto AL HD	10.0m Stiletto AL HD	12.0m Stiletto AL HD
Stowed Dimensions (Lx W x H) (in. / mm)	69.25 x 36.25 x 36.76 / 1758.9 x 920.7 x 933.8	69.25 x 36.25 x 36.76 / 1758.9 x 920.7 x 933.8	80.02 x 36.25 x 36.76 / 2032.5 x 920.7 x 933.8	88.68 x 36.25 x 36.76 / 2252.5 x 920.7 x 933.8	108.16 x 36.25 x 36.76 / 2747.3 x 920.7 x 933.8
Extended Height (ft. / m)	13.7 / 4.1	20.2 / 6.1	28.5 / 8.7	33.3 / 10.1	39.9 / 12.1
Payload Capacity (lb / kg)	600 / 272	600 / 272	600 / 272	600 / 272	600 / 272
Telescopic Mast Type	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical	Electro-Mechanical
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
Tilt Up / Mast Deploy / Mast Retract / Tilt Down / Total Cycle Time / Approximate – Payload Dependent	45 / 45 / 45 / 45 / 180 Seconds	45 / 65 / 65 / 45 / 220 Seconds	45 / 90 / 90 / 45 / 270 Seconds	45 / 105 / 105 / 45 / 300 Seconds	45 / 130 / 130 / 45 / 350 Seconds
Rotation Accuracy (Twist)	+/-7°	+/-7°	+/-7°	+/-7°	+/-7°
Voltage (MIL-STD 1275)	28 VDC	28 VDC	28 VDC	28 VDC	28 VDC
*Typical Payload Sail Area ($ft.^2$ / m^2)	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 / .74 CD=1.5
AMTS + Mast Weight (lb / kg)	1145 / 520	1210 / 550	1274 / 579	1300 / 591	1382 / 628
Integrated System Control	CAN-bus J1939, RS485 Serial, PC Control Capable		CAN-bus J1939, RS485 Serial, PC Control Capable		
MIL-STD 810 Design	Yes	Yes	Yes	Yes	Yes
Optional Cable Management Available	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil	Zig Zag e-Chain or Nycoil

*Consult factory for larger sail area as payload and wind capacities may be reduced. Specifications subject to change.

SURVEILLANCE / COMMUNICATIONS / COUNTER UAS

Steel Telescoping Tower
Integrated Trailer System

Telescoping Pneumatic Mast
Integrated Trailer System

Aluminum Telescoping Tower
Integrated Trailer System

WILL-BURT INTEGRATION & ELEVATION SYSTEMS

Extended Heights up to 130 ft. | Payload Capacity up to 1,200 lb

The Will-Burt Company, with the acquisition of Aluma Tower and Integrated Tower Systems (ITS) now offers integrated Telescoping Steel and Aluminum Tower Systems AND Telescoping Mast Systems - an elevation solution for every need! Will-Burt is a global leader in the design, 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 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
- National Security / Homeland Defense, Domestic & Foreign Military Initiatives; Tactical, Support Functions, and Counter UAS
- Border Security, Immigration and Customs Enforcement; 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

Will-Burt's innovative rapid response systems are manufactured to both civilian and military specifications and built to withstand many of the world's most demanding environments. Will-Burt controls every aspect of manufacture and assembly through an ISO 9001:2015 certified quality management system in all manufacturing locations. Will-Burt's engineering expertise and vertical integration capabilities allows for efficient COTS products and unique custom designs for the seamless installation of common or client-specific technologies, or pre-integrated with a Will-Burt or client-furnished Communications, Surveillance, or Counter UAS Solutions. Will-Burt's rapidly deployed systems are proven key components in establishing the flow of vital information from remote and urban areas of need.

COMMON USES

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- Lighting
- Disaster Recovery / Emergency Response
- Border Security
- Surveillance
- Remote Communications Site Security
- Sensor Applications
- Systems Testing
- Energy Exploration / Production Sites
- Telecommunications
- Temporary Cell Site
- Lightning Protection
- Counter UAS

CONTACT YOUR SALES REPRESENTATIVE TODAY

Contact Us
Complete a Contact Form

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

WILL-BURT INTEGRATION
ALUMA TOWER | ITS
7750 9th Street SW
Vero Beach, FL 32968 USA
Telephone: +1 772 567 3423 | +1 800 850 8535
Fax: +1 772 567 3432
Aluma Tower Email: info@alumatower.com
ITS 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 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 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

CLARK MASTS
A WILL-BURT COMPANY
18-20 Ringwood Road, Binstead,
Isle of Wight, PO33 3PA, England
Telephone: +44 (0) 1983 563691/567090
Fax: +44 (0) 1983 566643/811157
E-mail: sales@clarkmasts.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. 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.

Disclaimer: Dimensions and weights are for reference only and are subject to change. Please contact Will-Burt for current engineering specifications.

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ISO 9001:2015
INNOVATION ELEVATED®