



MES20 – Modular Electromechanical Mast System

High Performance / Weight Ratio Mast Unit

Wide Configurations Suitable for Electro-Optical Imaging, Radar and Communication Tasks



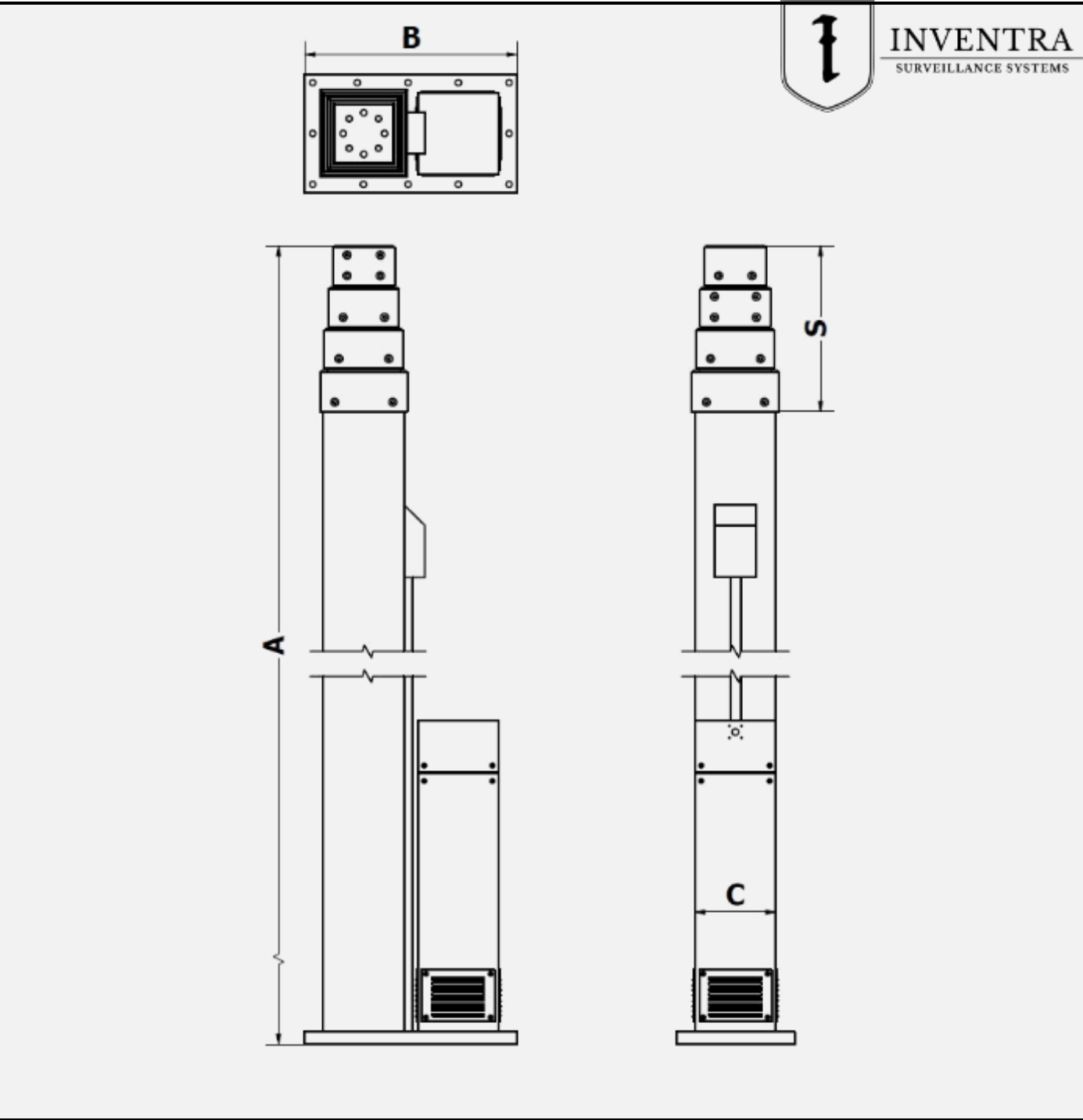
Distinctive Features

- ❖ **Patented Hybrid Drive Architecture:** The MES20 unit is equipped with an innovative and patented hybrid drive architecture centered around screw shafts. This unique design harnesses the power of screw shafts for the main actuation, setting it apart from conventional mast systems.
- ❖ **Synchronous Manual Mast Operation:** Unlike traditional mast systems, the MES20 offers a single mast design that can be opened synchronously using a single screw shaft. This simplifies the operation process, and the mast can be securely fixed at any point without relying on springs or complex mechanisms like flange locks.
- ❖ **Integrated High-Strength Design:** The MES20 unit is seamlessly integrated into a high-strength body structure, utilizing a square profile structure.

Main Features

- ❖ High performance with actuating based on hybrid screw shaft
- ❖ Configurable electromechanical or manual with crane arm
- ❖ MES20 unit is integrated into the high-strength body structure by using the square profile structure.

Configuration Breakdown	M (Mast) – E (lectromechanical – Actuating System (Screw Driven) – Product Class (20) – Retracted Height (mm) – Extended Height (mm) – Rated Payload Capacity (kg) – Product Specific Codes
Part Number	MES20-X-X-X (Check Available Options Below)
Available Customizations	Retracted/Extended Height, Payload Capacity, Communication Protocol, Mechanical Interfaces
Combinable Platforms	PEDXX – Electromechanical Positioner Family



Parameters			MES20-1200-2500-78	MES20-1700-6000-72	MES20-2100-8000-70	MES20-3300-14000-41
PERFORMANCE PARAMETERS	Retracted Height	mm	1200	1700	2100	3300
	Extended Height	mm	2500	6000	8000	14000
	Rated Payload Capacity	kg	78	72	70	41
	Weight	kg	32	53	65	85
	Opening Time	s	60	90	120	150
	Actuating Mechanism	-	Threaded Shaft			
	Voltage (MIL-STD 1275)	V	28VDC			
	Communication to the Unit	-	RS-485/RS422			
	Connector Type	-	MIL-DTL-38999			
	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
OPTIONS	Instant Height Information	-	Available			
	Control Remote for in Vehicle	-	Available			
	Cable Bundling Interface	-	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						



General Product Family