



## Low Profile Yoke Positioners

The low profile yoke positioner is a lightweight, low profile positioner initially designed to remotely operate thermal and/or visible cameras mounted on vehicles to accommodate driver vision enhancement (DVE) programs.

Other sensors, laser pointers/illuminators, etc. can also be mounted and delayed. Simple user interface and rapid "return to home" automatic home positioning provides the quick response a driver requires in emergency situations.

A simple base mount makes deployment or relocation fast and easy. The low profile yoke positioner is highly durable yet extremely reliable in even the most harsh environments. It has been certified to withstand pressure change, extreme temperatures, exposure to solar radiation, humidity, dust and sand penetration, military ground shock and vibration levels and submission.

### AVAILABLE FEATURES

- Lightweight and compact for mobile, inverted or stationary use.
- Operate remotely with ICD or optional joystick controller (CM575)
- Easily mount and remotely operate cameras, illuminators, and other sensors
- Rapid automatic "return to home" function
- Fast deployment or relocation
- Highly durable, extremely reliable in harsh environments
- Certified to military environmental test criteria
- Mil-Spec Connectors
- Multiple sensor mounts available
- Tough metal housing and gearing
- Marine configuration (IP-67)
- Thermostatically controlled heaters standard

### SENSOR INTEGRATION

- Multi-Spectrum Cameras (Visible/NIR/SWIR)
- Thermal Imagers (LWIR)
- IR and Visible Illuminators
- Laser Range Finders

# LOW PROFILE YOKE

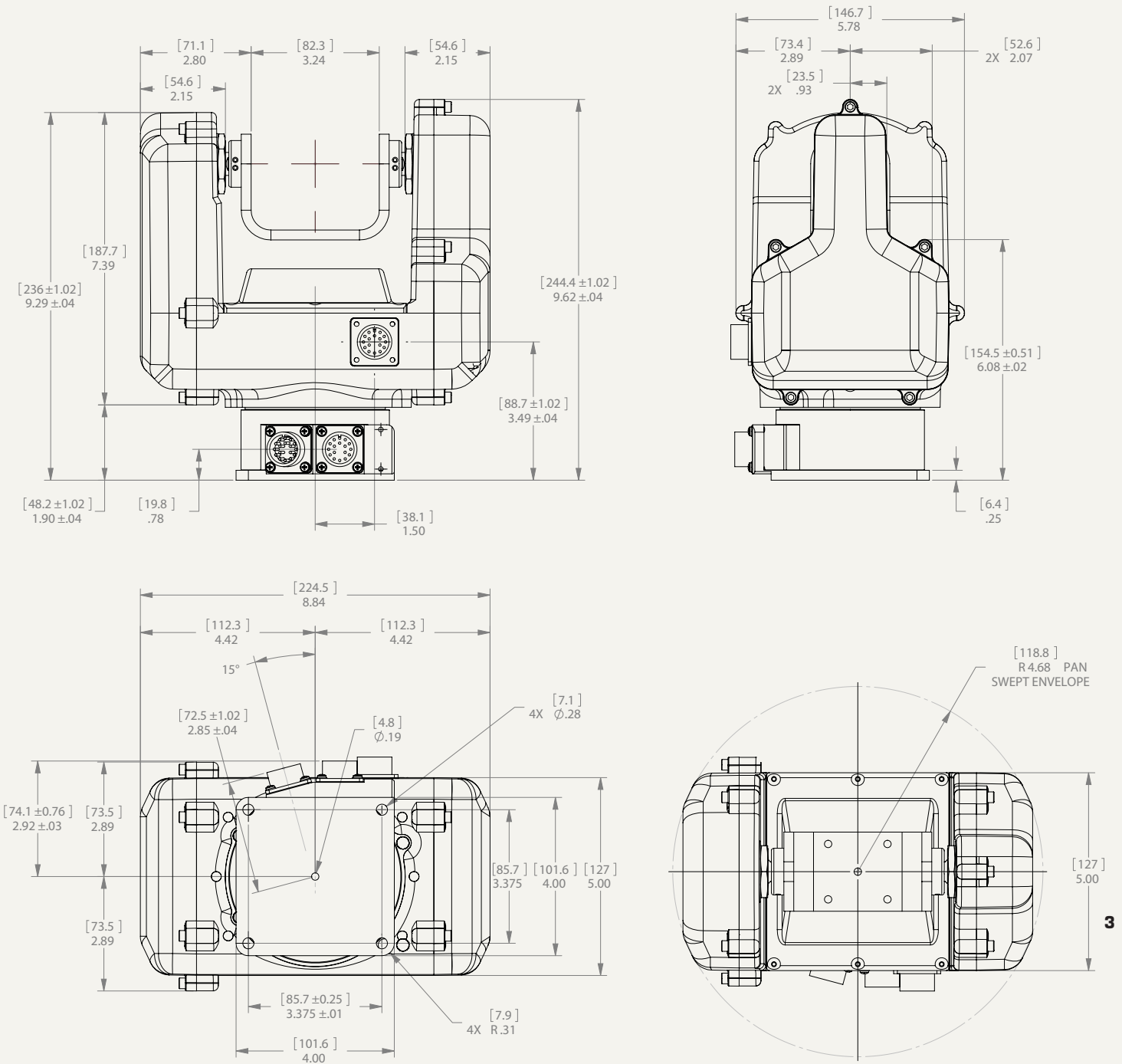
## Specifications

<b>Load Capacity</b>	2.5 lb ft
<b>Operating Voltage Range</b>	16 – 32 VDC (24VDC nominal)
<b>Total power</b>	90 Watts (max) (motor / heater shared current) Standby power: < 0.200A at 24VDC (no heater current)
<b>Pan-Axis Range</b>	180° (±90°)
<b>Pan-Axis Speed</b> (deg/sec)	35, centering @ 45
<b>Tilt-Axis Range</b>	55° (+30°/-25°)
<b>Tilt Axis Speed</b> (deg/sec)	35, centering @ 45
<b>Internal Heater</b>	Included standard, Thermostatically controlled (32° on/35° off)
<b>Operating Temperature</b>	-15°C to 55°C (without heater)      -30°C to 55°C (with heater) 5°F to 131°F (without heater)      -22°F to 131°F (with heater)
<b>Feedback</b>	Magnetic Encoders (0.044° readout)
<b>Repeatability</b>	0.25°
<b>Duty Cycle</b>	20%
<b>Motor Type/Drive</b>	DC Brush motor drives
<b>Communication to Pan &amp; Tilt</b>	RS422
<b>Communication to Sensors</b>	RS232
<b>Connector Specifications</b>	Mil-Spec grade used on all connectors
<b>Load Connector Interfaces</b>	1 Mil Spec on tilt table for load control, video and pass through connections 2 Mil Spec on base for power, control, video and pass through connections
<b>Materials</b>	Housing 6061-T6 Aluminum, stainless steel hardware, permanently sealed radial ball bearings.
<b>Finish/Color</b>	White powder coat paint over alodined chromate for corrosion resistance standard. Other colors available upon request
<b>Weight</b>	14 lbs
<b>Dimensions</b>	See page 3

## Environmental Capabilities

<b>Operational Altitude</b>	Sea Level to 15,000ft
<b>Ambient Pressure Change</b>	15,000ft to 40,000ft for 15 sec or less
<b>Operational Temperatures</b>	-37°C to 49°C (-35°F to 120°F)
<b>Rapid Temperature Range</b>	From 71°C to -46°C (159°F to -51°F) and from -46°C to 71°C (-51°F to 159°F)
<b>Solar Radiation</b>	Up to 1,120 Watts/m <sup>2</sup>
<b>Humidity, Sand and Dust</b>	Operate in up to 88%
<b>Transportation and Functional Vibration</b>	Military Ground Levels
<b>Shock Threshold</b>	Functional, Weapon Firing, Transportation, Crash Safety and Ballistic

## STANDARD HOUSING (CRADLE MOUNT)



Dimensions are in Inches [mm]

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## MOUNTING OPTIONS



**Cradle Mount**



**Clamp Mount**



## KEY FEATURES – CM575 CONTROLLER

Controller Module, Joystick Control, with Relay Activation.

On/Off Switch Provides Power to the Pan/Tilt Power Relay

Joystick with "Deadman Switch" Button

Separate Return to Home Button

Set Center Position Capability

8.99"L x 4.76"W x 2.04"H (228 x 121 x 52mm)

Communication format: RS-422

Cables optional



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