



Datasheet
Security Never Shuts Down

ColorPro 2.0 Turret Network Camera

MODEL: InSight S445S



**Ultra
Low Light**
Night Vision

4MP | H.265+

**AI-ISP
Powered**

**People & Vehicle
Analytics****

**Human & Vehicle
Classification**

// VIGI Color Pro 2.0 Night Vision

Compared with ColorPro 1.0, 2.0 is powered by AI ISP Technology, achieving higher image quality and color transparency in ultra low light conditions.

// LightPro Night Vision Technology

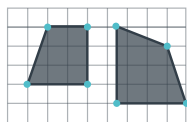
Intelligently switches between IR and full-color night vision by detecting people or vehicles, effectively minimizing light pollution and conserving energy.



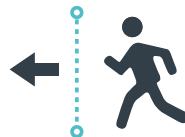
// Smart Detection



Human & Vehicle
Classification



Intrusion Detection



Line-Crossing
Detection



Abnormal Sound
Detection



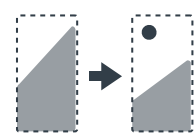
Region Entering
Detection



Region Exiting
Detection



Loitering
Detection

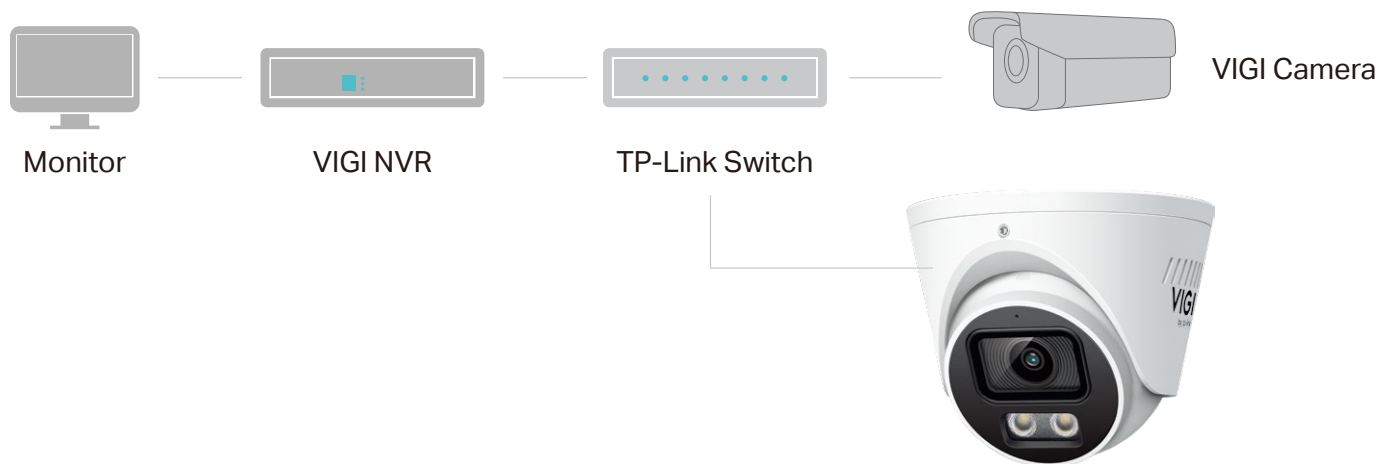


Scene Change
Detection

// 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.

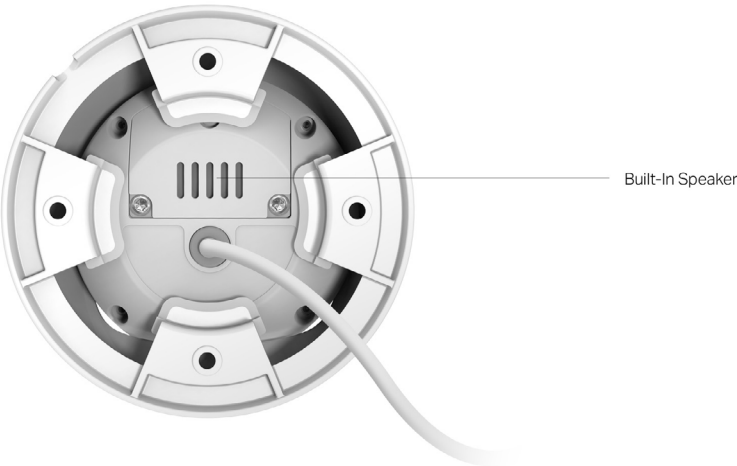


// Flexible Installation

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



// Build Features



*The microSD card is not included in the package.

// Specifications

Camera	
Product Model	InSight S445S
Image Sensor	1/1.79" Progressive Scan CMOS
Shutter Speed	1/3 to 1/10000 s
Slow Shutter	Yes
Min. Illumination	0.0005 Lux; 0 Lux with IR Light
Day/Night Mechanism	IR Cut Filter
Day/Night Switch	Unified/ Scheduled/ Auto
Lens	
Type	Fixed Focal Lens
Focal Length	2.8 mm
Aperture	F1.0
FOV	• Horizontal FOV: 112.5° • Vertical FOV: 61.4° • Diagonal FOV: 137°
Lens Mount	M12
DORI Distance	2.8 mm: • D: 194 ft (59 m) • O: 82 ft (25 m) • R: 39 ft (12 m) • I: 20 ft (6 m)
Angle Adjustment (Manual)	
Range	Pan: 0° to 360°, Tilt: 0° to 75°, Rotation: 0° to 360°
Illuminator	
IR LED	• Quantity: 2 • IR Range: 98 ft (30 m)[†] • White LED Range: 98 ft (30 m)[†] • Wavelength: 850nm

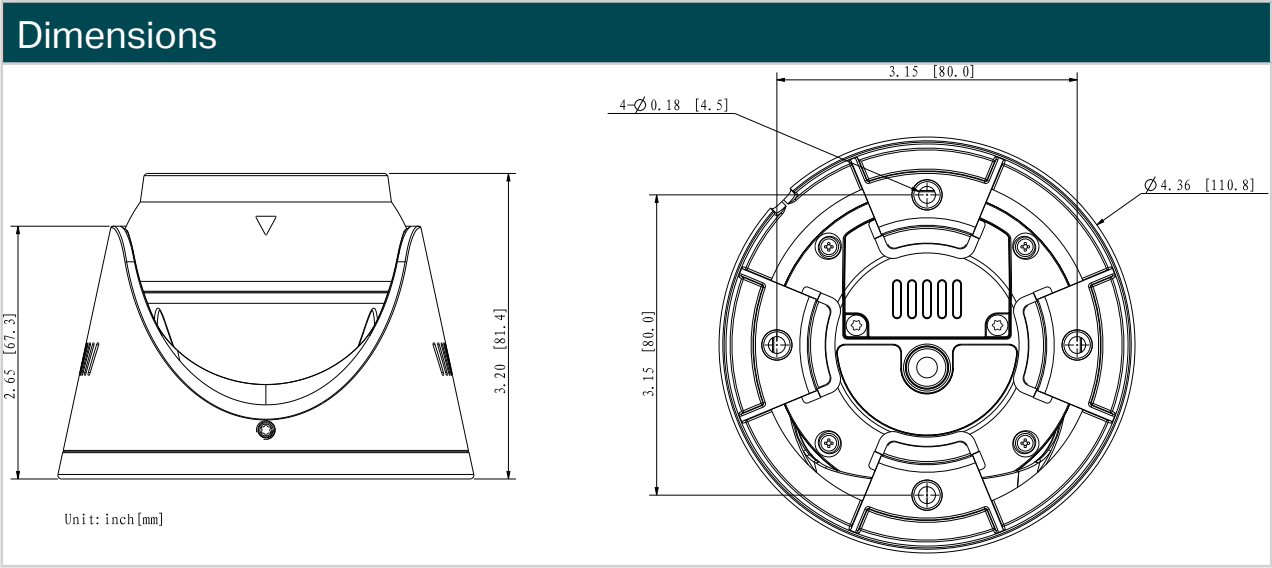
Illuminator On/Off Control	Auto/Scheduled/Always on/Always off
Video	
Max. Resolution	2688x1520
Main Stream	• Frame Rate: 50Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps 60Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps, 30fps • Resolution: 2688x1520, 2560x1440, 2304x1296, 2048x1280, 1920x1080, 1280x720 Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.
Sub-Stream	• Frame Rate: 50Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps 60Hz: 1fps, 5fps, 10fps, 15fps, 20fps, 25fps, 30fps • Resolution: 848x480, 704x576, 640x480, 640x360, 352x288, 320x240 Note: If the image rotation is set to 90° or 270°, the frame rate only supports up to 20fps.
Bit Rate Control	CBR, VBR
Video Compression	• Main Stream: H.265+/H.265/H.264+/H.264 • Sub-Stream: H.265/H.264
H.264 Type	High Profile
H.264+	Main Stream Supported
H.265 Type	Main Profile
H.265+	Main Stream Supported
Video Bit Rate	• Main Stream: 256 Kbps to 6 Mbps • Sub-Stream: 64 Kbps to 1024 Kbps

Image	
Image Settings	• Mirror • Rotation • Brightness • Contrast • Saturation • Sharpness • Exposure • WDR • White Balance • Prevent Overexposure to Infrared Light • HLC Adjustable by Client Software
Image Enhancement	BLC/3D DNR/HLC/SmartIR
Wide Dynamic Range	120 dB
SNR	≥ 52 dB
Image Parameters Switch	Yes
Privacy Mask	Up to 4 Masks
ROI	1 Region
OSD Setting	Yes
Audio	
Audio Communication	Two-Way Audio
Audio Input	Yes (Built-in Microphone)
Audio Output	Yes (Built-in Speaker)
Audio Compression	Yes
Audio Sampling Rate	8KHz
Environment Noise Filtering	Yes
Audio Bit Rate	64 Kbps(G.711 alaw)
Network	
Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, DHCP, DNS, RTSP, NTP, UPnP, UDP, SSL/TLS, FTP/SFTP, RTP, IPv4, IPv6, ARP, SMTP, SNMP, RTMP
ONVIF	Yes

API	Open Network Video Interface (Profile S/T/G)
Simultaneous Live View	3 Main Streams & 3 Sub-Streams
Client	VIGI App, Web UI, VIGI VMS, VIGI Cloud VMS, VIGI Config Tool, VIGI PC Client
Web Browser	• Google Chrome® 57 and above • Firefox® 52 and above • Safari® 11 and above • Microsoft® Edge 91 and above
Cloud	Yes
Security	Password Protection, HTTPS Encryption, IP Address Filter, Digest Authentication, 802.1X Authentication
Alarm and Event Management	
Smart Event	• Intrusion Detection • Line-Crossing Detection • Region Entering Detection • Region Exiting Detection • Object Abandoned Detection • Object Removal Detection • Loitering Detection • People Detection • Vehicle Detection • Abnormal Sound Detection • Scene Change Detection
Basic Event	• Motion Detection (Enhanced with Human & Vehicle Classification for more accurate alerts) • Video Tampering Detection • Exception (Illegal Login) • Alarm Input Device

Alarm Linkage	• Memory Card Video Recording • Upload to FTP Server • Alarm Output Device • Push Notifications • Send to Alarm Server • Active Defense-Sound Alarm • Active Defense-Light Alarm • Email Alarm
Deep Learning Function	
People & Vehicle Analytics	Search and filter to people or vehicle of interest based on many different attributes, making post-event search faster and easier.‡
Interface	
Network Interface	1 RJ45 10/100M Self-Adaptive Ethernet Port, PoE
On-board Storage	Built-In Memory Card Slot, Support MicroSD Card, up to 512 GB**
Built-in Speaker	Yes
Built-in Microphone	Yes; Records Anything Going on within a 16.4-ft (5 m) Radius of the Camera
Audio	N/A
Alarm	1 Alarm In, 1 Alarm Out
Reset Button	Yes
Power	DC Power Port
General	
Operating Temperature	-30 °C to 60 °C
Storage Temperature	-40 °C to 60 °C
Operating Humidity	95% or Less (Non-Condensing)
Storage Humidity	95% or Less (Non-Condensing)
Package Contents	• VIGI Network Camera • Quick Start Guide • Waterproof Cable Attachments • Mounting Accessories

Power Supply	• 12V DC $\pm$ 5%, Max. 15.6 W, 5.5 mm Coaxial Power Plug • PoE: 802.3at, Class 4, Max. 17.9 W
Protection	IP67 Weatherproof
Material	Metal
Net Weight	0.55 Kg
Product Dimensions	$\Phi 4.4 \times 3.2$ in ($\Phi 111 \times 81.4$ mm)
Certifications	CE, NTRA, VCCI, KC, IC, BSMI, FCC, IP67, ONVIF



†Calculations are based on laboratory testing. Actual data is not guaranteed and will vary as a result of client limitations and environmental factors.

‡This feature must be used with VIGI specified software.

**Micro SD card is not included in the package.

Specifications are subject to change without notice and can be found at www.vigi.com.

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