alhua TECHNOLOGY

2 MP HDCVI MotionEye Camera
2 MP HDCVI PIR Camera

HDCVI

- Maximum 1080p at 30 fps Resolution
- HD and SD Switchable Output
- 2.8 mm Fixed Lens
- 12 m x 12 m (39 ft x 39 ft) detection range, 100° detection angle
- Two-level detection with adjustable sensitivity
- Built-in Tamper Switch
- Five-year Warranty*

PIR | 1080p FULL HD | DC 12V

System Overview

The MotionEye camera is an indoor motion-detection video camera designed for applications that require motion detection and video verification of intrusion alarms. These compact cameras consist of a Full HD pinhole HDCVI camera and a passive infrared sensor. Once the PIR sensor detects motion, it sends the video and the alarm signal to a connected DVR over coax to preserve the video evidence.

Functions

Covert Surveillance
The MotionEye camera uses a conical pinhole lens hidden inside the PIR housing ensuring discreet video surveillance and monitoring.

Wide Detection Range
MotionEye cameras use a Fresnel lens to deliver a broad, wall-to-wall coverage area. The camera is capable of monitoring a horizontal angle of up to 100° at a distances between 1 m (3.28 ft) to 12 m (39.37 ft).

Accurate Alarm
The camera uses dual-sensor technology to process intrusion alarms based on temperature and sensor displacement. Both sensors are independent and must agree that an intrusion scenario exists before triggering an alarm. Dual-sensor technology automatically filters false positives from pets and other non-human moving objects. The camera allows fine-tuning for each sensor to achieve the level of detection appropriate for a specific application.

Long Distance Transmission
HDCVI technology guarantees real-time transmission over long distances without loss of video quality. HDCVI cameras provide the same resolution as most IP network camera systems using existing RG-59, RG-6, or CAT 6 UTP cabling.

Multi-format Support
The camera supports the HDCVI and the CVBS formats. The camera can switch between these formats via the a UTC controller (PFM820), making the camera compatible with not only HCVRs but also most existing HD/SD DVRs.

Tamper-proof Design
The device is designed with a built-in tamper switch that automatically triggers an alarm and sends a signal to the DVR.

Environmental
With a working temperature range of-10 °C to +50 °C (14 °F to +122 °F), the camera is designed for varied indoor environments. Supporting ±25% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Technical Specification

Camera

Image Sensor	1/2.9-in. CMOS Sensor
Effective Pixels	1920(H) x 1080(V), 2 MP
Scanning System	Progressive
Electronic Shutter Speed	1/30 s to 1/100,000 s
Minimum Illumination	Color: 0.02 Lux at F2.0 B/W: 0.002 Lux at F.20
S/N Ratio	More than 65 dB

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	2.8 mm
Maximum Aperture	F2.0
Horizontal Angle of View	100.5°
Close Focus Distance	500 mm (1.97 in.)

Pan/Tilt/Rotation

Range	Pan: 0° to 180° Tilt: 0° to 180° Rotation: 0° to 360°

Video

Resolution	1080p (1920 × 1080)	
Frame Rate	1080p @ 30 fps 720p @ 30/60 fps	
Video Output	One (1) Channel, BNC High-definition Video Output or CVBS Standard Definition Video Output (switchable)	
Video Transmission[1]	RG-59/U Coax	720p: 500 m (1640.42 ft) 1080p: 400 m (1312.34 ft)
	RG-6/U Coax	720p: 800 m (2624.67 ft) 1080p: 600 m (1968.50 ft)
	CAT 6 UTP (balun required)	720p: 380 m (1246.72 ft) 1080p: 380 m (1246.72 ft)
Day/Night	Auto (electronic), Manual	
OSD Menu	Multi-language	
BLC Mode	BLC, HLC, DWDR	
WDR	Digital WDR	
Gain Control	AGC	
Noise Reduction	2D	
White Balance	Auto, Manual	

PIR

Detection	Passive Infrared
Detection Range	12.0 m x 12.0 m (39.37 ft x 39.37 ft)
Alarm Prompt	Red LED, on or off
Sensitivity	Two-level (jumper)
Pet Immunity	≤ 18.0 kg (39.68 lb)
Resistance Light	6500 lux
Installation Height	Default bracket, wall mount: 2.20 m to 2.50 m (7.22 ft to 8.20 ft)

Certifications

Safety	EN55032, EN55024, EN50130-4 UL60950-1+CAN/CSA C22.2 No.60950-1
Electromagnetic Compatibility (EMC)	FCC CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014

Electrical

Power Supply	12 VDC ± 25%
Power Consumption	Maximum 0.7 W (12 VDC, IR on)

Environmental

Operating Conditions	-10° C to +50° C (14° F to +122° F), Less than 90% RH Initiate startup above -10° C (14° F)
Storage Conditions	-10° C to +50° C (14° F to +122° F), Less than 90% RH

Construction

Casing	Plastic
Dimensions	119.7 mm x 61.7 mm x 58.1 mm (4.71 in. x 2.43 in. x 2.29 in.)
Net Weight	0.13 kg (0.29 lb)
Gross Weight	0.18 kg (0.40 lb)

1. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

Ordering Information

Type	Part Number	Description
2 MP Camera	DH-HAC-HUM1220AN-PIR	2 MP MotionEye PIR Camera, 2.8 mm
Accessory, optional	PFM820	UTC Controller

Accessories

Optional:

PFM820
UTC Controller

Dimensions (mm/inch)

61.7 [2.43"]   58.1 [2.29"]

119.7 [4.71"]