



### Wireless N PTZ Internet Camera TV-IP651W (v1.0R)

The Wireless PTZ Internet Camera, model TV- IP651W, provides video monitoring over a large area. Pan the camera side-to-side a remarkable 340 degrees and tilt up-and-down 115 degrees from any Internet connection. Wireless n technology provides unsurpassed wireless coverage and improved streaming video quality. Add this camera to your wireless network at the touch of a button with Wi-Fi Protected Setup (WPS).

Record 640 x 480 pixel (VGA) video at up to 20 frames per second (fps). Manage up to 32 TRENDnet cameras with the included complimentary camera management software. Advanced features include adjustable motion detection recording areas, email alerts, scheduled recording sessions, pan / tilt Auto-Patrol, date-and-time overlays, one-way audio, an adjustable lens, and four times digital zoom. A wall / ceiling mounting kit is included and the camera's off white housing blends into most environments.

## PRODUCT OVERVIEW

- Pan 340° side-to-side and tilt 115° up-and-down
- High speed wireless n connection
- Program motion detection recording, recording schedules, email alerts and more with complimentary software
- 1-way audio



## FEATURES

- Wi-Fi compliant with IEEE 802.11n standard
- Backwards compatible with IEEE 802.11g and IEEE 802.11b devices
- One touch WPS connection button
- 1 x 10/100Mbps Auto-MDIX RJ-45 port (for optional wired installation)
- Power and activity LED indicators (can be disabled)
- 1-way audio
- 4x digital zoom
- Pan left or right 170° for a total of 340°
- Tilt the camera up 90° and down 25° for a total of 115°
- Dynamic DNS support
- Supports up to 640 x 480 pixel resolution at up to 20 frames per second
- Image controls: Brightness, contrast, saturation, flip image vertically, mirror image horizontally
- Define a recording schedule or motion detection recording
- Create motion detection fields of any shape over the viewing area
- Supports TCP/IP networking, Email, HTTP, and other Internet protocols
- System controls:
  - Define up to 64 user login accounts
  - Set the date and time or synchronize with an NTP server
- Supports wireless encryption up to WPA2-PSK
- Quick Universal Plug and Play (UPnP) installation
- Complimentary TRENDnetVIEW Pro software: manage up to 32 cameras \*
- TRENDnetVIEW Pro software compatible with Windows operating systems
- Mounting base and mounting hardware included
- 3-year limited warranty

\*Monitoring multiple cameras may require a high performance CPU



## TRENDNETVIEW PRO CAMERA SOFTWARE FEATURES

- Manage up to 32 cameras
- Compatible with Windows and Microsoft Server 2008
- Multiple language support
- Camera Viewing
  - Preset viewing modes
  - Program custom viewing modes
  - Full screen view
  - Drag and drop live feeds to a new location
  - Program camera cycle viewing sequence
  - Motion detection brings video forward
  - Side, top, and bottom tool bars can be hidden
  - Web based access from smart phones and tablets
- Recording options
  - Program weekly recording schedules
  - Motion detection recording
    - Define motion detection areas of any shape
    - Define motion detection sensitivity
  - Event trigger recording
  - Date and time overlay
  - Save a single video stream to multiple locations simultaneously
  - Define recording quotas by recording time or space allocation
  - Disk clean feature condenses and optimizes old files
  - Real time recording stats to help manage files
- Search and Playback
  - Navigation timeline provides a quick visual reference to the recorded content
  - Search continuous recordings by motion
  - Search recordings by motion within a defined field (a portion of the viewing area)
  - Time lapse playback search
- Map cameras on an image such as a floor plan
- Map cameras on Google Maps™

## SPECIFICATIONS

### CAMERA

<b>General</b>	<ul style="list-style-type: none"> <li>• Sensor: 1/5" CMOS Sensor</li> <li>• Board Lens</li> <li>• Focal Length: 4mm</li> <li>• F/No: 1.5</li> <li>• Minimum illumination: 1 lux</li> <li>• Focus Depth: 20 cm ~ infinity</li> <li>• View: <ul style="list-style-type: none"> <li>• Horizontal: 38.0 degrees</li> <li>• Vertical: 28.7 degrees</li> <li>• Diagonal: 46.5 degrees</li> </ul> </li> <li>• Digital Zoom: 4x</li> </ul>
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<b>Audio</b>	<ul style="list-style-type: none"> <li>• Built-in omni-directional microphone</li> <li>• Sensitivity: -38dB +/- 3dB (5 meters max.)</li> <li>• Frequency: 10~20000Hz</li> <li>• S/N: &gt;60dB</li> <li>• Format: PCM</li> </ul>
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<b>Pan &amp; Tilt</b>	<ul style="list-style-type: none"> <li>• Pan: -170° ~ +170°</li> <li>• Tilt: up 90° and down 25°</li> <li>• Auto-Patrol preset positions: 24</li> </ul>
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### HARDWARE

<b>Network</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3u 10/100Mbps Auto-MDIX Fast Ethernet</li> </ul>
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<b>LED</b>	<ul style="list-style-type: none"> <li>• Power, Link/Act</li> </ul>
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<b>WPS Button</b>	<ul style="list-style-type: none"> <li>• Push to enable WPS</li> </ul>
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<b>Reset Button</b>	<ul style="list-style-type: none"> <li>• Reset to factory default</li> </ul>
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<b>Privacy Button</b>	<ul style="list-style-type: none"> <li>• Privacy mode on / off</li> </ul>
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<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>• Max 6.12 Watts</li> </ul>
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<b>Power</b>	<ul style="list-style-type: none"> <li>• Input: 100~240V, 50/60Hz, 0.5A</li> <li>• Output: 12V, 1.25A external power adapter</li> </ul>
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<b>Dimension</b>	<ul style="list-style-type: none"> <li>• 113 x 113 x 130 mm (4.5 x 4.5 x 5.1 in.)</li> </ul>
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<b>Weight</b>	<ul style="list-style-type: none"> <li>• 503 g (1.1 lbs.)</li> </ul>
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<b>Temperature</b>	<ul style="list-style-type: none"> <li>• Operating: 0°C ~ 40°C (32°F ~ 104°F)</li> <li>• Storage: -25°C ~ 70°C (-13°F ~ 158°F)</li> </ul>
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<b>Humidity</b>	<ul style="list-style-type: none"> <li>• Max. 90% (non-condensing)</li> </ul>
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<b>Certifications</b>	<ul style="list-style-type: none"> <li>• CE, FCC</li> </ul>
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### REQUIREMENT

<b>Management Interface</b>	<ul style="list-style-type: none"> <li>• Internet Explorer 7.0 or higher</li> <li>• Firefox 3.5 or above</li> <li>• Safari 4.0 or above</li> </ul>
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<b>To Run software</b>	<ul style="list-style-type: none"> <li>• Windows 10, 8.1, 8, 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit)</li> <li>• Windows Server 2003, 2008</li> </ul>
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<b>TRENDnetVIEW Pro software</b>	<ul style="list-style-type: none"> <li>• Channel: supports up to 32 cameras</li> <li>• Record / Playback / Motion Detection/Audio</li> </ul>
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<b>Network Protocols</b>	<ul style="list-style-type: none"> <li>• IPv4, ARP, TCP, UDP, ICMP</li> <li>• DHCP Client, NTP Client, DNS Client, DDNS Client, SMTP Client, FTP Client</li> <li>• HTTP</li> <li>• PPPoE</li> <li>• UPnP</li> </ul>
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### SPECIFICATIONS

#### WIRELESS

<b>Standard</b>	<ul style="list-style-type: none"><li>• IEEE 802.11b, IEEE 802.11g, and IEEE 802.11n</li></ul>
<b>Frequency</b>	<ul style="list-style-type: none"><li>• 2.4 ~ 2.483 GHz ISM band</li></ul>
<b>Antenna</b>	<ul style="list-style-type: none"><li>• 1 x detachable 2dBi dipole antennas (Reverse-SMA connector)</li></ul>
<b>Data Rate</b>	<ul style="list-style-type: none"><li>• 802.11b: up to 11Mbps</li><li>• 802.11g: up to 54Mbps</li><li>• 802.11n: up to 150Mbps</li></ul>
<b>Security</b>	<ul style="list-style-type: none"><li>• 64/128-bit WEP, WPA / WPA2-PSK</li></ul>
<b>Output Power</b>	<ul style="list-style-type: none"><li>• 802.11b: 18dBm (typical)</li><li>• 802.11g: 15dBm (typical)</li><li>• 802.11n: 15dBm (typical)</li></ul>
<b>Receiving Sensitivity</b>	<ul style="list-style-type: none"><li>• 802.11b: -85dBm at 11Mbps</li><li>• 802.11g: -76dBm at 54Mbps</li><li>• 802.11n: -65dBm at 150Mbps</li></ul>
<b>Channels</b>	<ul style="list-style-type: none"><li>• 1~11 (FCC), 1~13(ETSI)</li></ul>

#### MANAGEMENT

<b>Accounts</b>	<ul style="list-style-type: none"><li>• Up to 64 user accounts</li></ul>
<b>Remote Login</b>	<ul style="list-style-type: none"><li>• Remote management supported</li></ul>
<b>Backup / Restore</b>	<ul style="list-style-type: none"><li>• Save / retrieve configuration files</li></ul>

#### SETTINGS

<b>Image</b>	<ul style="list-style-type: none"><li>• Brightness, contrast, saturation, flip, mirror (horizontal / vertical)</li></ul>
<b>Video Setting</b>	<ul style="list-style-type: none"><li>• Encoding: MJPEG<ul style="list-style-type: none"><li>• Resolution: 640 x 480 (20 fps), 320 x 240 (30 fps), 160 x 120</li><li>• Max frame rate: VGA @ 20fps, QVGA @ 30fps, QQVGA @ 30fps</li><li>• JPEG quality: Very Low, Low, Medium, High, Very High</li></ul></li></ul>
<b>Recording</b>	<ul style="list-style-type: none"><li>• Event based (motion detection) and scheduled</li></ul>
<b>Snapshot</b>	<ul style="list-style-type: none"><li>• Trigger event: motion detection</li><li>• Action: send alert email and / or upload to FTP</li><li>• Real time snapshot</li></ul>
<b>Port Settings</b>	<ul style="list-style-type: none"><li>• HTTP port: 80 (default)</li></ul>
<b>Time</b>	<ul style="list-style-type: none"><li>• Synchronize with NTP server or set time / date manually</li></ul>

# Wireless N PTZ Internet Camera

## TV-IP651W (v1.0R)



### NETWORKING SOLUTIONS



### PACKAGE CONTENTS

- TV-IP651W
- CD-ROM (Utility & User's Guide)
- Multi-Language Quick Installation Guide
- Network cable (1.5 m / 5 ft.)
- Power adapter (12V DC, 1.25A)
- Camera mounting kit

### RELATED PRODUCTS

<b>TV-IP651WI</b>	Wireless N Day / Night PTZ Internet Camera
<b>TV-IP672WI</b>	Megapixel Wireless N Day / Night PTZ Internet Camera
<b>TV-IP672PI</b>	Megapixel PoE Day / Night PTZ Internet Camera

### CONTACT INFORMATION

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