

# Model PTU-D48

## Outdoor Miniature Pan/Tilt Unit

Rugged, Compact, Precise

### Fully-Integrated, Computer-Controlled Positioning

The PTU-D48 is designed for high-speed, accurate positioning of camera, laser, antenna, or other payloads up to 15 pounds. It is a fully-integrated design with single weatherized connection for power, control, and camera or other payload signals. Its compact size and light weight make it ideal for mast/pole mount and vehicle applications.

### Key features include:

- Positions any payload: IP cameras, antennas, lasers
- Smooth, repeatable motion provides steady images in windy environments
- Rigid worm gear design (no belts/pulleys)
- Solid and vibration-tolerant for vehicle-mounted applications
- High holding torque (no sag when powered off)
- Payload capacity (25 lb top-mount; 12 lb side-mount)
- Wide range of speeds (< 0.006°/sec to 100°/sec)
- Integrated controller - no other electronics box required
- Extremely precise positioning (0.006°) allows translating object positions to map coordinates accurately
- Flexible payload mounting (single/dual-side, top, top+side)
- Precise control of position, speed & acceleration
- Simple control from host computer via RS-232/-485
- Fully sealed for outdoor/marine applications (IP67)
- CE Mark, FCC, RoHS certification

### Options

- Geo-Pointing Module: powerful command set supports real-time detection and tracking applications including absolute angle, relative angle, velocity control, geo-pointing (lat/lon); continuous velocity control
- Ethernet/IP Interface Module
- Payload pass-through wiring



### Applications

- Perimeter surveillance
- Automated antenna pointing
- Harbor and port monitoring
- Laser ranging systems
- Video detection and tracking
- Industrial automation
- Vehicle surveillance systems
- Law enforcement
- Force protection



Surveillance



Military



Remote Sensing



Robotics



Maritime



Antennas



Motion Control Systems

# Model PTU-D48

## Technical Specifications

### Pan/Tilt Performance

	Side Mount	Top Mount
Max. Payload	15 lb	10 lb
Max. Pan Speed <sup>1</sup>	100°/second	100°/second
Max Tilt Speed	50°/second	50°/second
Resolution - Pan	0.006°	0.006°
Resolution - Tilt	0.003°	0.003°

<sup>1</sup> Unloaded. Maximum speed may depend on exact payload configuration and input voltage.

### Pan/Tilt Features

Tilt Range	+30° to -90° from level (120° range)
Pan Range	+/- 168° (+/-220° range) extended mode
Duty Cycle	Up to 100% duty cycle
Acceleration/Deceleration	On-the-fly speed and position changes

### Power Requirements

Input Voltage	Unregulated 12-30 VDC (fastest performance & torque @ 30 VDC)
Power Consumption (Measured at 30 VDC)	48 W continuous peak (high power mode) 30 W continuous peak (default regular power mode) 7.5 W average (holding power off mode)

### Connections & Communications

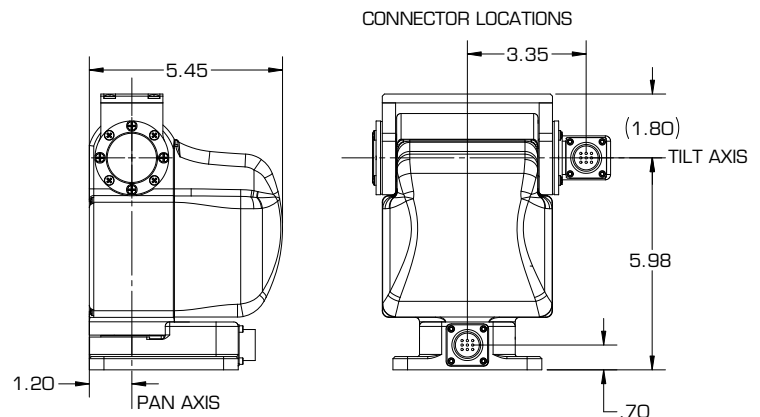
Base Connectors	PRIMARY: AMP (MIL-C-26482). Includes: PTU-Power (3c) - 9-30 VDC + shield PTU-Control (7c) - RS-232 (3c) and RS-485 (4c)
Payload Signal Pass-Through (Option)	Power (2c): 30 VDC max. @ 3 A Video-1 (2c): NTSC/PAL/RS-170 Video-2 (2c): NTSC/PAL/RS-170 Other (3c): 30 VDC max. @ 1 A Connector: AMP (MIL-C-26482)
Computer Controls	RS-232 standard; RS-485 with networking
Control Protocols	DP (ASCII, Binary)

### Mechanical

Weight	8.75 lb (9.25 lb with top bracket)
Dimensions	7.78"(h) x 5.35"(w) x 5.43"(d) (no payload connector)
Payload Mounting	Side and/or top
PTU Mounting	Pedestal
Material	Machined aluminum

### Packaging & Environmental

Standards	Designed to IP67
Operating Temperature	-30°C to 70°C
Humidity	100% relative humidity, non-condensing
Ice (Operating)	Sustained operation with 0.25" ice buildup
Dust/Sand (Operating)	Sustained exposure to blowing dust/sand
Wind/Rain/Fog	IP67
Salt Spray	Sustained operation in salt spray environments
Color/Finish	Black anodized
EMI	CE Mark and FCC Part 15, Subpart B, Class A
Certifications	RoHS Compliant



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