

Smart 3G\4G Vandal Dome



These ultra-low light Smart cameras are able to capture high quality coloured images in dim light environments. The Smart 3G\4G Vandal Dome offers Full HD resolution with up to 60fps high framerate, 120dB WDR, PoE, Defog, 3D DNR and complete Smart Feature-set to meet a wide variety of applications.



Example applications:

- Temporary traffic surveys
- Bus stop safety
- Fly-tipping surveillance
- Remote area monitoring
- Time-lapse

3G\4G Vandal Dome features complete Smart functions including:

Smart Detection

Intrusion Detection, Line Crossing Detection, Object Left/Removal, Area Entering/Leaving, Scene Change Detection, Audio Surge Detection, Audio Loss Detection, Defocus Detection, Face Detection, Object Counting, etc.

Smart Codec

Smart Recording with dual-VCA, Low Bitrate, Low Latency, ROI enhancement, Multi-stream, Rotate Mode, Edge Recording, etc.

Smart Image Control

Support distortion correction

- 1/1.8" Progressive Scan CMOS
- Full HD1080p video
- Up to 60fps frame rate
- Ultra-low light
- Slow shutter
- 120dB WDR
- 3D DNR
- Up to 40m IR range
- Motorised lens with Smart Focus
- Built-in heater
- Audio/Alarm IO
- Support 128G on-board storage
- AC24V/DC12V/PoE
- IP66
- GSM, GPRS, UMTS, HSDPA, 3G, 4G



Smart 3G\4G Vandal Dome

KEY FEATURES

Smart

- ▶ 6 behaviour analysis, 4 exception detections, 1 recognition, 1 statistic function
- ▶ Smart recording: Support edge recording and dual-VCA
- ▶ Smart encoding: Support low bit rate; low latency; ROI enhance encoding
- ▶ Smart lens options: AF lens

Image

- ▶ HD 1920 × 1080@60fps
- ▶ Supports image distortion correction
- ▶ Supports rotate mode, suitable for environments such as corridors
- ▶ Supports regional cropping, details can be seen with low bandwidth
- ▶ Code smoothness setting for different requirements of image quality and fluency
- ▶ Supports H.264+/H.264/MJPEG/MPEG4 video compression, multi-level video quality configuration; support Basic/Main/High Profile H.264 encoding complexity
- ▶ Multiple OSD colour: Black & white self-adaptive; Custom
- ▶ 120dB WDR is supportable for backlight environment
- ▶ Supports defog, BLC, EIS

Infrared

- ▶ Irradiation distance is up to 40m(2.8~12mm)/50m(8~32mm)
- ▶ Smart IR, prevent over-exposure in close distance

Modem

- ▶ Supports mobile devices (iOS & Android)
- ▶ Supported network types (GSM, GPRS, UMTS, HSDPA, 3G & 4G)
- ▶ Remote management available via web browser

System

- ▶ Supports ONVIF (profile S/profile G), CGI, PSIA, ISAPI protocol
- ▶ Supports three streams, and Supports 20 channels live view at the same time
- ▶ Anti-surge, anti-static protection level
- ▶ Smart heater for starting in extra low temperature (-H optional)
- ▶ Anti-thunder, anti-surge, anti-static, IP66 & IK10 protection level

Interface

- ▶ Supports standard 128GB Micro SD/SDHC/SDXC card storage
- ▶ Supports 10M/100M Ethernet Port
- ▶ Supports Audio I/O, support dual channel stereo audio
- ▶ Supports Alarm I/O
- ▶ Supports CVBS analogue output (4CIF resolution)

Security

- ▶ Supports three-level user authentication management, user and password authorisation, IP address filtering and anonymous access
- ▶ Supports security certificate as HTTPS, SSH; support creating certificate
- ▶ Basic and digest authentication is supportable in IE configuration
- ▶ Lock user IP for multiple error login attempts

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SPECIFICATION

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	0.002 Lux @ (F1.2, AGC ON), 0.0027 Lux @ (F1.4, AGC ON), 0 Lux with IR
Shutter Speed	1s ~ 1/100,000s
Slow Shutter	Supported
Lens	2.8~12mm @ F1.4, 92°~32°
Lens Mount	Φ 14
Angle Adjustment	Pan: 0° ~355° , tilt: 0° ~75° , rotation: 0° ~355°
Auto-iris	DC drive
Day & Night	IR Cut Filter
WDR	120dB
Compression Standard	
Video Compression	H.264+/H.264/MPEG4/MJPEG
H.264 Type	Baseline Profile / Main Profile / High Profile
Video Bit Rate	32 Kbps – 16 Mbps
Audio Compression	G.711/G.722.1/G.726/MP2L2
Audio Bit Rate	64Kbps(G.711) / 16Kbps(G.722.1) / 16Kbps(G.726) / 32-128Kbps(MP2L2)
Image	
Max. Resolution	1920 x 1080
Frame Rate	50Hz: 50fps(1920 x 1080, 1280 x 960, 1280 x 720) 60Hz: 60fps (1920 x 1080, 1280 x 960, 1280 x 720)
Third Stream	Independent with Main Stream and Sub Stream, up to 50Hz: 25fps(1920 x 1080); 60Hz: 30fps (1920 x 1080)
Image Enhancement	BLC/3D DNR/ROI/Defog/EIS
Image Setting	Rotate Mode, Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser
Regional Cropping	Supported
Distortion Correction	Supported
Day/Night Switch	Auto/Schedule/Triggered by Alarm In
Picture Overlay	Logo picture can be overlaid on video with 128x128 24bit bmp format
Network	
Network Storage	NAS (Supports NFS,SMB/CIFS), ANR
Alarm Trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, Storage exception
Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour
Security	User Authentication, Watermark, IP address filtering, Anonymous access
Standard	ONVIF (PROFILE S,PROFILE G), PSIA, CGI, ISAPI

Smart 4G\3G

Vandal Dome

SPECIFICATION CONTINUED

<i>Interface</i>	
Audio	1-ch audio in(Mic in/Line in)/out interface
Communication Interface	1 RJ45 10M/100M Ethernet port, 1 RS-485 interface
Alarm	1 input, 1 output (up to DC24V 1A or AC110V 500mA)
Video Output	1Vp-p composite output (75 Ω/BNC)
On-board storage	Built-in Micro SD/SDHC/SDXC slot, up to 128 GB
Reset Button	Yes
<i>Modem</i>	
SIM Card Interface	1 Subscriber Identity Module slot
Mobile Support	Mobile app for iOS and Android mobile devices
Remote Management	Configuration accessible via web browser
Supported Network Types	GSM, GPRS, UMTS, HSDPA, 3G, 4G
<i>Audio</i>	
Environment Noise Filtering	Supported
Audio I/O	Supported dual audio track, stereo
Audio Sampling Rate	16kHz / 32kHz / 44.1kHz / 48kHz
<i>Smart Feature-set</i>	
Behaviour Analysis	Line crossing detection, Intrusion detection, Region entrance, Region exiting, Unattended baggage, Object removal
Line Crossing Detection	Cross a pre-defined virtual line
Intrusion Detection	Enter and loiter in a pre-defined virtual region
Region Entrance	Enter a pre-defined virtual region from the outside place
Region Exiting	Exit from a pre-defined virtual region
Unattended Baggage	Objects left over in the pre-defined region such as the baggage, purse, dangerous materials
Object Removal	Objects removed from the pre-defined region, such as the exhibits on display
Exception Detections	Scene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detection
Recognition	Face detection recognition
Statistics	Object Counting (Entrance and Exit object number is accounted and showed on screen in real time)
<i>General</i>	
Protection Level	IP66
Impact Protection	IK10
Operating Conditions	-30°C – 60 °C (-22 °F – 140 °F), Humidity 95% or less (non-condensing); -H: -40°C – 60 °C
Power Supply	24V AC ± 10%, 12 V DC ± 10%, PoE (802.3af); -H: 24V AC ± 10%, 12 V DC ± 10%, PoE (802.3at)
IR Distance	Up to 40m
Power Consumption	Max. 14 W; -H: 17W
Weight	2100 g (4.63 lbs)