Panorama IP Camera 180-View Specifications

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

**Lens**
- **F Number**: F/1.7
- **Focal Length**: 1.09mm
- **Horizontal Angle of View**: 180 degree

**Functions**
- **Video**: Web Browser to Windows Internet Explorer
- **Support**: Pan Tilt Zoom (PTZ) / Preset Position / Privacy Mask / Auto Return

**Image Adjustment**
- **Minimum Brightness (AGC)**: 5 ~ 25
- **White Balance**: AWB / One Push
- **Electronic Shutter (AES)**: Max 24dB or 30dB (Switchable)
- **BLC (Back Light Compensation)**: Max 16 Areas
- **Color Level**: ±5 ~ +5
- **Brightness Level**: ±5 ~ +5
- **Hue Level**: ±5 ~ +5
- **Flickerless**: selectable
- **Flickerless Compensation Angle**: selectable

**Image Processing**
- **Network Protocol**: IPv4/IPv6, TCP, ARP, ICMP, HTTP, FTP, IGMP(Ver2), RTCP, RTSP, UDP, RTP, STP
- **Output Image Resolution**: Original Image: 1280 x 960
  - Compensation Image: 640 x 480 or 320 x 240
- **Frame Rate**: Max. 15 fps
- **Audio Compression**: G.711 (64kbps)
  - Original Image: Motion JPEG / MPEG-4
  - Compensation Image: H.264 / Motion JPEG / MPEG-4

**Network**
- **Protocol**: RTSP, HTTP (H.264 / Motion JPEG / MPEG-4)
- **Pre / Post Alarm Recording**: Original Image Pre : 10 sec, Post : 120 sec
  - Compensation Image: 640 x 480 or 320 x 240

**Power**
- **Input Power**: 12V DC ±10% P.o.E. (Complied with IEEE 802.3af) ; 4.5W
- **Weight**: Approx. 470g
- **Operation Humidity**: 30% ~ 80% RH (No Condensation)
- **Operating Temperature**: -10°C ~ +50°C (Recommend : 0°C ~ 40°C)

**OS**
- **Web Browser**: Microsoft Internet Explorer (v6, v7, v8)
- **CPU**: Pentium III MHz (minimum)
- **RAM**: more than 2GB
- **HDD**: more than 100GB

**Dimensions**
- **Tripod Base**: (1/4-20UNC)
- **Audio Output**: Line Out (Monoline Audio Jack)
- **Ethernet Cable**: ø120

**Environmental Protection**
- **Tamron promotes corporate activities that protect the earth’s environment through the establishment of a quality assurance system that is compliant with ISO14001.

**Quality Assurance Activities**
- **Tamron, quality management activities are performed in compliance with ISO9001:2000 not only to assure product quality but to enhance customer satisfaction.

**Specifications subject to change without notice**

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

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. 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 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.

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.

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.

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.

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.