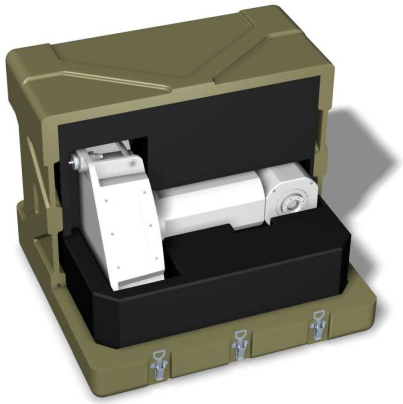
Two Axis Sensor Platform Series USP-2x15

Features

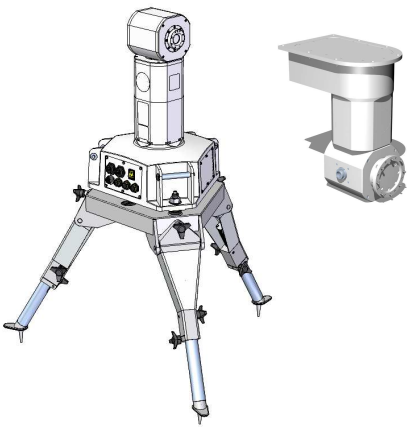
- Elevation over Azimuth Universal Sensor Pedestal with anti-backlash gears
- For stationary or mobile application
- Adaptable to different and multiple sensors
- Prepared for integrated with GRIP Video Processor for automatic target tracking
- Microprocessor controlled servo electronic, with fast serial interface (Ethernet)
- Designed to operate in harsh environment

Description



The elevation over azimuth Universal Sensor Platform Series USP-2x15 is driven by brushless servo motors, backlash free high reduction gear. Position is measured by direct mounted high resolution absolute encoder. The drive generates high torque, smooth rates and can tolerate load unbalances. Slip rings can be optional added for continuous rotation in the outer axis.
There are flanges on each side of the elevation axis drive assembly. Payloads mount directly on the flanges or on optional universal mounting plates.
All axes are sealed. Materials are corrosion resistant and/or surface treated to withstand harsh land based, shipboard or aircraft environmental conditions.
The base casting has three attachment points with leveling provision. It houses the platform control unit interfacing with the operator control hardware and touch screen monitor.

Options



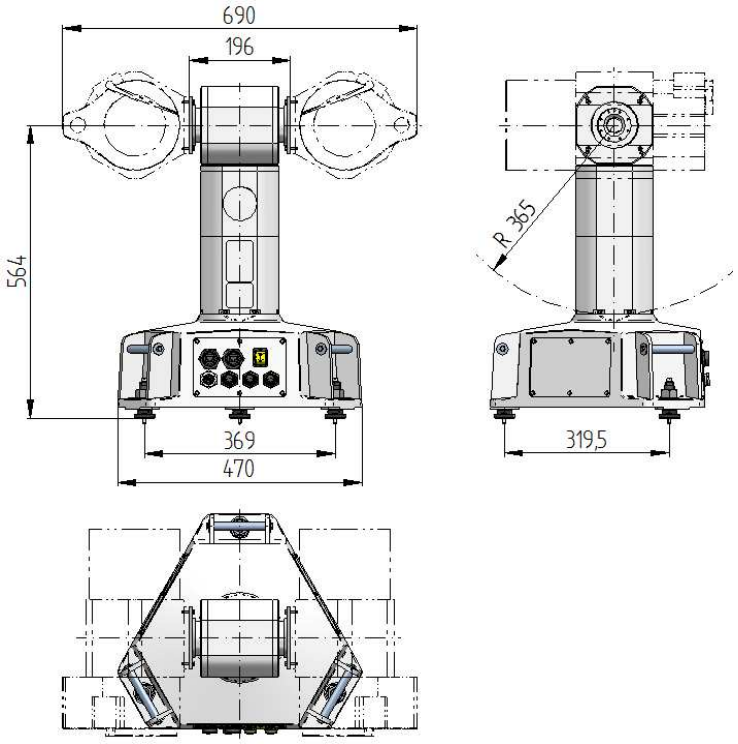
- Integration of Video Target Tracking System interfacing tracking camera and/or thermal imaging camera
- Base housing suited for installation on different supporting elements such as boats, helicopters, vehicle, masts etc.
- Inertial stabilization with integrated GPS positioning for mobile application
- Tracking cameras with zoom lens in environmental housing with universal interface plate
- Thermal imaging camera with zoom lens with universal interface plate

Series USP-2x15

Specification Summary

General Configuration	Payload nominal	10 kg nominal (20 kg peak), balanced around the elevation axis	
	Power	48VDC +/-15%,	
	Weight	28 kg, in transport case <36kg	
Performance		**Azimuth**	**Elevation**
	Angular freedom (deg)	±185deg	-10deg to +85deg
	optional	unlimited in AZ by adding slip rings	
	Position resolution	1 arcsec	1 arcsec
	Position repeatability	±2 arcsec	±2 arcsec
	Position accuracy	±5 arcsec	±5 arcsec
	Rate range in deg/s	±0.005 to 60	±0.005 to 60
	Acceleration (deg/s^2)	±45	±45
	Wobble (sec) 3σ	<4	<4
	Perpendicularity	better than ±10 arcsec	
	LOS pointing accuracy	better than 14 arcsec	
Environment	Operating Temperature	-20°C to +45°C	
	Humidity	Mount: Splash-proof	
	Altitude	up to 4'000 m above sea level	
	Wind load	not exceeding 100Nm in either axis	
Command	Ethernet, at a baud rate of 115200, via a compatible input device or host computer.		

Outline Dimensions



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