VideoSphere MDOME

The **VideoSphere® MDome HD PTZ** is a compact indoor/outdoor IP dome camera. It combines high-quality (720p) video resolution and True Day/Night (TDN) technology in a programmable PTZ solution. This combination of fully compressed high-definition (HD) video, real-time frame rate and PTZ capabilities integrates the best qualities of the VideoSphere edge devices into a compact environmental housing designed to withstand extreme temperature conditions.

HD WITH REAL-TIME FRAME RATE

The MDome HD PTZ is an advanced IP camera capable of transmitting HDTV format (720p) streams over the network at 30 fps in H.264. Its megapixel CMOS progressive scan sensor ensures exceptional detail and motion capture, while advanced functionalities like backlight compensation, digital slow shutter, and day/night transitions (IR cut filter) make it possible to capture high-resolution images in light conditions as low as 0.2 lux.

POWERFUL PTZ CAPABILITIES

The MDome features Microstep technology, which guarantees accurate and rapid positioning, with a rotation speed of up to 360° per second on presets. The combination of HD video and a 10x optical zoom provides an outstanding level of detail and allows the monitoring wide scenes with a single camera. The MDome can save up to 128 presets, or as many as 1024 presets and 10 guard tours when used with a VMS.

SYSTEM INTEGRATION

The MDome HD PTZ seamlessly integrates with March Networks Command[1] or VideoSphere Video Management System (VMS) and hybrid NVRs. The camera is ONVIF-compliant, allowing it to be used with a variety of third-party systems.

VIDEO STREAMING

The camera's support for H.264 compression technology results in up to 20 times the efficiency of comparable JPEG-based IP cameras. This allows for archiving of higher-quality video for longer periods of time, while significantly reducing bandwidth and storage costs.
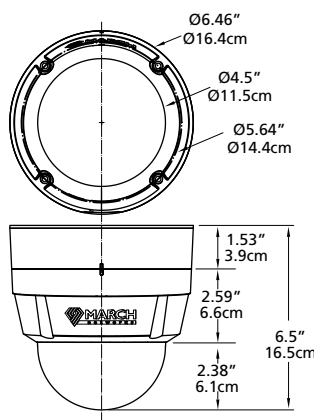
BUILT-IN REDUNDANCY

The MDome HD PTZ can record a video stream in parallel to an internal microSD High Capacity (microSDHC) card or to a Network Attached Storage (NAS) device to provide redundant recording in the event of a network outage or server failure. When the camera is used with March Networks Command or VideoSphere VMS and hybrid NVRs[2], an innovative Shadow Archiving feature provides seamless access to redundant video for total fail-safe management. It does this by forming a "shadow" on the central recording server of all the data available on the camera and NAS devices.

EXTREME TEMPERATURE PROTECTION

A compact environmental housing protects the MDome and allows it to operate in extreme temperatures ranging from -40 to 122°F / -40 to 50°C. The housing is vandal-resistant and IP66-rated.

FEATURES

- **HD** 720p video quality for high resolution color and clarity
- True Day/Night
- E-Flip
- Multi-streaming H.264, MPEG-4, and M-JPEG (up to 2 streams simultaneously)
- Shadow Archiving™ with microSDHC or NAS
- ONVIF™ compliant for open third-party system integration
- Digital slow shutter
- Day/night transitions with IR cut filter
- Backlight compensation
- 10X optical / 12X digital zoom with fast, accurate preset acquisition
- Indoor/outdoor vandal-resistant housing
- Operating temperatures of -40 to 122°F / -40 to 50°C

PART NUMBERS

Cameras
- MDOME10XHD

Mounts and Accessories
- MDOMENPTCAP - 1.5" NPT mount adaptor (for pendant mounting)
- HOMINIDOMEWB - 1.5" NPT wall mount bracket
- HOMINIDOMEPMA - pole mount adapter
- MDOMEFMA - indoor/outdoor flush mount adapter
- HOMINIDOMESB – sunshield

Ø6.46"
Ø16.4cm

Ø4.5"
Ø11.5cm

Ø5.64"
Ø14.4cm

1.53"
3.9cm

2.59"
6.6cm

6.5"
16.5cm

2.38"
6.1cm

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Technical Specifications

CAMERA

Image Sensor	1/3" 2 megapixel CMOS progressive scan
Lens	5.1 - 51 mm, F1.8 – 2.1, autofocus, automatic day/night, IR cut removable filter
	Horizontal angle of view: 50° - 5.4°
Minimum Illumination	Color: 2.0 lux @ 30 IRE F1.8 B/W: 0.2 lux @ 30 IRE F1.8
Shutter Time	1/10000 s to 1/2 s
Pan/Tilt/Zoom	E-flip, auto-flip, 128 preset positions
	Pan: 360° (with auto-flip), 0.05°- 360°/s (zoom proportional)
	Tilt: 180° (auto-flip on) / 95° (auto-flip off) 1°-180°/s
	10x optical zoom and 12x digital zoom, total 120x zoom
	4 guard tours
	On-screen direction indicator
	Microstep technology

VIDEO

Video Compression	H.264 (MPEG-4 Part 10/AVC), MPEG-4, M-JPEG
Resolution	1280x720p to 352x288
Frame Rate	
H.264	Up to 30 fps in all resolutions
MPEG-4	Up to 30 fps in all resolutions
M-JPEG	Up to 30 fps in all resolutions
Video Streaming	Multi-stream H.264, MPEG-4, and M-JPEG[3]
	Controllable frame rate and bandwidth
	CBR H.264 and MPEG-4, VBR M-JPEG (quality settings)
	Up to two simultaneous streams (primary stream H.264 or MPEG-4)
Image Settings	Automated shutter, white balance, backlight compensation, exposure control, shutter priority, iris priority, gamma control

AUDIO

Audio Streaming	Two-way mono
Audio Compression	G.711 PCM
	G.726 ADPCM
	Configurable bit rate (8 or 16 kHz)
Audio Input/Output	Line input, line level output

NOTES: [1]March Networks Command available in early 2011
[2]Shadow Archiving not available with March Networks 4000 C Series NVR or 3204 DVR systems.
[3]Maximum 720p on stream 1; maximum 640 x 352 on stream 2.

NETWORK

Security	Password protection, connection management, LDAP authentication, HTTPS encryption (configuration only)
Supported Protocols	ONVIF, RTP, RTSP, RTCP, HTTP, HTTPS, IPv4, TCP, UDP, DHCP, ARP, LDAP

SYSTEM INTEGRATION

Intelligent Video	Video motion detection, connection monitoring
Alarm Triggers	Video motion detection, external input
Alarm Events	External output activation
	Video recording to local storage (microSDHC)
	Video recording to NAS

GENERAL

Housing	Polycarbonate transparent dome cover Metal casing (aluminum die casting) IP66 rating (NEMA 4X)
Power	12 VDC/24 VAC; 12W (heater off), 22W (heater on)
Connectors	RJ-45 100BASE-TX PoE
	2 alarm inputs; 1 alarm output
	3.5 mm line in / 3.5 mm line out
Local Storage	microSD/microSDHC memory card slot (card not included)
Operating Conditions	-40° to 122° F / -40° to 50° C
	8-90% RH, non-condensing
Regulatory Approvals	UL 60950-1; FCC Part 15 Subpart B; CE EN55022; RoHS Directive (2002/95/EC)
Weight	
Without Sunshield	4.4 lbs / 2 kg
With Sunshield	5.5 lbs / 2.5 kg
Dimensions (HxD)	
Without Sunshield	6.5 x 6.46 in. / 16.5 x 16.4 cm
With Sunshield	8.07 x 7.87 in. / 20.5 x 20 cm
Direct Mounting Options	Surface mount, flush mount
Indirect Mounting Options (sold separately)	1.5" NPT mount adapter, 1.5" NPT wall mount, pole mount adapter
Included Accessories	9-pin male connector (power, alarms, AUX)
	Software CD (including Installation Guide and User Manual, VideoSphere SiteManager, and VideoSphere Browser)
	Screwdriver and screws
Optional Accessories	Flush mount adapter, sunshield

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