Converged Intelligent Terminal

GW-V2

Day and Night AI Monitoring

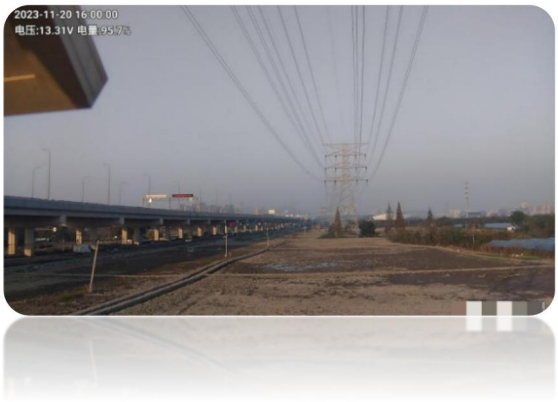
Products

The device adopts a dual lens integrated design structure, equipped with a starlight-level night-vision lens with optional zoom lens, combined with a large-size image sensor and digital wide dynamic range, which can easily manage low-light environments and nighttime scenes to meet the needs of 24-hour monitoring. By collecting video/image and other data, the device automatically monitors and identifies hidden dangers and provides timely warnings, realizing the function of visual online monitoring of transmission lines.

Effective demonstration：

1.Field cases

2.Channel View



3.Night vision effect

Day and Night AI Monitoring

Technical Parameters:

Camera	
Sensor type	Zoom: 1/4-inch CMOS (either with Day vision lens) Day Vision: 1/4 inch CMOS Night vision: 1/2-inch CMOS
Pixels	Zoom: 2 million (either with Day vision lens) Day Vision: 16 million Night vision: 2 million
Maximum resolution	Zoom: 1920 x 1080 (either with Day view lens) Day Vision: 4608×3456 Night vision: 1920×1080
Minimum illumination	Color: 0.001Lux@F1.5
Camera lens	
Focal length of lens	Zoom: 3.7mm (either with Day vision lens) Day Vision: 3.7mm Night vision: 4.9mm
Lens aperture	Zoom: F2.0 (Either with Day Vision Lens) Day Vision: F2.0 Night vision: F1.65
Field-of-view angle	Zoom: V50.6°H64.3°D76.2° (either with Day vision lens) Day vision: V50.6°H64.3°D76.2° Night vision: V46°H82°D94°

Optical zoom	10x (either with Day vision lens)
Focus mode	Automatic/semi-automatic/manual
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.
Font-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 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	Support

(physics)	
Fog permeability	Electronically transparent fog
Digital zoom	8x (either with Day vision lens)
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 consumption	Dormant power consumption: 0.03W (the device is turned on without any operation, tested after 30 minutes, only to ensure that the MCU power supply) Stationary Power Consumption: 0.17W (the device is turned on without any operation, tested after 30 minutes, the channel camera takes a shot in 20 minutes and transmits 4G data) Peak power consumption: 0.47W (the device is turned on without any operation, tested after 30 minutes, the channel camera 20 minutes a shot, the transmission of 4G data)
Solar panel/battery capacity	Standard 18V20W/12.8V10AH 30days
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	290mm×133mm×122mm(L x W x H)
Net weight	2.4kg

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	≧30000h
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

	Name	Measurement Range	Error Range	Resolut
Micro Weather	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)