Converged Intelligent Terminal

GW-V6P

Omni-directional PTZ cameras for transmission visualization and AI surveillance

Products:

Omni-directional PTZ equipment is equipped with omni-directional PTZ zoom lens and Day & Night Lens, and supports optional downward looking lens. It can be equipped with micro-meteorological sensors, tower tilt, arc droop dance and other online monitoring sensors to realize three-dimensional intelligent inspection of transmission line channels and the body.

Effects:

Installation picture

Channel picture

Tower Base Pictures

Night Vision Pictures

Technical Parameters:

Camera	
Sensor type	Zoom: 1/2.8-inch CMOS Day vision: 1/4-inch CMOS Night vision: 1/2 inch CMOS Down view: 1/4-inch CMOS (optional) Rear view: 1/4-inch CMOS (optional) Wide angle: 1/2.7-inch CMOS (optional)
Pixels	Zoom: 2 million Day Vision: 16 million Night vision: 2 million Down view: 16 million (optional) Rear view: 16 million (optional) Wide angle: 16 million (optional)
Maximum resolution	Zoom: 1920×1080 Day vision: 4608×3456 Night vision: 1920×1080 Down view vision: 4608×3456 (optional) Rear view: 4608×3456 (optional) Wide angle: 1920×1280 (optional)
Minimum illumination	Color: 0.001Lux@F1.5 Black & White: 0.0005Lux@F1.5 0Lux (IR)
Maximum fill light distance	100m（Infrared fill light）
Type of fill light	Infrared fill light
Wiper function	Manual wipers
Camera lens	

Focal length of lens	Zoom: 5.5-130mm 5-220mm (optional) Day vision: 3.7mm Night vision: 4.9mm Down view vision: 3.7mm (optional) Rear view: 3.7mm (optional)
Lens aperture	Zoom: F1.5-F3.8 F2.2-F4.7 (optional) Day vision: F2.0 Night vision: F1.65 Down view vision: F2.0 (optional) Rear view: F2.0 (optional) Wide angle: F2.4 (optional)
Field-of-view angle	Zoom: 56.9-2.9 (wide-angle - telescopic) Day vision: V50.6°H64.3°D76.2° Night vision: V46°H82°D94° Down view vision: V50.6°H64.3°D76.2° (optional) Rear view: V50.6°H64.3°D76.2° (optional) Wide angle: V61°H112°D132° (optional)
Optical zoom	20X 40X（optional）
Focus mode	Automatic/semi-automatic/manual
PTZ	
Rotation range	Horizontal: 0°~360° continuous rotation Vertical: -90°~+90°
Preset point	256
3D Positioning	Support
Keying speed	Horizontal: 0.1°/s to 23°/s Vertical: 0.1°/s to 23°/s
Preset point speed	Horizontal: 0.1°/s to 23°/s Vertical: 0.1°/s to 23°/s

Professional Intelligence	
Intelligent identification	Supports automatic identification of common hidden dangers in transmission corridors: construction equipment (tower cranes, cranes, pump trucks, excavators, bulldozers, shovels, rollers, forklifts, piling rigs, graders, gravers, insulated bucket trucks, trucks), missing fixtures (insulators with blown pieces, insulators with missing pieces, fixture pins with missing pins), smoke from hill fires (smoke, open fires), and foreign objects in conductor wires (foreign objects above the wires, foreign objects under the wires-dust-proof nets, foreign objects below the wires-reflective films), and so on.
Front-end analysis	Supports hidden danger analysis on the device side after the device has captured the hidden danger, and transmits the analysis results directly back to the back-end, shortening the vacuum period of image analysis and reducing the pressure on the back-end server.
Local storage back-end access	Support equipment to locally store the video recording video, take the cycle to cover the storage mode, support the back-end at any time to access the equipment side of the video recording, reduce traffic costs
Video	
Video compression standard	H.264;H.265;MJPEG
Day-to-Night Conversion	Time Zone Positioning / Optical Sensing
Wide dynamic (physics)	Support
Fog permeability	Electronically transparent fog
Digital zoom	16X
Signal-to-noise ratio	≥55dB

Anti-shake function	Electronic stabilization
Internet	
Network protocol	HTTP;HTTPS;TCP/IP;IPv4;RTSP;UDP;SMTP;NTP;DHCP;DNS;DDNS;IPv6;802.1x;SSL;Qos;FTP;UPnP;ICMP;SNMP;SNMPv1/v2c/v3(MIB2);IGMP;ARP;RTCP;RTP;PPPoE;IP Filter;RTMP;Bonjour;TCP;SMB;NFS;NA
Wireless standard	3G/4G/5G China/lndia: LTE FDD:B1/B3/B5/B8 LTE TDD:B34/B38/B39/B40/B41 WCDMA:B1/B8 TD-SCDMAB34/B39 EVDO/CDMA:BC0 GSM:900/1800MHZ
Wi-Fi	Supported, but recommended for testing only
Functionality	
Regional Focus	Supported
OSD information overlay	Support channel name, time, preset point position, PTZ coordinates, magnification, geographic location, picture
Power supply	
Power supply method	Solar panel plus battery
Power wastage	Dormant power consumption: 0.03W (device power on without any operation, tested after 30 minutes, only ensure MCU power supply) Stationary Power Consumption: 0.47W (the device is turned on without any operation, tested after 30 minutes, channel camera and zoom lens for 20 minutes, transmitting 4G data, 3 preset bits switching in turn) Video power consumption: 2.7W (the device is turned on the video state, turn on 4G,

	no fill light) Peak power consumption: 9.9W (the device is turned on the video state, while capturing and analyzing pictures and uploading turned on, fill light)
Solar panel/battery capacity	Standard 6.4V 37.5 AH LiFe + 12V 30W PV panel 20 days
Power supply	Lithium iron phosphate batteries or gel batteries
Working environment	
Operating temperature	-25℃~+70℃
Operating humidity	≤95%
Protection class	IP67
Framework	
Shell material	Die-cast aluminum
Product Size	277.1mm×202m×232.9mm（L×W×H）
Net weight	4.7kg
Installation method	Wall-mounted, angle-mounted
Other items	
Night vision grade	Starlight Rating
Storage capacity	Optional add-on TF card 16G, 32G, 64G, 128G

Antennas	Built-in antenna
Positioning function	Support GPS
MTBF	≧30000hours
Camera mounting adjustability	Omni-directional manual adjustment according to transmission line direction
Monitoring cycle	Front-end analysis of the default interval of 5 minutes a photo, timed return default 1 hour a photo, and sampling time period can be freely set; equipment to take pictures of the front-end analysis, identification of hidden problems immediately return, no hidden problems return timed return

Option table:

Projects	Reference Configuration
Tower tilt S6310	Inclination measurement range: biaxial -10°~+10° (optional -30° ~+30°, -60°~+60° or -90°~+90°); Inclination measurement error: ≤±0.05°; Inclination measurement resolution: ±0.01°

Micro Weather module（Three combinations available）ST6140

	Wind speed	Wind direction	Temperature	Humidity	Atmospheric pressure	Rainfall
4 Elements	√	√	√	√		
5 Elements	√	√	√	√	√	
6 Elements	√	√	√	√	√	√

Technical Parameter

Micro Weather	Name	Measurement Range	Error Range	Resolut
	Temperature	-30℃～+85℃	±0.5℃	0.1℃
	Humidity	0～100%	±4%RH	1%RH
	Atmospheric pressure	0～100%	±4%RH	0.1hPa
	Wind speed	0～75m/s	±(0.3+0.03V） m/s	0.1m/s
	Wind direction	0～360°	±3°	0.5°
	Rainfall	0～4mm/min	±0.4mm (when ≤10mm) ±4% (when >10mm)	0.2mm
Audible and visual alarms S6150	Meet 200 meters away can hear the alarm sound and can clearly distinguish the voice content, can see the obvious light			
Sub-machine	Camera pixel: 8 megapixel for general light as standard. Optional 16-megapixel general light camera, 2-megapixel night vision camera			

Annexes (dimensional drawings of equipment)