

The new Standard by i-PRO video surveillance

Full HD Indoor Box Network Camera with AI engine

The S-Series network cameras offer a new standard in i-PRO video surveillance with drastically improved image quality with advanced technology. It comes with pre-installed AI analytics applications that detects people and vehicles with accuracy, allowing you to easily start state-of-the-art video surveillance.

The camera can be configured while keeping the unit in the box with the acclaimed "Easy Kitting Packaging", making the installation process smooth and easy.

Key Features

- Drastically improved image quality by advanced technology and AI intelligent Auto
- Pre-installed AI analytics applications to detect human and vehicles. Ready for installing 3rd party applications
- Detecting suspicious sound like Gunshot, Yell, Vehicle horn, and Glass break, with external microphones
- Easy Kitting Package enabling installers to configure cameras easily while keeping the unit in the box
- i-PRO Configuration Tool "iCT" can set up 1024 cameras at the same time.

(iCT page : https://security.panasonic.com/training_support/design_tools/iCT/)

Key i-PRO Spec.

- Full HD 1080p up to 60fps
- Intelligent Auto (with AI Engine)
- Super Dynamic 144dB
- Color night vision (0.006 to 0.008 lx)
- Smart Coding (with AI Engine)
- Onvif Profile G / S / T

Industry examples

- Public safety (City / Road / Highway / Port)
- Transportation (Airport / Train / Subway)
- Retail / Bank / Education / Hospital / Building



Lens not included



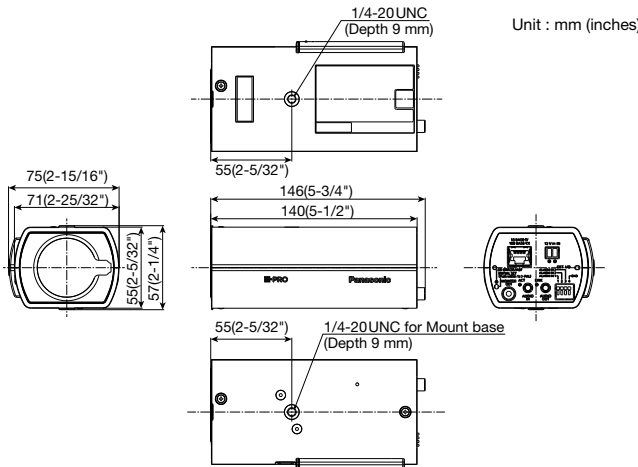
Specifications

Camera	Image Sensor	Approx. 1/2.8 type CMOS image sensor
	Minimum Illumination	Color : 0.006 lx (30IRE, F1.2, 1/30s) *1 Color : 0.008 lx (50IRE, F1.2, 1/30s) BW : 0.004 lx (50IRE, F1.2, 1/30s)
	White Balance	ATW1/ ATW2/ AWC
	Shutter Speed	[60fps mode] 1/60 Fix to 1/10000 Fix, [30fps/15fps mode] 1/30 Fix to 1/10000 Fix [50fps mode] 1/50 Fix to 1/10000 Fix, [25fps/12.5fps mode] 1/25 Fix to 1/10000 Fix
	Intelligent Auto	On / Off
	Super Dynamic*2	On / Off. The level can be set in the range of 0 to 31.
	Dynamic Range	Max.144 dB (Super Dynamic : On, Level 31)
	Adaptive Black Stretch	The level can be set in the range of 0 to 255.
	Back light compensation / High light compensation	BLC (Back light compensation) / HLC (High light compensation) / Off (only when Super dynamic / Intelligent Auto : Off)
	Fog compensation	On / Off (only when Intelligent auto / auto contrast adjust : Off)
	Maximum gain (AGC)	The level can be set in the range of 0 to 11.
	Color/BW (ICR)	Off / On / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC)
	Digital Noise Reduction	The level can be set in the range of 0 to 255.
	Video Motion Detection (VMD)	On / Off, 4 areas available
	Scene Change Detection (SCD)	On / Off, 1 areas available
	Audio Detection	On / Off
	AI Sound classification	Gunshot, Yell, Vehicle horn, Glass break
	AI Analytics	Yes
	Privacy Zone	On / Off. Up to 8 zones available
	VIQS	On / Off. Up to 8 zones available
Image rotation*3	0° / 90° / 180° / 270°	
Camera Title (OSD)	On / Off. Up to 40 characters (alphanumeric characters, marks)	
Focus Adjustment	Auto back focus / Manual / Adjusting method (Auto / Preset / Fix)	
Camera Control	Brightness, AUX On / Off	
Browser GUI	Audio	Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High Audio Output : On / Off Volume adjustment : Low / Middle / High
	GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
	Browser*4	Microsoft Edge, Firefox, Google Chrome
Network	Network IF	10Base-T / 100Base-TX, RJ45 connector
	Resolution	[16:9 mode (60 fps mode)]*2, [16:9 mode (30 fps mode)], [16:9 mode (50 fps mode)]*2, [16:9 mode (25 fps mode)] 1920x1080, 1280x720, 640x360, 320x180 [4:3 mode (30 fps mode)], [4:3 mode (25 fps mode)] 1280x960, VGA, QVGA [4:3 mode (15 fps mode)], [4:3 mode (12.5 fps mode)] 2048x1536*5, 1280x960, VGA, QVGA
	H.265/ H.264/ JPEG (MJPEG)	
	H.265/ Transmission Mode	Constant bit rate / VBR / Frame rate / Best effort
	H.264*6 Transmission Type	Unicast port (AUTO)/ Unicast port (MANUAL)/ Multicast
	JPEG Image Quality	10 steps
	Smart Coding	GOP (Group of pictures control): Off/ Low (Variable GOP 1s-8s)/ Mid (Variable GOP 4s-16s)/ Advanced(Fixed GOP 60s w/1s key-frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control) *Advanced and Frame rate control are only available with H.265. Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off
	Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC*7 : 64 kbps / 96 kbps / 128 kbps
	Audio transmission mode	Off / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)

Network	Supported Protocol	IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP
	No. of Simultaneous Users	Up to 14 users (Depends on network conditions)
	SDXC/SDHC/SD Memory Card (Option)	H.265 / H.264 recording : Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure Available SDXC/SDHC/SD Memory Card microSDXC memory card: 64 GB, 128 GB, 256 GB, 512 GB microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB microSD memory card: 2 GB
	Mobile Terminal Compatibility	iPad, iPhone, Android™ terminals
Alarm	Alarm Source	3 terminals input, VMD alarm, Command alarm, Audio detection alarm
	Alarm Actions	SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, Panasonic alarm protocol output
Input/ Output	Monitor Output (for adjustment)	VBS : 1.0 V [p-p] / 75 Ω, composite, Pin jack An NTSC or PAL signal can be outputted from camera
	Audio input	ø3.5 mm stereo mini jack
	For microphone input :	Recommended applicable microphone : Plug-in power type (Sensitivity of microphone : -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz)) Input impedance : Approx. 2 kΩ (unbalanced) Supply voltage : 2.5 V ±0.5 V
	For line input :	Input level : Approx. -10 dBV
	Audio Output	ø3.5 mm stereo mini jack (monaural output) Output impedance : Approx. 600 Ω (unbalanced) Output level : -20 dBV
	External I/O Terminals	ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1) ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)
General	Safety	UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1
	EMC	FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassB, EN55035
	Power Source and Power Consumption	DC power supply : DC12 V 480 mA, Approx. 5.8 W PoE (IEEE802.3af compliant) Device : DC48 V 130 mA, Approx. 6.3 W (Class 2 device)
	Ambient Operating Temperature	-10 °C to +50 °C (14 °F to 122 °F)
	Ambient Operating Humidity	10 to 90 % (no condensation)
	Dimensions	75 mm (W) x 57 mm (H) x 146 mm (D) {2-15/16 inches (W) x 2-1/4 inches (H) x 5-3/4 inches (D)} (excluding lens / power cord plug)
	Mass (approx.)	370 g (0.82 lbs.)
	Finish	Main body : PC / ABS resin (i-PRO white)

*1 Converted value
*2 When 60 fps or 50 fps is selected, the Super Dynamic function is automatically set to off.
*3 When the 60 fps mode, 50 fps mode, 15 fps mode or 12.5 fps mode is used, the "90°" and "270°" settings are not available.
When the 320x180 resolution is used, the "90°" and "270°" settings are not available.
*4 For information on the operation verification of the supported web browsers, refer to our support website <Control No.: C0132>.
*5 Used by super resolution techniques.
*6 Transmission for 4 streams can be individually set.
*7 When recording audio on a microSD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).

Appearance



Trademarks and registered trademarks
 - iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries.
 - Android is a trademark of Google LLC.
 - ONVIF is trademarks or registered trademarks of Onvif Inc.
 - All other trademarks identified herein are the property of their respective owners.

AI Analytics applications

- AI Video Motion Detection (AI-VMD)**
Advanced video analysis technology detects objects (faces, people, cars, motorcycles) in a specified area. (Intruder Detection, Loitering Detection, Direction Detection, Cross Line Detection)
- AI Privacy Guard**
To protect privacy and portrait rights, it is possible to automatically apply a mosaic the entire face and figure of a person photographed by the camera.
- AI Face Detection**
Detects faces with high precision even in low-light, backlit, and mask-wearing environments.
- AI People Detection**
Extract the characteristics of human face / clothing and classify them into meaningful categories such as gender, age, and clothing color.
- AI Vehicle Detection**
Extract vehicle characteristics and classify them into meaningful categories such as type and color.

Important
 - Safety Precautions : Carefully read the Basic Information, Installation Guide and Operating Instructions before using this product.
 - Panasonic i-PRO Sensing Solutions Co., Ltd. cannot be held responsible for the performance of the network and/or other manufacturers' products used on the network.
 • Masses and dimensions are approximate. • Specifications are subject to change without notice.



Panasonic Corporation

Panasonic i-PRO Sensing Solutions Co., Ltd.

<https://ipro.panasonic.com>

<https://security.panasonic.com>

<https://www.linkedin.com/company/i-pro-sensing-solutions-co-ltd/>