

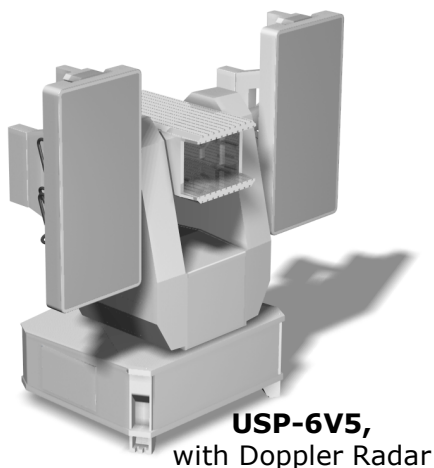
Two Axis Sensor Platform Series USP-6V5

Features

- Elevation over Azimuth universal sensor platform
- Direct drive brushless torquer
- Can be configured for stationary or mobile application
- Adapts different and multiple sensors
- Microprocessor controlled servo electronic, with fast serial interface (Ethernet)
- Platform controller and power electronic incorporate in the mount
- Sealed; designed to operate in harsh environment



Description



The large Universal Sensor Platform Series USP-6V5 is designed and optimized for long focal length optical system and spacious heavy loads. Direct drive brushless servo motors assuring very smooth rotation over the entire dynamic range. Position is measured by direct mounted high resolution absolute encoder. Slip ring capsule and rotary joints can be added as option for continuous rotation in the outer axis.

The USP-6V5 is an Elevation over Azimuth Sensor Platform. There is a central universal sensor platform with T-slots. Flanges or shaft extensions on each side of the elevation axis drive assembly offer provisions for outboard sensor mounting. Amplifier, servo controller and platform control are mounted in the pedestal. Communication and control are via Ethernet cable. Camera signals are digitized prior to passing slip rings or rotary joints for application with continuous rotation in the outer azimuth axis.

The pedestal is sealed. It can be purged with inert dry gas. Desiccant capsule maintain and monitor the humidity inside the pedestal. Materials are corrosion resistant and/or surface treated to withstand harsh land based, shipboard or aircraft environmental conditions.

The base plate has three attachment points with leveling provision.

Options

- Integrated Video Target Tracking Electronic
- Inertial stabilization with integrated GPS positioning
- Incorporation of GPS information
- Electronic level monitoring of the azimuth axis

Series USP-6V5

Specification Summary

General Configuration	Payload central platform	100 kg, balanced around the elevation axis,
		nominal inertia <16kgm ² ;
	Outboard load	150 kg on each side

Performance

	<u>Azimuth</u>	<u>Elevation</u>
Angular freedom (deg) optional	±185deg unlimited in AZ by adding slip rings and rotary joints	-30deg to +210de
Position resolution	1 arcsec	1 arcsec
Position repeatability	±3 arcsec	±3 arcsec
Position accuracy	±6 arcsec	±6 arcsec
Rate @ cont. torque	±100 deg/s	±100 deg/s
Acceleration, loaded	100 deg/s ²	100 deg/s ²
Torque continuous	700 Nm	400 Nm
Wobble (sec)	<±5	<±2
Perpendicularity	better than ±15 arcsec	

Environment

Operating Temperature	-20°C to +45°C
Humidity	Mount: Splash-proof
Altitude	up to 4'000 m above sea level

Command

Ethernet or RS-422 at a baud rate of 115200, via a compatible input device or host computer.

Supply

400 VAC, 50/60Hz 3 phase, N and earth.

Outline Dimensions

