



## **MP-DAYVIEW<sup>PTZ</sup>** **MP-NIGHTVIEW<sup>PTZ</sup>** **Stabilized Payload** **Cameras**

As part of a comprehensive line of miniature UAV autopilot products, MicroPilot introduces its Stabilized Payload Camera, a high performance observation system featuring interchangeable thermal imaging or daylight channel cameras fully integrated with MicroPilot's MP2028<sup>g</sup> or MP2128<sup>g</sup> autopilot. This system provides high resolu-

tion and sensitivity, is light weight with built-in testing capability and easily interfaces with the UAV. The cameras operate on a single power source and consume only 3 watts. Exceptionally reliable, this observation system is designed for UAV operators working with the many challenges of image gathering under varied light conditions.

### *exceptional imaging performance*

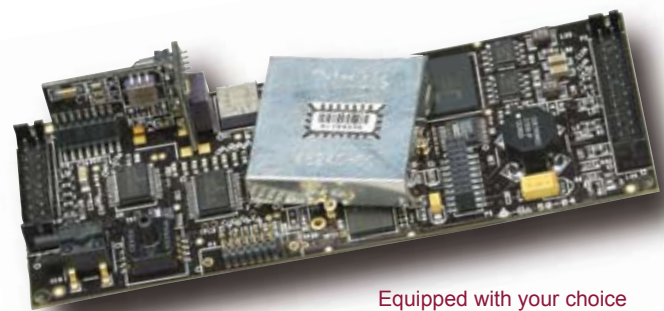
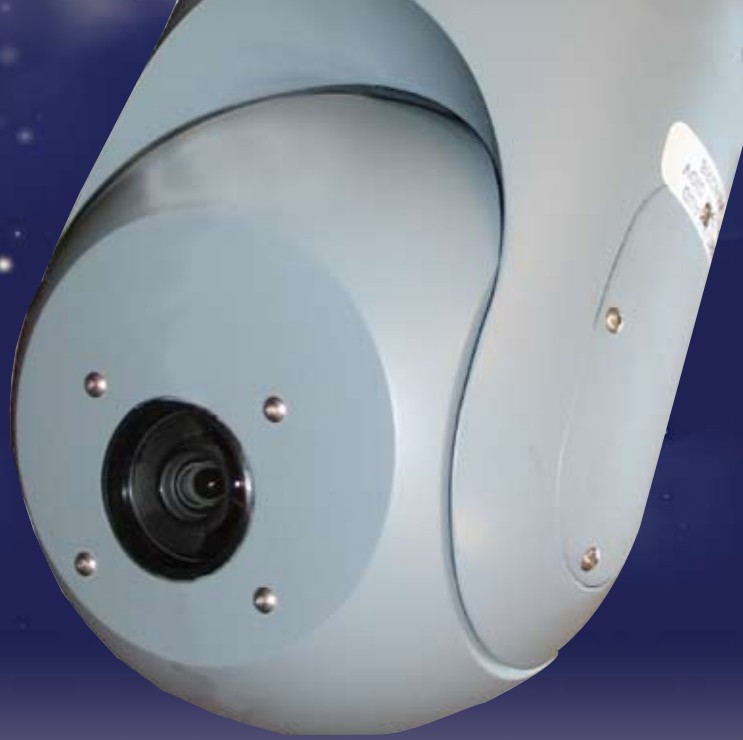
- A two axis gimbal stabilizes the video camera in yaw/roll and elevation providing a stable image even at high zoom factors.
- A high resolution color CCD camera capable of 800K pixels, 25x optical zoom and 1.0VP-P composite video output give you exceptional day imaging capability with the MP-DAYVIEW<sup>PTZ</sup>. A FLIR sensor operating in the 8-12 $\mu$ m spectral range, 50mm germanium lens, 320x240 resolution, sensitivity greater than 85 degrees mK and a frame rate of 30 Hz in the MP-NIGHTVIEW<sup>PTZ</sup> give you crisp image results under night conditions.

### *simple integration*

- The MP-DAY/NIGHTVIEW<sup>PTZ</sup>'s light weight (camera and autopilot less than 1kg), compact size and low power consumption make it ideal for installing in a variety of miniature UAV systems.
- With RS-232/PWM communication capability, this product easily integrates with your MP2028<sup>g</sup> or MP2128<sup>g</sup>- equipped UAV. The stabilized gimbal assembly is mounted through a mechanical interface that can be configured to suit specific UAV requirements.

### *maximum flexibility*

- The MP-DAYVIEW<sup>PTZ</sup> and MP-NIGHTVIEW<sup>PTZ</sup> cameras are field interchangeable for maximum flexibility.



Equipped with your choice of MicroPilot's MP2028<sup>g</sup> or MP2128<sup>g</sup> autopilot, the cameras integrate superior imaging technology with UAV control in a convenient, intuitive package.

# specifications - dayview

## physical characteristics

- weight: less than 0.9kg
- dimensions: (Ø)110mm x (H)210mm
- environmental conditions:
  - temperature -23°C to +50°
  - humidity up to 95%
- power
  - voltage 12VDC
  - power consumption 3 watt (nominal)

## controls

- payload on/off
- BIT
- roll and elevation (using a joystick)
- high/low rate
- zoom

## stabilized gimbals

- 2 gimbal system
- field of regard from Nadir:
  - pitch: -120° to 110°
  - roll: +/-170°
- angular velocity up to 60°/sec in pitch and up to 60°/sec in roll
- stabilization level better than 400  $\mu$ rad RMS

## daylight channel

- high resolution color CCD, 800K pixels camera
- automatic AGC
- 25x optical zoom lens
- 1.0VP-P composite, 75 $\Omega$  video output
- NTSC or PAL video standard
- >49Db S/N ratio



**a world leader  
in miniature  
UAV autopilots**

**350 clients in 49 countries**

# specifications - nightview

## physical characteristics

- weight: less than 1kg
- dimensions: (Ø)110mm x (H)210mm
- environmental conditions:
  - temperature -25°C to +50°
  - humidity up to 95%
- power
  - voltage 11-13.5 vdc
  - power consumption 3 watt (nominal)

## controls

- payload on/off
- BIT
- roll and elevation (using a joystick)
- high/low rate
- zoom
- focus
- gain/level, auto/manual
- FLIR NUC
- FLIR polarity
- manual gain
- manual level

## stabilized gimbals

- 2 gimbal system
- field of regard from Nadir:
  - elevation: +217° to -45°
  - roll: +/-170°
- angular velocity up to 60°/sec in azimuth and up to 60°/sec in elevation
- stabilization level better than 400  $\mu$ rad RMS

## FLIR option

- 50 mm germanium lens
- 2 FOV(x2 digital) - narrow FOV
- WFOV
- sensor operating in spectral range of 8-12  $\mu$ m
- unilayer amorphous silicon micro-bolometer, 320 x 240 detector, sensitivity <85°mK, frame rate 30 Hz
- RS-170 or CCIR video output
- electronics module
  - proximity card
  - digital signal processing card
  - bad pixels replacement



**We are  $\mu$ p.**

*When test flights are launched at MicroPilot's 40-acre flight test facility, staff announce the occasion with the words, "We are up." To everyone in the on-site office, this is not only notification of a test flight in progress but a celebration of the continued success of MicroPilot's products. With more than 15 developers, a ground-breaking research and development philosophy, and a reputation for quality, MicroPilot is unparalleled in the growing miniature UAV autopilot industry. We are up!*