GV-SD220-S (20x / 30x)   Outdoor Full HD IP Speed Dome

- 1/2.8" progressive scan CMOS sensor
- Full HD 1080p at up to 30 fps and 720p at up to 60 fps
- 20x / 30x optical zoom and 12x digital zoom
- H.264 and MJEPG video compression
- Dual streams
- IR-cut filter for day and night function
- Vandal resistance (IK10 for metal and polycarbonate casing)
- Ingress protection (IP67)
- 4 digital inputs, 1 relay output
- Built-in micro SD card slot (SD/SDHC) for local storage
- Auto focus
- Wide Dynamic Range Pro (WDR Pro)
- Backlight Compensation
- Image noise reduction
- Pan 360° endlessly
- Tilt from 0° up to 180°
- Preset speed at up to 460° /sec
- PTZ movement (Preset, Sequence, Auto Pan, Cruise and Tour)
- PTZ movements by schedule
- Auto and manual PTZ calibration
- Motion detection
- Privacy Mask
- 2-way audio
- Supports iPhone, iPad, Android & 3GPP
- ONVIF (Profile S) conformant
- 31 languages on Web interface
  * No memory card slot & local storage function for Argentina
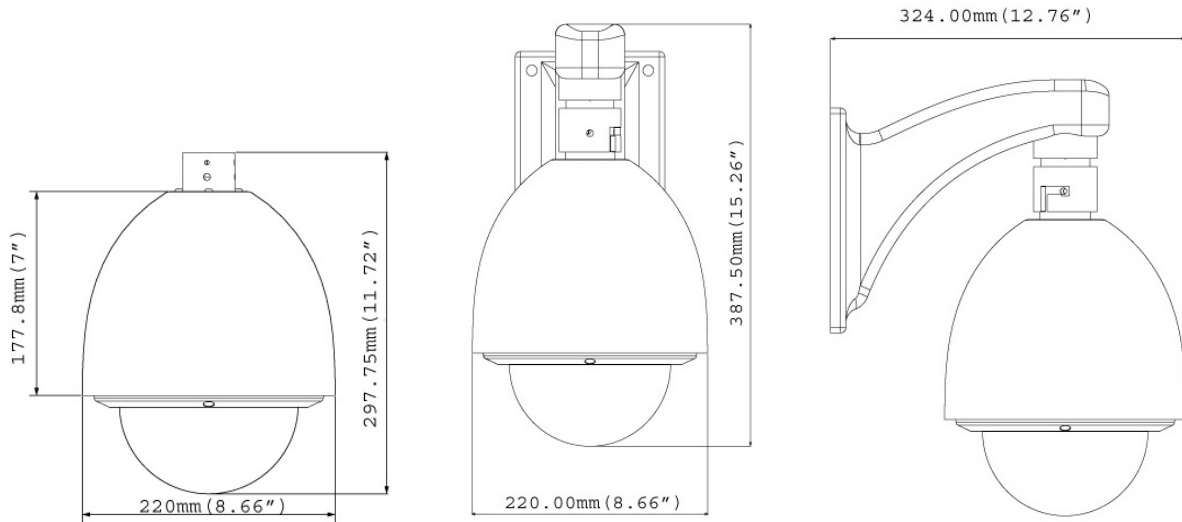
Introduction

The GV-IP Speed Dome (GV-SD220-S) is a network PTZ camera designed for image quality and adaptability in various environments. This camera offers image of 1080p at 30 fps, 720p at 60 fps and 20x / 30x optical zoom, capable of showing smooth live view with great detail. In low-light environments, image quality is promised with its image processing tools, such as IR-cut filter (ICR), Wide Dynamic Range Pro (WDR Pro), Backlight Compensation and noise reduction.

Wide surveillance coverage is made possible with 360° endless panning and 180° tilting capacity. Dome movements such as Preset, Sequence, Auto Pan, Cruise and Tour can be programmed and activated by schedule. You can create multiple dome movement modes and have different modes enabled at different time slots. The GV-IP Speed Dome provides variable pan/tilt speeds ranging from a fast patrol of 460° per second to a slow ramble of 0.5° per second with 0.2° pan accuracy for fast and accurate tracking ability.

The GV-IP Speed Dome comes with an indoor model, an outdoor model and also optional mounting kits for outdoor installations on wall, ceiling and pole.

Dimensions

Specifications

Camera		
Image Sensor		1/2.8" progressive scan CMOS
Optical Zoom		20x / 30x
Digital Zoom		12x
Picture Elements		1920 (H) x 1080 (V)
Minimum Illumination	Color	0.05 Lux at F/1.6
	B/W	0.005 Lux at F/1.6
Electronic Shutter		1/1 ~ 1/10000 sec.
White Balance		Auto / Manual
Iris Control		Auto / Manual
AGC control		Auto / Manual
S/N Ratio		50 dB (AGC Off)
WDR Pro		Yes (with WDR sensor)
Optical Lens		
Megapixel		Yes
Day / Night		Yes (with removable IR-cut filter)
Focal Length	20x	4.7 ~ 94 mm
	30x	4.3 ~ 129 mm
Operation	Focus	Auto / Manual
	Zoom	20x / 30x
	Iris	Auto / Manual
Video		
Video Compression		H.264, MJPEG
Video Streaming		Dual streams
Video Resolution	16:9	1920 x 1080, 1280 x 720, 640 x 360, 448 x 252
Frame Rate		30/25 fps (60/50 Hz) at 1920 x 1080 60/50 fps (60/50 Hz) at 1280 x 720
Audio		
Audio Compression		G.711, AAC (optional)
Audio Support		Two-way Audio
Network		
Interface		10/100 Ethernet
Protocol		DHCP, DynDNS, FTP, HTTP, HTTPS, NTP, ONVIF (Profile S), QoS (DSCP), RTSP, SMTP, SNMP, TCP, UDP, UPnP, 3GPP/ISMA

Mechanical			
Temperature Detector			Yes
Connectors	Power		DC Jack
	Ethernet		10/100 Base-T, RJ-45 connector
	Audio		1 in (RCA female for microphone); 1 out (RCA female for speaker)
	Local Storage		Micro SD card slot (SD/SDHC, SD version 2.0 only, Class 10) *SDXC and UHS-I card types are not supported.
	Digital I/O		I/O wires
Operation			
Pan Travel			360° endless
Tilt Travel			0° ~ 180°
Manual Speed			0.5° ~ 460°/s
Calibration			Auto / Manual
Presets	Max. Number		255
	Accuracy		0.2°
Sequence	Max. Number		8
	Max. Presets Allowed		16
Auto Pan			8
Cruise			4
Tour	Max. Number		8
	Max. Number of Preset / Sequence / Auto Pan / Cruise		16
Privacy Mask			8
Proportional Pan & Tilt			Auto (Pan and tilt speed proportional to zoom ratio)
Automatic Function			Preset, Sequence, Auto Pan, Cruise, Tour
Mechanical Flip			On / Off
Digital Slow Shutter			On / Off
Motion Detection			On / Off
Wide Dynamic Range			On / Off
Day/Night: Mechanical IR Cut Filter			On / Off
Picture Flip			On / Off
Image Freeze			On / Off
Digital Noise Reduction			On / Off
Alarm	Input		4
	Output		1
	Reaction		Preset, Sequence, Auto pan, Cruise, Tour
General			
Operating Temperature			-40°C ~ 50°C (-40°F ~ 122°F)
Heater			Heater 1 On: 5°C (41°F); Off: 8°C (46.4°F) Heater 2 On: -7°C (19.4°F); Off: -2°C (28.4°F)
Fan-On			45°C (113°F)
Humidity			20% ~ 90% (non-condensing)
Dimensions			Ø 220 x 297.75 mm (8.7" x 11.7")
Weight			4.7 kg (10.4 lb)
Power Source			24V AC ± 10%, 3A / 24V DC ± 10%, 3.75A
Power Consumption			60 W (with 30W heater)
Ingress Protection			IP67
Vandal Resistance			IK10 for metal and polycarbonate casing
Regulatory			CE, FCC, RoHS
Web Interface			
Installation Management			Web-based configuration
Maintenance			Remote upgrade through Web Browser, IP Device Utility included in the Software CD
Access from Web Browser			Live View, Video Recording, PTZ Control, Preset, Sequence, Cruise, Auto Pan, Tour, Image Quality, Bandwidth Control, Image Snapshot, I/O Control, 2-way Audio, Picture-in-Picture (PIP), Picture-and-Picture (PAP), Text Overlay, Image Masking

Language	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian / Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Swedish / Thai / Traditional Chinese / Turkish
Applications	
Network Storage	GV-NVR, GV-System, GV-Backup Center, GV-Recording Server
Smart Device Access	GV-Eye for Android smartphone, tablet, iPhone, and iPod Touch GV-Eye HD for iPad
Live Viewing	IE , mobile phone
CMS Server support	GV-Control Center, GV-Center V2, GV-VSM

Note: Specifications are subject to change without notice.

Packing List

1. GV-SD220-S Outdoor IP Speed Dome
2. Pendant Tube
3. Hex Key x 2
4. M6 Screw x 4
5. Desiccant Pack x 4
6. GV-IP Speed Dome Software CD
7. GV-NVR Software DVD

Note: Power adapters can be purchased upon request.

Accessories

Part Number	Name		Details
GV-Mount100	Straight Tube and Junction Box Kit		Dimensions: 200 x 170 x 257.5 mm (7.9" x 6.7" x 10.1") Weight: 3.17 Kg (6.99 lb)
GV-Mount101	Straight Tube Kit		Dimensions: 219 x 125 x 332 mm (8.6" x 4.9" x 13.1") Weight: 1.8 Kg (3.97 lb)
GV-Mount203	Wall Pendant Tube and Junction Box Kit		Dimensions: 315 x 195.5 x 225 mm (12.4" x 7.7" x 8.9") Weight: 2.95 Kg (6.5 lb)
GV-Mount300	Convex Corner Adapter Kit		Dimensions: 238.6 x 409.5 mm (9.4" x 16.1") Weight: 4.27 Kg 9.41 lb)

Part Number	Name		Details
GV-Mount310	Concave Corner Adapter Kit		Dimensions: 238.6 x 409.5 mm (9.4" x 16.1") Weight: 4.27 Kg (9.41 lb)
GV-Mount400	Pole Mount Bracket Kit (Ø 4" ~ 6")		Dimensions Bracket: 241 x 161 mm (9.5" x 6.3") Weight: 1.70 Kg (3.75 lb) Steel Strap: Ø 4" ~ 6"
GV-Mount410	Pole Mount Bracket Kit (Ø 6" ~ 7.5")		Dimensions Bracket: 241 x 161 mm (9.5" x 6.3") Weight: 1.70 Kg (3.75 lb) Steel Strap: Ø 6" ~ 7.5"
GV-Mount702	Extension Tube		Four options are available. Dimensions: Ø 5.4 x 10 or 20 or 30 or 50 cm (Ø 2.1" x 3.9" or 7.9" or 11.8" or 19.7") Weight: 180 g or 390 g or 550 g or 800 g (0.4 lb or 0.86 lb or 1.21lb or 1.76 lb)
GV-Mount908	In-Ceiling Mounting Kit for GV-SD220-S IP Speed Dome		Dimensions Mounting Plate: 227 x 286 mm (8.9'' x 11.3'') Weight 2.05 Kg (4.5 lb)

Part Number	Name		Details
	DC 24V Power Adaptor 100-240VAC US		Dimensions (L x W): 132.75 x 58.6 mm (5.23" x 2.3") Weight: 0.39 kg (0.86 lb) Input: 100 to 240V AC 2.5A 50-60Hz Output: 24V DC 3.75 A
	DC 24V Power Adaptor 100-240VAC AU		
	DC 24V Power Adaptor 100-240VAC AR		
	DC 24V Power Adaptor 100-240VAC EU		
	DC 24V Power Adaptor 100-240VAC JU		
	DC 24V Power Adaptor 100-240VAC UK		