TRENDNET®

Outdoor 3 MP Full HD 1080p PoE IR Network Camera

TV-IP312PI (v1.0R)

• 3 Megapixel max. resolution

• Night vision up to 50 meters (164 ft.)

• Advanced IR reduces close object overexposure

• Outdoor IP66 weather rating

• Digital WDR optimizes high contrast lighting environments

• Free pro-grade management software and mobile app

• Save installation costs with Power over Ethernet (PoE)

• ONVIF and IPv6 support

TRENDnet's Outdoor 3 MP Full HD 1080p PoE IR Network Camera, model TV-IP312PI, offers night vision up to 50 meters (164 ft.), an IP66 weather rating, and an integrated mounting bracket. Ultra energy efficient advanced infrared creates a more balanced night vision illumination field and reduces close object overexposure. Record 3 Megapixel HD video (2048 x 1536) at 20 fps in a space saving H.264 compression format. Manage up to 32 TRENDnet cameras with included complimentary software and mobile apps.

Day/Night HD Surveillance

Powerful 3 Megapixel video (above Full 1080p) at 30 fps in H.264 compression and 50 meter rated night vision provide 24-hour surveillance.

Outdoor Ready

Built for extreme environments with an IP66 weather rating and an operating temperature range of -30 – 65 °C (-22 – 149 °F).

Advanced Night Vision

Advanced infrared LEDs provide improved night vision and significantly reduce close object overexposure—common with standard infrared LEDs.

Networking Solution

1. Optional power port
   (Power adapter not included)
2. PoE/Ethernet connector
3. Articulated mounting hardware
4. IP66 rated housing
5. Adjustable sun visor
6. Advanced infrared LEDs

TRENDnet®

3 Megapixel HD
Record 3 Megapixel HD video (2048 x 1536) at 20 fps in a space saving H.264 compression format

Powerful Night Vision
Night vision up to 50 meters (164 ft.) with advanced infrared noise reduction

Advanced IR Technology
Ultra energy efficient advanced infrared creates a more balanced night vision illumination field and reduces overexposure of close objects in the center of the viewing field (common with standard IR LEDs)

Outdoor Rated
Built for extreme environments with an IP66 weather rating and an operating temperature range of -30 – 65 °C (-22 – 149 °F)

PoE
Compatible with IEEE 802.3af PoE switches and extenders

Sun Visor
Adjustable sun visor

Integrated Mounting Bracket
Integrated articulated mounting bracket supports most installations

D-WDR
Improved image quality in high contrast lighting environments with Digital Wide Dynamic Range technology

Recording Schedule
Define a weekly hybrid continuous and motion detection recording schedule

IPv6
IPv6 support

ONVIF
ONVIF compliant

Complimentary Software
Complimentary pro-grade software to manage up to 32 TRENDnet cameras

Complimentary Apps
Live video to a mobile device with free iOS® and Android™ apps

TRENDnet

Specifications

Lens
- Focal length: 4 mm
- Focal depth: 20 cm+
- Aperture: F2.0
- Board lens
- Sensor: 1/3" progressive scan CMOS

Viewing Angle
- Horizontal: 77°
- Vertical: 42°
- Diagonal: 90°

Zoom
- User-defined digital zoom

Minimum Illumination
- IR off: 0.19 lux
- IR on: 0 lux
- 50 meter IR illumination distance
- Smart IR reduces close object overexposure

Video
- D-WDR: 0-100 scale
- 3D Digital Noise Reduction (DNR)
- Shutter speed: 1/3 - 1/100,000
- H.264: 2048 x 1536 up to 20 fps
- MJPEG: 704 x 480 up to 30 fps

Hardware Standards
- IEEE 802.1X
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3af

Device Interface
- 10/100 Mbps PoE port
- Power port (for non-PoE installations, power adapter sold separately (12VDC1A)
- Integrated adjustable mounting base
- LED indicator

Housing
- Weather rating: IP66
- Adjustable sun visor

Network Protocol
- IPv4, IPv6, UDP, TCP, ICMP, ONVIF v2.2, DHCP, NTP, DNS, DDNS, SMTP, FTP, SNMP (v1, v2c, v3), QoS
- NFS, SMB/CIFS

- HTTP, HTTPS
- PPPoE
- UPnP, RTSP, RTP, RTCP, SSL

Operating Temperature
- -30 - 60 °C (-22 - 140 °F)

Operating Humidity
- Max. 95% non-condensing

Certifications
- CE
- FCC
- UL 60950

Dimensions
- 104 x 104 x 243 mm (3.9 x 4.1 x 9.6 in.)

Weight
- 835 g (1.8 lbs.)

Power
- Input: PoE (802.3af)
- Consumption: 9 Watts max.

Optional Power Supply (Sold separately)
- Output: 12 V DC 1 A
- 5.5 mm barrel connector
- TRENDnet power adapter, model 12VDC1A, sold separately

Management Interface
- Multi-language support: English, French, German, Russian, and Spanish
- IP address filter
- QoS traffic prioritization
- Time, date, and text overlay
- Image settings: brightness, contrast, saturation, sharpness, smart IR, exposure time (1/3 – 1/100,000), video standard, day/night switch, sensitivity, switch time, mirror, D-WDR, white balance, digital noise reduction
- D-WDR enhances video quality in high contrast daytime lighting
- 3D Digital Noise Reduction enhances night vision quality
- Scheduled recording: continuous and motion detection
- Video storage: to computer, NAS, CIFS/SAMBA share or through software

- Motion detection fields: define custom motion detection areas, motion sensitivity, and dynamic motion analysis
- Privacy masks: define custom privacy mask areas
- Tamper detection: email notification if the viewing field darkens suddenly
- Video playback: advanced playback functionality with visual timeline displaying detected motion and scheduled recordings
- Alert messages: storage full, storage error, and illegal login
- Snapshot: real time snapshot, motion detection with schedule, video tamper detection with schedule
- Supported dynamic DNS services: Dyn.com and NO-IP.org
- Management Setting: maximum 32 user accounts
- Supports remote management
- Storage logs: Alarm, Exception, Operation, and others
- Compatibility: Internet Explorer® 9.0 or higher, Firefox® 13.0 or higher, Safari® 4.0 or higher, Chrome™ 24.0 or higher

TRENDnetView Pro Software
- Supports up to 32 TRENDnet cameras
- Multiple language support
- Set recording options (motion detection, schedule, event trigger)
- Search and playback
- Custom viewing modes and options
- Compatibility: Windows® 8.1, 8, 7, Vista, XP, Windows Server® 2003, 2008

TRENDnetVIEW App
- Free iOS and Android™ app
- View your camera on your mobile device
- Take snapshots
- Zoom

Warranty
- 3 year limited

Package Contents
- TV-IP312PI
- CD-ROM (Software & User's Guide)
- Quick Installation Guide
- Camera mounting hardware
- (Optional power adapter sold separately)