

## IR Turret Network Camera

MODEL: VIGI C420I (2.8/4mm), VIGI C430I (2.8/4mm),  
VIGI C440I (2.8/4mm)



Human & Vehicle  
Classification



Smart Detection



SmartVid



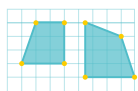
Remote Monitoring

## // Human & Vehicle Classification

Intelligently distinguishes humans and vehicles from other objects, so you receive more accurate event notifications.



## // Smart Detection



Intrusion  
Detection



Line-Crossing  
Detection



Object Removal  
Detection



Object Abandoned  
Detection



Region Entering  
Detection



Region Exiting  
Detection



Motion  
Detection



Camera  
Tampering

## // SmartVid



### Smart IR

Keeps objects from being under-rendered when far away or overexposed when close to camera at night.



### Wide Dynamic Range

Adjusts for lighting contrast to minimize shadowing effects and renders images true to life.



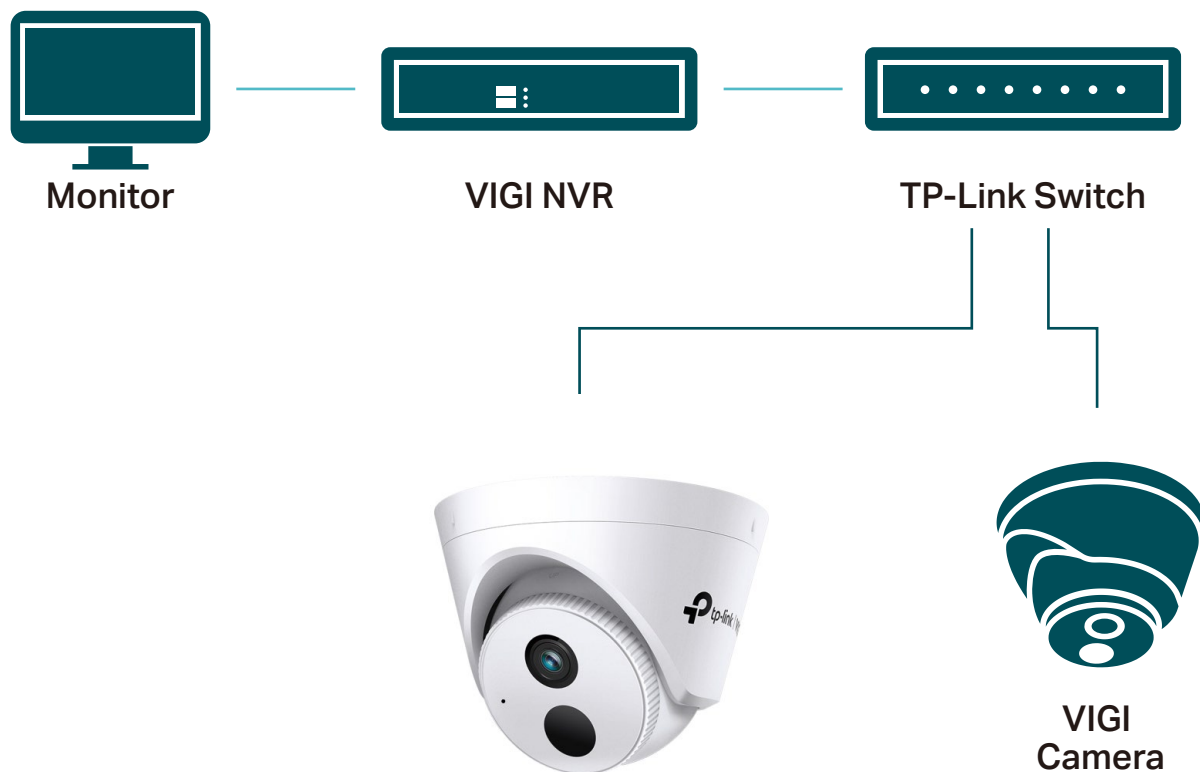
### 3D DNR

Removes abnormal pixelation to provide clearer video and eliminate distortion.

## // VIGI Surveillance Solution

The VIGI professional surveillance system by TP-Link is dedicated to protecting the business that you've worked hard to build—whenever, wherever.

Outstanding functions, reliable quality guarantees, and simplified installation work together to ensure your business stays safe and sound.



## // Flexible Installation

Easily route your camera's cable into a dropped ceiling or avoid drilling by slotting it through the camera's side outlet.



## // Specifications

| Camera                    |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Model             | VIGI C420I                                                                                                                                                                                                                                                                                | VIGI C430I                                                                                                                                                                                                                                                                                  | VIGI C440I                                                                                                                                                                                                                                                                                 |
| Image Sensor              | 1/3" Progressive Scan CMOS                                                                                                                                                                                                                                                                | 1/2.8" Progressive Scan CMOS                                                                                                                                                                                                                                                                | 1/3" Progressive Scan CMOS                                                                                                                                                                                                                                                                 |
| Shutter Speed             | 1/3 to 1/10000 s                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Slow Shutter              | Yes                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Min. Illumination         | Color: 0.01 Lux; 0 Lux with IR Light                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Day & Night               | IR Cut Filter                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Digital Noise Reduction   | 3D DNR                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Day/Night Switch          | Unified/ Scheduled/ Auto                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Lens                      |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Focal length              | 2.8 mm/4 mm                                                                                                                                                                                                                                                                               | 2.8 mm/4 mm                                                                                                                                                                                                                                                                                 | 2.8 mm/4 mm                                                                                                                                                                                                                                                                                |
| Aperture                  | 2.8mm: F2. 2<br>4mm: F2.0                                                                                                                                                                                                                                                                 | 2.8mm: F2. 2<br>4mm: F2.0                                                                                                                                                                                                                                                                   | 2.8mm: F2. 2<br>4mm: F2.0                                                                                                                                                                                                                                                                  |
| Type                      | Fixed                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| FOV                       | <ul style="list-style-type: none"><li>• 2.8mm:<br/>Horizontal FOV: 88.2°,<br/>Vertical FOV: 48.7°,<br/>Diagonal FOV: 106.5°</li><li>• 4mm:<br/>Horizontal FOV: 75.2°,<br/>Vertical FOV: 40.8°,<br/>Diagonal FOV: 88.3°</li></ul>                                                          | <ul style="list-style-type: none"><li>• 2.8mm:<br/>Horizontal FOV: 97.8°,<br/>Vertical FOV: 52.9°,<br/>Diagonal FOV: 117.9°</li><li>• 4mm:<br/>Horizontal FOV: 82.8°,<br/>Vertical FOV: 44.5°,<br/>Diagonal FOV: 98.1°</li></ul>                                                            | <ul style="list-style-type: none"><li>• 2.8mm:<br/>Horizontal FOV: 88.8°,<br/>Vertical FOV: 48.9°,<br/>Diagonal FOV: 106.5°</li><li>• 4mm:<br/>Horizontal FOV: 75.2°,<br/>Vertical FOV: 40.8°,<br/>Diagonal FOV: 88.3°</li></ul>                                                           |
| Lens Mount                | M12                                                                                                                                                                                                                                                                                       | M12                                                                                                                                                                                                                                                                                         | M12                                                                                                                                                                                                                                                                                        |
| DORI Distance             | <ul style="list-style-type: none"><li>• 2.8 mm<br/>Detect: 45 m (149 ft)<br/>Observe:19 m (62 ft)<br/>Recognize: 9 m (30 ft)<br/>Identify: 5 m (15 ft)</li><li>• 4 mm<br/>Detect: 60 m (198 ft)<br/>Observe: 25 m (83 ft)<br/>Recognize: 12 m (40 ft)<br/>Identify: 6 m (20 ft)</li></ul> | <ul style="list-style-type: none"><li>• 2.8 mm<br/>Detect: 49 m (161 ft)<br/>Observe: 20 m (67 ft)<br/>Recognize: 10 m (32 ft)<br/>Identify: 5 m (16 ft)</li><li>• 4 mm<br/>Detect: 65 m (214 ft)<br/>Observe: 27 m (89 ft)<br/>Recognize: 13 m (43 ft)<br/>Identify: 7 m (21 ft)</li></ul> | <ul style="list-style-type: none"><li>• 2.8 mm<br/>Detect:60 m (197 ft)<br/>Observe: 25 m (82 ft)<br/>Recognize: 12 m (39 ft)<br/>Identify: 6 m (20 ft)</li><li>• 4 mm<br/>Detect: 80 m (262 ft)<br/>Observe:33 m (109 ft)<br/>Recognize: 16 m (52 ft)<br/>Identify: 8 m (26 ft)</li></ul> |
| Angle Adjustment (manual) |                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| Range                     | <ul style="list-style-type: none"><li>• Pan: 0° to 360°</li><li>• Tilt: 0° to 85°</li><li>• Rotate: 0° to 360°</li></ul>                                                                                                                                                                  |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |

| Illuminator                |                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IR LED                     | <ul style="list-style-type: none"><li>• Quantity: 1</li><li>• Range: 30m</li><li>• Wavelength: 850nm</li></ul>                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| White LED                  | N/A                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| Illuminator On/Off Control | Auto/Scheduled/Always on/Always off                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| Video                      |                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| Max. Resolution            | 2MP (1920 × 1080)                                                                                                                                                                                                                                                                                                                      | 3MP (2304 × 1296)                                                                                                                                                                                                                                                        | 4MP (2560 × 1440)                                                                                                                                                                                                                                                                                                                                         |
| Main Stream                | <ul style="list-style-type: none"><li>• Frame Rate<br/>50Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps<br/>60Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps, 30fps</li><li>• Resolution:<br/>1920x1080, 1280x960, 1280x720</li></ul> <p>Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.</p>      | <ul style="list-style-type: none"><li>• Frame Rate: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps</li><li>• Resolution: 2304x1296, 2048x1280, 1920x1080, 1280x720</li></ul> <p>Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.</p> | <ul style="list-style-type: none"><li>• Frame Rate:<br/>50Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps<br/>60Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps, 30fps</li><li>• Resolution:<br/>2560x1440, 2304x1296, 2048x1280, 1920x1080, 1280x720</li></ul> <p>Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.</p> |
| Sub-Stream                 | <ul style="list-style-type: none"><li>• Frame Rate<br/>50Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps<br/>60Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps, 30fps</li><li>• Resolution:<br/>704x576, 640x480, 352x288, 320x240</li></ul> <p>Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.</p> | <ul style="list-style-type: none"><li>• Frame Rate: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps</li><li>• Resolution: 704x576, 640x480, 352x288, 320x240</li></ul> <p>Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.</p>        | <ul style="list-style-type: none"><li>• Frame Rate:<br/>50Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps<br/>60Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps, 30fps</li><li>• Resolution:<br/>640x480, 352x288, 320x240</li></ul> <p>Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.</p>                            |
| Bit Rate Control           | CBR, VBR                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| Video Compression          | <ul style="list-style-type: none"><li>• Main Stream: H.265+/H.265/H.264+/H.264</li><li>• Sub-Stream: H.265/H.264</li></ul>                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| H.264 Type                 | High Profile                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| H.264+                     | Main Stream Supported                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| H.265 Type                 | Main Profile                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| H.265+                     | Main Stream Supported                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |
| Video Bit Rate             | <ul style="list-style-type: none"><li>• Main Stream: 256 Kbps to 4 Mbps</li><li>• Sub-Stream: 64 Kbps to 512 Kbps</li></ul>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                           |

## Image

|                         |                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Settings          | <ul style="list-style-type: none"><li>• Mirror</li><li>• Brightness</li><li>• Contrast</li><li>• Saturation</li><li>• Sharpness</li><li>• Exposure</li><li>• WDR</li><li>• White Balance</li><li>• Prevent Overexposure to Infrared Light</li><li>• HLC Adjustable by Client Software</li><li>• Rotation(90°/270°)</li></ul> |
| Image Enhancement       | BLC/3D DNR/HLC/SmartIR                                                                                                                                                                                                                                                                                                       |
| Wide Dynamic Range      | WDR                                                                                                                                                                                                                                                                                                                          |
| SNR                     | ≥ 52 dB                                                                                                                                                                                                                                                                                                                      |
| Image Parameters Switch | Yes                                                                                                                                                                                                                                                                                                                          |
| Privacy Mask            | Up to 4 Masks                                                                                                                                                                                                                                                                                                                |
| ROI                     | 1 Region                                                                                                                                                                                                                                                                                                                     |
| OSD Setting             | Yes                                                                                                                                                                                                                                                                                                                          |

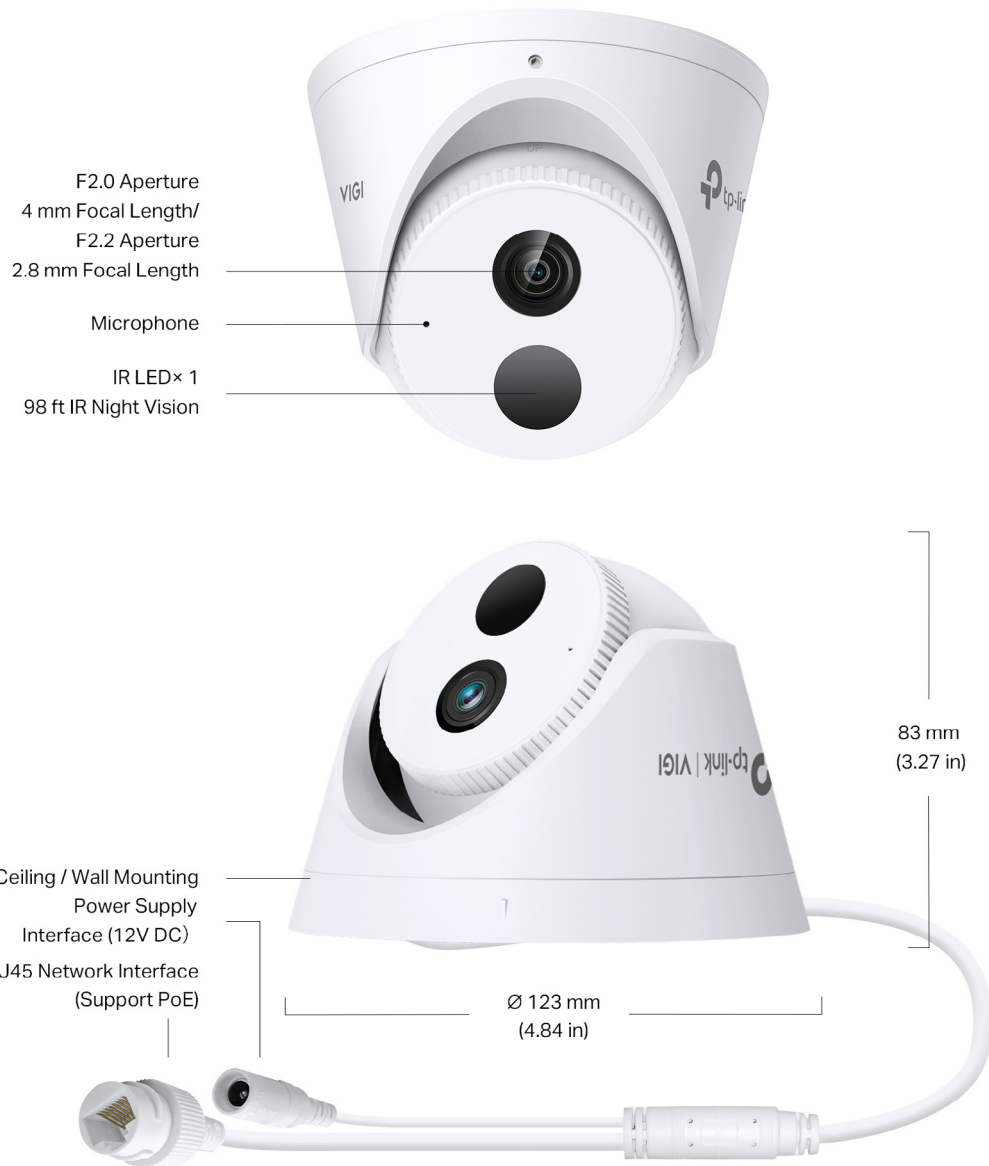
## Audio

|                             |      |
|-----------------------------|------|
| Audio Communication         | N/A  |
| Audio Input                 | Yes  |
| Audio Output                | N/A  |
| Audio Compression           | Yes  |
| Audio Sampling Rate         | 8KHz |
| Environment Noise Filtering | Yes  |

|                                   |                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Audio Bit Rate                    | 64 Kbps(G.711 alaw)                                                                                                                                                                                                                                                                                                                                                          |
| <b>Network</b>                    |                                                                                                                                                                                                                                                                                                                                                                              |
| Protocols                         | <ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• UDP</li> <li>• ICMP</li> <li>• HTTP</li> <li>• HTTPS</li> <li>• DHCP, DNS, RTSP</li> <li>• NTP</li> <li>• UPnP UDP</li> <li>• SSL/TLS</li> <li>• FTP/SFTP</li> <li>• RTP</li> <li>• RTSP</li> <li>• IPv4</li> <li>• IPv6 (VIGI C420I does not support IPv6)</li> <li>• ARP</li> </ul>                             |
| ONVIF                             | Yes                                                                                                                                                                                                                                                                                                                                                                          |
| API                               | Open Network Video Interface (Profile S)                                                                                                                                                                                                                                                                                                                                     |
| Simultaneous Live View            | 3 Main Streams & 3 Sub-Streams                                                                                                                                                                                                                                                                                                                                               |
| Client                            | VIGI App, VIGI Security Manager, Web UI                                                                                                                                                                                                                                                                                                                                      |
| Web Browser                       | <ul style="list-style-type: none"> <li>• Google Chrome® 57 and above</li> <li>• Firefox® 52 and above</li> <li>• Safari® 11 and above</li> <li>• Microsoft® Edge 91 and above</li> </ul>                                                                                                                                                                                     |
| Cloud                             | Yes                                                                                                                                                                                                                                                                                                                                                                          |
| Security                          | Password Protection, HTTPS Encryption, IP Address Filter, Digest Authentication                                                                                                                                                                                                                                                                                              |
| <b>Alarm and Event Management</b> |                                                                                                                                                                                                                                                                                                                                                                              |
| Smart Event                       | <ul style="list-style-type: none"> <li>• Human &amp; Vehicle Classification</li> <li>• Intrusion Detection</li> <li>• Line-Crossing Detection</li> <li>• Region Entering Detection</li> <li>• Region Exiting Detection</li> <li>• Object Abandoned/Removal Detection</li> <li>• Abnormal Sound Detection</li> <li>• People Detection</li> <li>• Vehicle Detection</li> </ul> |
| Basic Event                       | <ul style="list-style-type: none"> <li>• Motion Detection</li> <li>• Video Tampering Detection</li> <li>• Exception ( Illegal Login)</li> </ul>                                                                                                                                                                                                                              |
| Alarm Linkage                     | Message Push                                                                                                                                                                                                                                                                                                                                                                 |
| Linkage Method                    | N/A                                                                                                                                                                                                                                                                                                                                                                          |

|                       |                                                                                                                                  |                                                                                                                                                  |                                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Output Notification   | Message Push                                                                                                                     |                                                                                                                                                  |                                                                                                                                                  |
| Interface             |                                                                                                                                  |                                                                                                                                                  |                                                                                                                                                  |
| Network Interface     | 1 RJ45 10/100M Self-Adaptive Ethernet Port, PoE                                                                                  |                                                                                                                                                  |                                                                                                                                                  |
| Alarm                 | N/A                                                                                                                              |                                                                                                                                                  |                                                                                                                                                  |
| Reset Button          | N/A                                                                                                                              |                                                                                                                                                  |                                                                                                                                                  |
| Power                 | DC Power Port (VIGI C420I does not have DC power port.)                                                                          |                                                                                                                                                  |                                                                                                                                                  |
| On-board Storage      | N/A                                                                                                                              |                                                                                                                                                  |                                                                                                                                                  |
| Built-in Microphone   | Yes; Records Anything Going on within a 15-ft Radius of the Camera                                                               |                                                                                                                                                  |                                                                                                                                                  |
| Built-in Speaker      | N/A                                                                                                                              |                                                                                                                                                  |                                                                                                                                                  |
| Audio                 | N/A                                                                                                                              |                                                                                                                                                  |                                                                                                                                                  |
| General               |                                                                                                                                  |                                                                                                                                                  |                                                                                                                                                  |
| Operating Temperature | -30–60 °C                                                                                                                        |                                                                                                                                                  |                                                                                                                                                  |
| Storage Temperature   | -40–60 °C                                                                                                                        |                                                                                                                                                  |                                                                                                                                                  |
| Operating Humidity    | 95% or Less (Non-Condensing)                                                                                                     |                                                                                                                                                  |                                                                                                                                                  |
| Storage Humidity      | 95% or Less (Non-Condensing)                                                                                                     |                                                                                                                                                  |                                                                                                                                                  |
| Package Contents      | <ul style="list-style-type: none"><li>• VIGI Network Camera</li><li>• Quick Start Guide</li><li>• Mounting Accessories</li></ul> |                                                                                                                                                  |                                                                                                                                                  |
| Power Supply          | PoE: 802.3af/at, class 0, Max. 5.5 W                                                                                             | <ul style="list-style-type: none"><li>• 12V DC ± 5%, Max. 5 W, 5.5mm Coaxial Power Plug</li><li>• PoE: 802.3af/at, class 0, Max. 5.5 W</li></ul> | <ul style="list-style-type: none"><li>• 12V DC ± 5%, Max. 5 W, 5.5mm Coaxial Power Plug</li><li>• PoE: 802.3af/at, class 0, Max. 5.5 W</li></ul> |
| Net Weight            | 0.19 Kg                                                                                                                          |                                                                                                                                                  |                                                                                                                                                  |
| Gross Weight          | 0.34 Kg                                                                                                                          |                                                                                                                                                  |                                                                                                                                                  |
| Material              | Plastic                                                                                                                          |                                                                                                                                                  |                                                                                                                                                  |
| Protection            | N/A                                                                                                                              |                                                                                                                                                  |                                                                                                                                                  |
| Product Dimensions    | 123 × 123 × 83 mm (4.84 × 4.84 × 3.27 in)                                                                                        |                                                                                                                                                  |                                                                                                                                                  |

## Build Features



\*VIGI C420I does not have power supply interface.

\*Calculations based on laboratory testing using a 3MP VIGI camera, and an actual performance may vary according to the amount of activity recorded, resolution and other variables.

Specifications are subject to change without notice and can be found at [www.tp-link.com](http://www.tp-link.com).

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