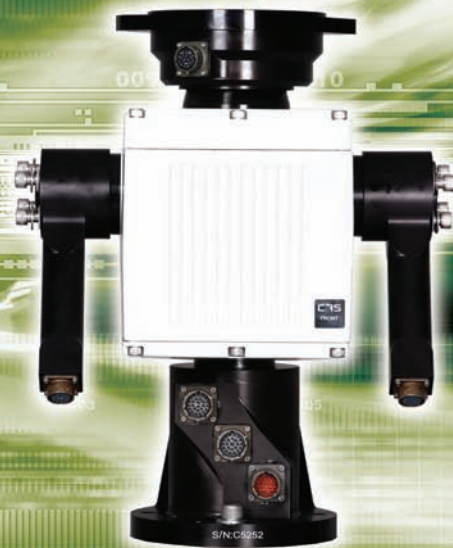


CARBIDE-75™



PRODUCT OVERVIEW

PAN TILT POSITIONER FOR MULTI-SENSOR PAYLOADS

The Carbide-75 Numeric Positioner is a high-resolution pan and tilt for driving long-range optics. The Carbide-75's repeatability is essential to successful maritime and land based operations. In addition to the side saddle mount, RVision's unique pan through shaft allows for configurations of sensors not typically seen in the surveillance marketplace. The Carbide-75 can carry a total payload of 75 lbs. across the pan axis (includes both sides of the unit) and can carry an additional 50 lbs on top of the unit.

The Carbide-75 is used for unique configurations of sensors such as Laser Range Finders, Xenon Spotlights, Defensive Acoustic Arrays, Laser Designators, and of course long range CCD and Thermal Camera systems. A versatile internal wiring harness and multiple Mil-Spec ports located at the base of the Carbide-75 allow for unlimited configurations without exposing cables to unnecessary wear and tear.

Configurations of multiple sensors utilized in this fashion with the Carbide-75 are termed the COLE configuration. A typical COLE solution would feature a 100-500mm thermal imager on one side of the positioner with a low light 17-374mm Color CCD camera mounted in a pressurized housing on the opposite side. A ground based surveillance radar is often mounted on top of the pan tilt while a Laser Range Finder and Laser Designator are mounted on top of the pressurized color camera housing. Bore-sight adjustment mechanisms are integrated for highly accurate alignment of all sensors. The end solution allows the radar to move independently and acquire targets. That information is sent to the Carbide 75 which in turn tracks those targets autonomously. When the Carbide 75 has locked on both color and thermal imagery is sent back to command and control along with range and the target is painted with light only visible to individuals wearing night vision goggles.

The Carbide-75 is a work horse for the surveillance industry matched only by it's big brother, the Carbide-150.

KEY FEATURES

- 75 LB PAYLOAD
- MARINE-RATED
- PAN AND TILT AXLES MADE FROM TYPE 7075 T6 ALUMINUM ALLOY
- ALL STAINLESS STEEL FASTENERS
- HEAVY DUTY STEPPER MOTORS
- ENCODERS ARE INTEGRATED ELECTRO-OPTIC SENSORS
- LOW POWER CONSUMPTION
- NUMERIC POSITIONING CONTROLS FOR "SLEW TO QUEUE" OPERATIONS
- RS232 OR RS422 SERIAL COMMUNICATIONS
- OPTIONS:
 - CUSTOM AND VENDOR SPECIFIC PROTOCOLS
 - IP ADDRESSABLE

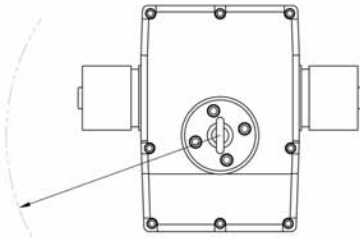
RVision, Inc.
IMAGING SYSTEMS FOR SIGHT

619.233.1403 : www.rvisionusa.com

CARBIDE-75™

TECHNICAL SPECIFICATIONS

- PAN ANGLE RANGE0° to 365°
- PAN ANGLE MINIMUM MOVEMENT0.004°
- PAN ANGLE SPEED0.2° to 25°/s
- PAN ANGLE ENCODER FEEDBACK0° to 365°
- PAN ANGLE FEEDBACK ACCURACY0.004°
- PAN TORQUE30 newton meters
- TILT ANGLE RANGE0° to 90°
- TILT ANGLE MINIMUM MOVEMENT.....0.004°
- TILT ANGLE SPEED0.2°/s to 25°/s
- TILT ANGLE ENCODER FEEDBACK0° to 190°
- TILT ANGLE FEEDBACK ACCURACY0.004°
- TILT TORQUE30 newton meters
- VIDEO COAX4 Analog video signals, NTSC or PAL
- OPERATIONAL TEMPERATURE RANGE0°C to +70°C
- STORAGE TEMPERATURE RANGE-20°C to +85°C
- OPERATIONAL HUMIDITY RANGE..0 to 100% non-condensing
- CARBIDE HOUSINGTiger Drylac Powder Coat, 38/60031
- OPERATING VOLTAGE22-26vdc
- OPERATING POWER0.5 amps, 2 amps peak
- WEIGHT48 lbs



MINIMUM PAN CLEARANCE
WILL DEPEND ON PAYLOADS
AND TILT ANGLES

