



INVENTRA
SURVEILLANCE SYSTEMS

PEG03 – Lightweight Goniometer

High-Resolution Digital Goniometer for

Military Surveillance, Target Acquisition, and Man-Portable Operations



Distinctive Features

- ❖ **High-Resolution Encoders:** 0.0056° (0.1 mil) resolution and 0.056° (1 mil) accuracy, ensuring superior alignment.
- ❖ **Selectable Payload Counterbalance:** Ensures flexibility in payloads up to 12 kg for varying missions.
- ❖ **Independent Fine Adjustment:** Mechanisms in pan and tilt for exact sighting and continuous stability.
- ❖ **Low Power Consumption:** Extends operational endurance, making it suitable for prolonged field use.
- ❖ **Digital Magnetic Compass Compatibility:** Enhances navigation and directional accuracy during operations

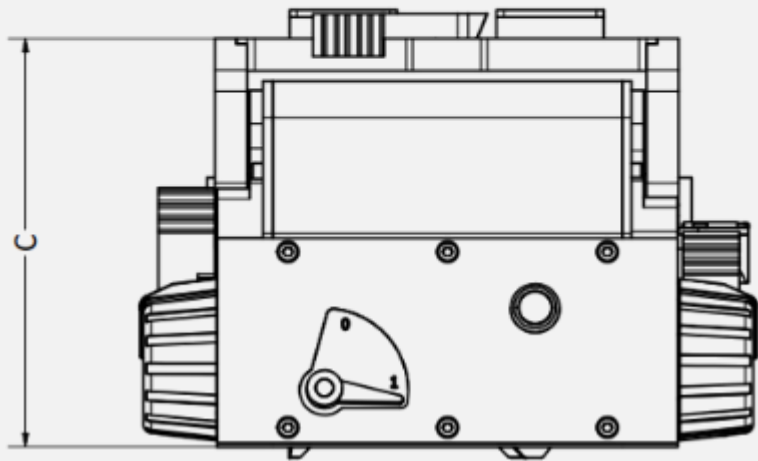
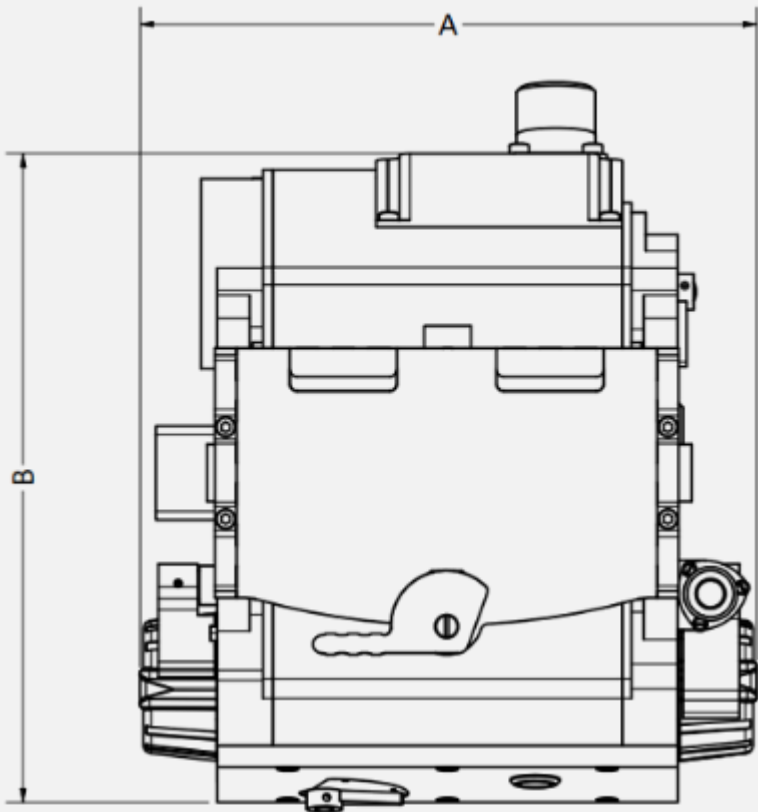
Main Features

- ❖ PEG03 Digital Goniometer ensures accurate line-of-sight measurements, perfect for mission-critical surveillance and target acquisition tasks.
- ❖ It features fine pan/tilt adjustment mechanisms and operates with high-resolution encoders for exceptional precision.
- ❖ Ideal for man-portable deployments, its compact design suits versatile field needs.

Configuration Breakdown	Positioner – <u>E</u> lectromechanical – <u>G</u> oniometer –01 (Product Class) – Payload Capacity (kg) – Resolution (bit)
Part Number	PEG03-12-16
Available Customizations	Mechanical Interfaces
Combinable Platforms	TML10 – Ultra Lightweight Tripod



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	Parameters / Configurations		PEG03-12
GENERAL PARAMETERS	Payload Capacity	kg	12 kg
	Pan Axis Range		n x 360°
	Tilt Axis Range		±45°
	Axis Resolution	°	0.0056° (0.1 mil) on Both Axis
	Accuracy	°	0.056° (1 mil) on Both Axis
	Weight	kg	<3.0 kg
	Independent Braking	-	Available on Both Axis
	Fine Adjustment Range	°	±0.8438° (15mil) on Both Axis
DIMENSIONS	Width (A)	mm	173
	Depth (B)	mm	183
	Height (C)	mm	115
ENVIRONMENTAL QUALIFICATIONS	Wind Load	km/h	120
	IP Rating	-	IP65
	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
	Low Pressure	-	MIL-STD-810G, Method 500.5 Procedure I – Storage 37,000ft
			MIL-STD-810G, Method 500.5 Procedure I – Operational 10500ft
	Vibration	-	MIL-STD-810G, Method 514.6 Procedure I Category 20, Figure 514.6C-3
	Shock	-	MIL-STD-810G, Method 516.6 Functional Shock, 20G 11ms, XYZ Axis, 3 Positive and 3 Negative Each Axis
	Humidity	-	MIL-STD-810G, Method 507.5 Procedure I – 90% Noncondensing @60°C, 11 Days
	Rain	-	MIL-STD-810G, Method 506.5 Procedure II
	Salt Fog	-	MIL-STD-810G, Method 509.5, 2 Cycles of 24 Hours
	Dust and Sand	-	MIL-STD-810G, Method 510.5, Procedure I and Procedure II