



MMS20 – Modular Manual Mast System

Minimal Deflection and Twist Performance Manual Mast
Configurations for

Electro-Optical Surveillance, Radar and Communication Tasks



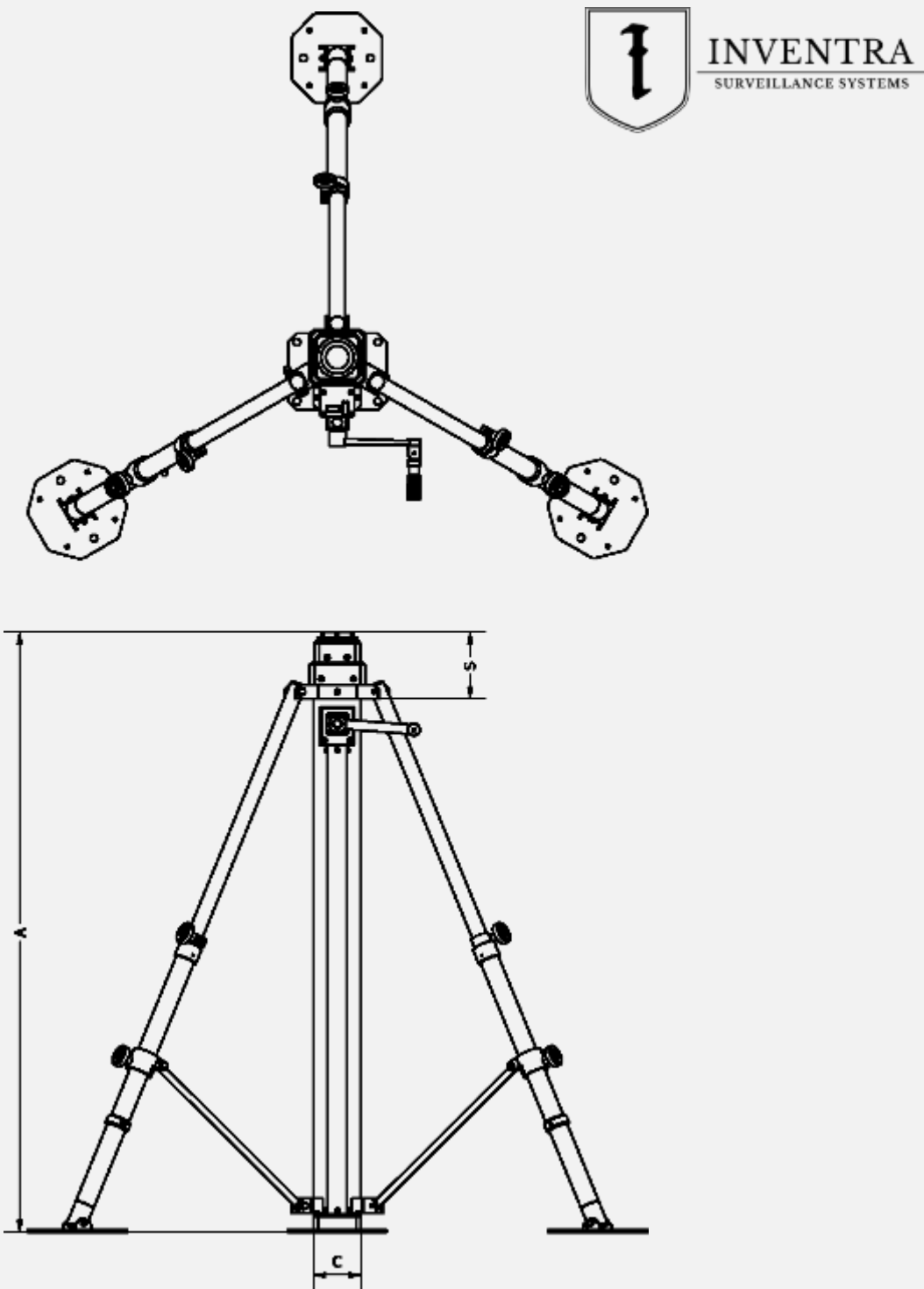
Distinctive Features

- ❖ **High-Performance Lightweight Actuator:** The MMS20 employs a patented hybrid actuator that combines trapezoidal screws and steel wires. This unique design results in a high-performance actuation mechanism that is both lightweight and robust, optimizing the mast's functionality while maintaining efficiency.
- ❖ **Synchronized Section Actuation:** The mast's sections are synchronized during actuation, ensuring smooth and coordinated movement. This feature contributes to the overall stability and reliability of the mast during deployment and retraction.

Main Features

- ❖ High performance, low weight patented hybrid actuator make use of trapezoidal screws and steel wires.
- ❖ Lightweight construction with high specific strength ratio materials
- ❖ Electromechanical and manual configurations are available.

Configuration Breakdown	Mast – Manual – Screw Driven – Product Class (10) – Retracted Height (mm) – Extended Height (mm) – Rated Payload Capacity (kg) – Product Specific Codes
Part Number	MMS20-X-X-X (Check Available Options Below)
Available Customizations	Retracted/Extended Height, Payload Capacity, Mechanical Interfaces
Combinable Platforms	PMD01 – Manual Pan-Tilt Unit



	Parameters		MMS20-1200-2500-58	MMS20-1700-6000-52	MMS20-2100-8000-40	MMS20-3300-14000-21
PERFORMANCE PARAMETERS	Retracted Height	mm	1200	1700	2100	3300
	Extended Height	mm	2500	6000	8000	14000
	Rated Payload Capacity	kg	58	52	40	21
	Weight	kg	32	53	65	85
	Actuating Mechanism	-	Manual Driven			
	Deployment Time	min	5	10	15	20
	External Paint	-	RAL 9005 MATTE Black Electrostatic Powder Coating			
DIMENSIONS	Retracted Height (A)	mm	1200	1700	2100	3300
	Section Width (C)	mm	140	180	180	180
	Number of Sections (S)	-	3	5	5	5
ACCESSORIES	Straight and Flat Stakes	-	4/8	8/8	12/8	16/8
	Wheeled Carry Bag	-	Available			
	Installation Guide	-	Available			
ENVIRONMENTAL QUALIFICATIONS	Wind Load	km/h	120 km/h			
	Temperature	°C	MIL-STD-810G, Method 502.5 Procedure II – Operational, -32°C			
			MIL-STD-810G, Method 501.5 Procedure II – Operational, +60°C			
			MIL-STD-810G, Method 501.5 Procedure I – Storage; +70°C			
			MIL-STD-810G, Method 502.5 Procedure I – Storage; -40°C			
	Vibration	-	MIL-STD-810G, Method 514.6 Procedure I Category 20, Figure 514.6C-3			
	Shock	-	MIL-STD-810G, Method 516.6 Procedure I – Functional Shock; 20g 11ms			
	Rain	-	MIL-STD-810G, Method 506.5 Procedure I – Rain and Blowing Rain, 1.7 mm/h			
	Humidity	-	MIL-STD-810G, Method 507.5 Procedure I; 90% Noncondensing			
	Dust and Sand	-	MIL-STD-810G, Method 510.5 Procedure I – Blowing Dusts			
MIL-STD-810G, Method 510.5 Procedure II – Blowing Sand						



MMS20 – Modular Manual Mast System at IDEF International Defense Industry Fair



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