

Panorama IP Camera 180-View Specifications

■ Camera

Image Sensor	1/4" Progressive CMOS	Minimum Illumination	F/1.7 2lx (AGC 24dB, 50% Video Output at Color)
Effective Pixels	2048(H) x 1536(V) Pixels		F/1.7 0.75lx (AGC 30dB, 25% Video Output at Color)
Monitor Output (Analog)	NTSC or PAL Selectable		F/1.7 0.1lx (AGC 24dB, 50% Video Output at B&W)

■ Lens

Focal Length	1.09mm	Horizontal Angle of View	180 degree
F Number	F/1.7		

■ Functions

Camera Set Up	Web Browser by Windows (Internet Explorer)	Camera ID	○
Preset Position ID	○	ND Filter	ON / OFF
IR Cut Filter	ON / OFF / Auto / Trigger	Digital Noise Reduction (DNR)	ON / OFF
Privacy Mask	ON / OFF (No. of Mask : 1)	Motion Detection	ON / OFF
Auto Return	ON / OFF		

■ Image Adjustment

AGC	Max 24dB or 30dB (Switchable)	Electronic Shutter (AES)	Auto (1/15 ~ 1/100000)
Electronic Enhancement	Max x 8	BLC(Back Light Compensation)	ON / OFF (Selectable from 16 Areas)
AE Level Adjustments	-5 ~ +5	Color Level	○
Enhance Level	○	Brightness Level	○
Contrast Level	○	Hue Level	○
Saturation Level	○	Flickerless	○
White Balance	AWB / One Push		

■ Image Processing

Distortion Compensation	○	Distortion Compensation Angle	Horizontal 120 degree or 180 degree (Selectable)
Electronic Pan/Tilt	○	Electronic Zoom	x 8
No. of Preset Positions	9 (Free Positions)	Preset Sequence	1 Sequence : 4 Areas
Direction of Camera Installation	Wall / Ceiling / Desk-Top	Upside / Down Rotation	○
Image split	1 / 2 / 3 / 4		

■ Server

Network Protocol	IPv4/v6, TCP, ARP, ICMP, HTTP, FTP, IGMP(Ver2), RTCP, RTP, UDP, RTSP, SMTP, NTP	Compression Type	Original Image: Motion JPEG / MPEG-4 Compensation Image : H.264 / Motion JPEG / MPEG-4
Output Image Resolution	Original Image : 1280 x 960 Compensation Image : 640 x 480 or 320 x 240	Frame Rate	Max 15 fps
Pre / Post Alarm Recording	Original Image Pre : 10 sec, Post : 120 sec	Audio Compression	G.711 (64kbps)

■ Interface

Network	RJ-45, IEEE802.3, 10Base-T/100Base-TX	Audio Input	Internal Microphone
Audio Output	Line Out (Monoline Audio Jack)	I/O Interface	Built-in 2 (Make/Break)

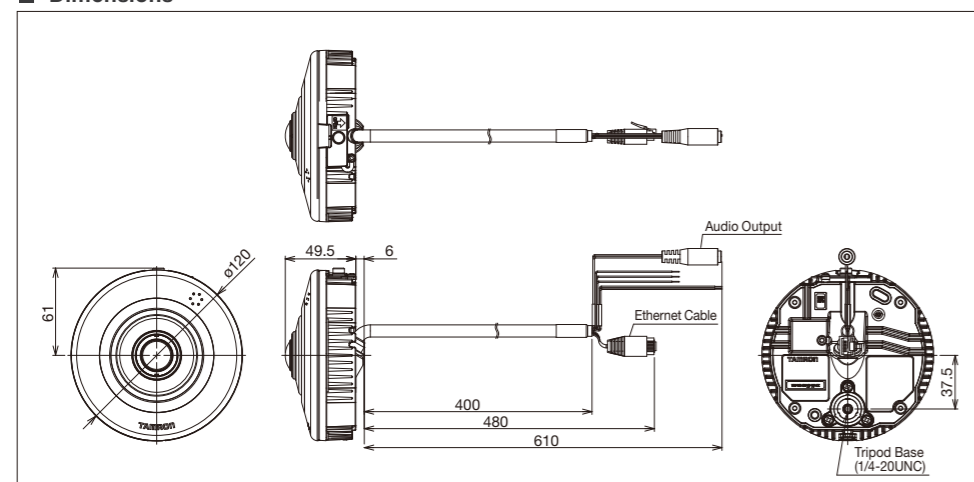
■ General

Power	12V DC ±10% P.o.E. (Complied with IEEE 802.3af) ; 4.5W	Dimension	Diameter 120mm x 50 (D) Excluding Cable
Weight	Approx. 470g	Operating Temperature	-10°C ~ +50°C (Recommendation : 0°C ~ 40°C)
Operation Humidity	30% ~ 80% RH (No Condensation)	Protection	IP66

■ Minimum Web Browsing Requirement

OS	Windows XP Professional SP3	Web Browser	Microsoft Internet Explorer ver 6, 8, 9 (32bit)
	Windows Vista Business	CPU	more than Intel Core2 Duo 2GHz
	Windows 7 Professional 32bit	RAM	more than 2GB
		HDD	more than 100GB

■ Dimensions



Caution : Please read the instruction manual carefully before using the camera.

TAMRON® Manufacturer of precise and sophisticated optical products for a broad range of industries.

TAMRON CO., LTD. <http://tamron.co.jp/cctv>
1385, Hasunuma, Minuma-ku, Saitama-shi, Saitama 337-8556 JAPAN
Tel: +81-48-684-9129 Fax: +81-48-683-8594 E-mail: tokki@tamron.co.jp



Quality Assurance Activities : At Tamron, quality management activities are performed in compliance with ISO9001:2000 not only to assure product quality but to enhance customer satisfaction.
Environmental Protection : We recognize the significance of our social responsibilities. Tamron promotes corporate activities that protect the earth's environment through the establishment of a quality assurance system that is compliant with ISO14001.

● Specifications subject to change without notice 2013.2

Panorama IP camera with fish-eye lens

PANORAMA CAMERA 180-View

Model 300QV-P-CM / Network Camera



	Wide Angle of View		IP Wired Network		F/1.7 High Sensitivity
	Dual Streaming		Electronic Zoom		Distortion Compensation
	IP66 weather resistant		Electronic Pan/Tilt		Audio Output

A new type of security camera



Stylish 180° IP Security Camera Equipped with a High-Performance Fish-Eye Lens!

The Panorama IP Camera 180-View is a new type of omni-directional network camera equipped with a fish eye lens that provides a 180° horizontal field of view, enabling the capture of images that are almost free of any blind spots. Outstanding lens performance is provided along with a best-in-class wide aperture of F/1.7. The proprietary image processing technology corrects for any residual distortion in the captured image and generates a more natural-looking image. The camera is also equipped with smart functions like electronic PTZ, presetting function and motion detection, to better serve the needs of users. The camera is intelligently constructed with lens and sensor that are controlled by software, without the need for any mechanically moving parts to make the camera highly durable and reliable and therefore suitable for various applications.

Equipped with a fast, 180° horizontal field of view fish-eye lens (F/1.7)

The 180-View is equipped with a specially designed fish-eye lens with a 180° horizontal field of view. This allows a single camera unit to monitor wide areas, providing coverage that is almost free of any blind spots—a level of performance that was simply not possible with a standard wide-angle lens. This high speed F/1.7 lens features the optical design properties you would expect from a leading manufacturer of CCTV lenses, and provides a higher level of image brightness when compared to standard F/2.8 lenses.



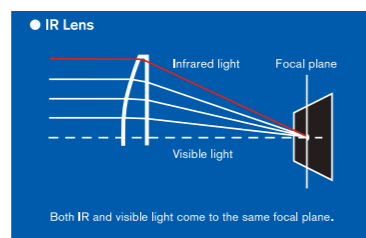
180-View : F/1.7



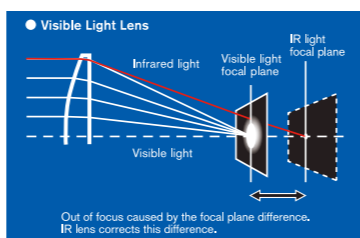
Conventional lens : F/2.8

Camera with Day/Night feature

A mechanical IR cut-filter is incorporated to achieve true day/night surveillance. With this feature, 24/7 surveillance can be realized by switching to color for daytime and to B/W at nighttime. In addition, the fast F/1.7 aperture helps to pursue clear picture quality even under low light conditions. The camera is IP66 rated to meet requirements for outdoor installations.



Both IR and visible light come to the same focal plane.



Out of focus caused by the focal plane difference, IR lens corrects this difference.

Dual Stream Function

The processing software provides a unique feature that outputs the original fisheye image and either the distortion-corrected full image or a distortion-corrected cropped image at the same time, allowing dual stream surveillance.



Original Image
(Horizontal field of view 180°)



Cropped Image
(4 position presets can be stored)

Tamron original image processing technology for 120°/180° distortion correction

Tamron original image processing technology for 120°/180° distortion correction A preset image of 120°/180° is provided. These images are distortion-corrected with Tamron's unique image processing technology.



Original Image
(Before compensation)



120° Image with correction



180° Image with correction

Panorama image / On desk mode/ Area selection (Max 4 areas)

Equipped with various display modes to support the requirements for diverse situational surveillance scenes. Specified areas can be displayed simultaneously with the original image (Maximum 4 images).



Equipped with electronic PTZ, presetting function and motion detection

There are no mechanically moving parts to drive and control the lens structure. The Pan focus and electronic PTZ function will instantly focus and pick the scene you need. Pan/tilt/zoom can be controlled manually by picking the desired area. 9 preset positions and 4 preset sequence patterns (4 positions for each sequence) can be stored. Objects that are moving can be detected automatically and the camera will follow the subject within the captured area. The motion detection function detects brightness changes and outputs the cropped image. In addition, sending images to a registered e-mail address and transferring to an FTP server are possible.



Viewing mode setup screen



Codec setup screen

Two way audio function

Audio functions are gaining notice from the surveillance market. This network camera comes with monaural microphone and an audio output. The voice system provides efficiency to the surveillance system by functioning as a PA system. A built-in speaker with an amplifier can be used to warn the intruder.



Cut-out image



- Motion detection and tracking
- Image transmission to FTP server



Original image



Audio output