Converged Intelligent Terminal

GW-V10

Transmission Visualization

Intelligent Monitoring

Products:

V10 Multi-lens AI camera has front, rear and Downview multi-directional multi-mirror lenses, which can simultaneously meet the needs of the channel sides, tower base and near tower side of the field of vision blind spot monitoring." Spirit Eye" is feature-rich, in which the rear view lens can be adjusted in all directions, the Downview view lens can be adjusted up and down, and the modular side generation unit design is the first in the industry.

Spirit Eye" not only realizes the movement of the lens, but also meets the monitoring needs of clear vision. Through the application of silent video and other functions, it brings extraordinary visualization experience, further realizes the full coverage of space and time dimensions, meets the monitoring needs of different perspectives and dimensions, truly redefines the visualization camera, improves the intelligent level of transmission line visualization and monitoring, and protects the operation safety of transmission lines.

Effective demonstration：

Channel Effects

Night vision

Downward-looking effect

Technical Parameters:

Camera	
Sensor type	Zoom: 1/2.7-inch CMOS (either with day vision lens) Day vision lens: 1/4 inch CMOS Down view lens: 1/2.8-inch CMOS Rear vision lens: 1/2.8-inch CMOS Night vision lens: 1/2-inch CMOS
Pixels	Zoom: 8 megapixels (either with Day vision lens) Day vision lens: 16 million Down view lens: 5 million Rear vision lens: 5 million Night vision lens: 2 million
Maximum resolution	Zoom: 3840 x 2160 (either with Day vision lens) Day vision lens: 4608×3456 Down view lens: 2592×1944 Rear vision lens: 2592×1944 Night vision lens: 1920×1080
Minimum illumination	0.001Lux
Camera lens	
Focal length of lens	Zoom: 5.15-47.38mm (either with Day vision lens) Day vision lens: 3.7mm Down view lens: 3.3mm Rear vision lens: 3.3mm Night vision lens: 5mm

Lens aperture	Zoom: F1.8 - F2.5 (Either with Day vision lens) Day Vision: F2.0 Bottom view: F1.05 Rear view: F1.05 Night vision: F1.0
Field-of-view angle	Zoom: (Either with Day Vision Lens) V69.5° (W) 7.95° (T) H61.5° (W) 7° (T) D69.5° (W) 7.59° (T) Day vision: v50.6°h64.3°d76.2° Downview vision: v76.2°h101.5°d137.8° Rear view: v76.2°h101.5°d137.8° Night vision: v48°h88°d105°
Optical zoom	10x (either with Day vision lens)
Focus mode	Automation
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 (physics)	Support
Fog permeability	Electronically transparent fog
Digital zoom	10x (either with Day vision lens)
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	Supported

Focus	
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	Static power consumption: 0.07W (platform online without capture) Capture power consumption: 0.22W (front HD camera captures 1 picture every 5 minutes and uploads it to the platform) Peak power consumption: 3.67W (4 cameras simultaneously capture 1 picture and upload it to the platform)
Solar panel/battery capacity	18V30W/12.8V20AH 30days
Power supply	Lithium Iron Phosphate Battery
Condition	
Operating temperature	-25℃~+70℃
Operating humidity	5%RH-95%RH
Protection level	IP67
Structures	
Shell material	Die-cast aluminum
Product Size	261mm (L) x 128mm (W) x 128mm (H)
Net weight	1.85kg
Installation	Applicable to all levels of voltage level transmission lines, support for vertical poles,

	angle steel, round tube and other installation methods
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 Adjustability	Omni-directional manual adjustment according to 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	Meet 200 meters away can hear the alarm sound and can clearly distinguish the voice content, can see the obvious light			
S6150				
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)