



# Indoor / Outdoor 3 MP HD PoE IR Network Camera

# TV-IP312PI (v1.0R)

- 3 Megapixel max. resolution
- Night vision up to 50 meters (164 ft.)
- EXIR provides up to a 30% increase in illuminant efficiency over traditional IR LED array technology
- 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 Indoor / Outdoor 3 MP HD 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.

# TRENDIET



# **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**

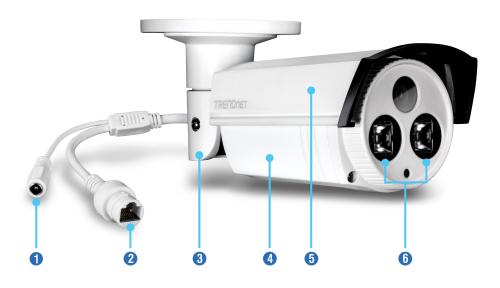
Built for extreme environments with an IP66 weather rating and an operating temperature range of -30 - 65 °C (-22 - 149 °F).



# **Advanced Night Vision**

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

# **Networking Solution**



- 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





# 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<sup>®</sup> and Android<sup>™</sup> apps



# **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.)

#### Powe

- 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<sup>®</sup> 9.0 or higher, Safari<sup>®</sup> 4.0 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<sup>®</sup> 10, 8.1, 8, 7, Vista, XP, Windows Server<sup>®</sup> 2003, 2008

# TRENDnetVIEW App

- Free iOS and Android<sup>™</sup> 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)

