

GROUNDVIEW 500

Borehole Camera and Motorised Winch System



APPLICATIONS The Groundview portable borehole video system features four interchangeable video cameras, including motorised pan-and-tilt heads, and a twin-camera dual-view head (down and side). Perfect for inspection of wells, bores, groundwater boreholes, mine shafts and even open water, you can check casing integrity, use it for lost equipment recovery, check downhole pump operation, find contaminants, verify downhole instrumentation installations, and even use them for search and rescue.

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FEATURES

- Pan-and-tilt Full HD Camera
- Fully waterproof camera with water depth and temperature sensor display on the video
- Professional grade watertight connectors
- Unique data transmission protocol to transmit signal long distances via two core cable
- Shielded underwater cable pull resistance, double shielded, high-tensile, anti-corrosive, anti-wear
- Motorised forward and retract modes with variable speed control
- 500m cable length standard, custom shorter cable lengths available to save weight/cost
- Up to 7kms of cable available on special order
- Winch cable depth counter with on screen display
- Inbuilt pressure sensor in camera to measure pressure head
- All in one control module with LCD display, microphone and full keyboard, battery or mains powered
- Camera focus and LED intensity control and capture video files to USB
- Fully customisable control module that can be set to many languages

GROUNDVIEW SERIES



The Groundview series of borehole inspection systems are state of the art camera and winch packages that capture HD footage via a small pan and tilt camera. They transmit signals over very long cable runs, pushing the boundaries of drill hole inspections. Conveniently the entire series (excluding Groundview Scope) is controlled by the same control module that displays and captures footage to USB. It features a full keyboard so notes can be made on screen, and it also includes a microphone for verbal commentary. The pan-tilt camera comes in three sizes (45mm, 55mm and 65mm diameter) and there is an optional slim dual-view camera. The hand winch model is robust, portable, and well suited for commercial use.

Control Box:

ABS Main Control Box, equipped with a variety of accessories, integrated control
 Voltage Input: DC12V
 Depth Interface: 4-pin port for connecting the depth sensor
 Probe Interface: 6-pin port for camera power, video signal, camera controls
 Data Interface: Record the well number and calibrate depth automatically
 Data Storage: USB-A socket for removable USB drive, supports 128GB max.
 Depth Return to Zero: Action before well-logging for accurately depth counts
 Display: 13.3" high brightness 2K LED display, sunshade for outdoor visibility
 Controls: Pan and Tilt, Auto-Pan Speed, LED Lighting, Camera Focus

Electric Cable Winch

Motorised cable winding with adjustable speed
 Motor: Permanent magnet DC motor, power off self-locking
 Down hole Pulley: includes depth counter, data line connects to main control box
 Dimensions: 87 x 94 x 90 cm
 Weight: 130kg (with 500m cable, 110kg with 300m cable)
 Material: Aluminium plate



CAMERA SPECIFICATIONS

Model	Groundview 500	
Camera Module		
Image Sensor	1/1.8" 2MP SONY COMS	
Effect Pixel	1920(H)x1080(V)	
Sensor	Water depth and temperature	
PT	360° Pan/Tilt	
Compressive pressure:	3-10MPa	
Focal	Auto/Manual	
LED	6pcs 1W White LED	
Scan Mode	Line by line Scan	
Electronic shutter	1/25s~1/10000s;Automatic Adjustment	
Min Illumination	Color0.001Lux@F1.2	
S/N Ratio	≥50dB(AGC OFF)	
Day and night switch mode	Photo Detect / Video Detect / Time Detect	
WDR	80dB WDR	
Digital Noise Reduction	3D NR	
ROI region	Support up to 4 ROI region	
Lens	3.6mm 5MP lens	
Video Parameters		
Video compression	H.265+, H.265 Main Profile, H.264 Baseline Main	
Video resolution	Main stream	1920*1080P/1280*960P/1280*720P
	Sub stream	D1(704*576)/VGA(640*480)
Video Frame	1920*1080P 30fps	
Video Bit rate	32KB ~8Mbps,	
Smart functions		
Smart Coding	Support low code rate, low latency, ROI region of	
Smart Detect	Support Block Detection, Defocus	
Smart Control	Support intelligent control alarm on, alarm off, fault	
Network Parameters		
Network Interface	10M/100M adaptive Ethernet port	
Network Protocol	IPv4/IPv6,802.1x,HTTPS, HTTP, TCP/IP, UDP, RTP,	
Access Standard	Support the latest ONVIF2.42 / GB28181 / SDK	
Number of Client Visits	Support 8 users login at the same time	
APP	iPhone, iPad, Android	
General Parameters		
Power Supply	DC 12V	
Power consumption	2W (max)	
Size	65mm/55mm/45mm	
Weight	2-4kg	