

## D1

*Lightweight High Performance Motorised Pan & Tilt Head for General Purpose Surveillance Applications*



### Main Advantages & Features

- Versatile Pan and Tilt unit for a wide range of payload configurations in both fixed and mobile applications
- Man portable
- Rugged design
- Lightweight and compact
- Environmentally sealed (IP67)
- High accuracy
- RS422 or 100Base-T Ethernet communications
- Precise speed control
- High axis speed (50°/s)
- Highly resistant to shock and vibration
- Quick release payload interface
- Designed to MIL STD 810F

### Applications

- Fixed and mobile border surveillance
- Tripod mounted observation posts
- Customs and border police
- Industrial security
- Security & perimeter defence
- Communications antenna alignment



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### Outline Specification

Weight (approx)*	4.6kg (10.1lbs)
Payload capacity	
-Light payload version	
-Top mounted payload	5kg
-Pannier mounted payload	9kg
-Heavy payload version	
-Top mounted payload	14kg
-Pannier mounted payload	25kg
Elevation (Tilt) range	±45°
Azimuth (Pan) range	
-Non slipping versions	±182°
-Slipping versions	Continuous 360°
Minimum velocity	0.0056°/s
Maximum velocity	
-Light payload version	50°/s
-Heavy payload version	10°/s
Positional accuracy	0.056° 1σ
Operating voltage	24Vdc
Safety cut-out	Yes
Electrical connection	38999 type
Connectivity	-RS422, -100Base-T Ethernet -Analogue Video
Environmentally sealed	Yes (IP67)
Operating temperature	-32°C to 71°C

### Dimensions (approx)

D1            247mm H x 136mm W x 225mm D

### Accessories

- PC based control software and cables
- Hardware controller with monitor and digital video recorder
- Tripod mount adaptor
- Matching tripod
- Quick release payload adaptors

The D1 is a lightweight high performance family of motorised pan and tilt heads developed for general purpose surveillance applications.

Based around a rugged and compact casing, the lightweight D1 is designed to support payloads such as thermal imagers, day / night cameras and combination EO sensor systems. Depending on application requirements, D1 supports a choice of 2 payload capacities, 5kg or up to 14kg with the higher torque variant.

D1 pan and tilt models are available in both slipping and non slip ring configurations for cost sensitive applications and all can be tripod mounted for rapid deployment in homeland security and border surveillance tasks. All models feature an integral levelling bubble.

Payloads can be either top mounted using Instro's quick release wedge interface or installed side in a pannier configuration using a suitable dual payload mounting bracket.

Optimised cable connection eliminates the possibility of cable wrap up by including the input connector into the azimuth mounting base.

Internal cable connections pass power and communications through to a connector on the main body of the unit to enable easy connection to the payload.

### Options

- Maritime environmental protection
- Customer specific mounting brackets
- Customer specific paint colour



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