Model 7

m_PAC

Available Models:

■ Standard Definition Models
7-SD10
7-SD18
7-SD36

■ High Definition Models
7-HD12
7-HD20
7-HD30

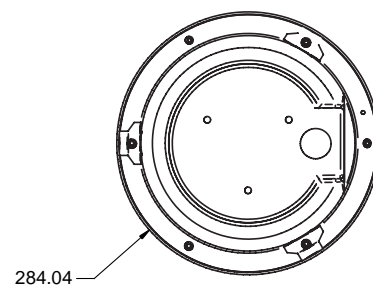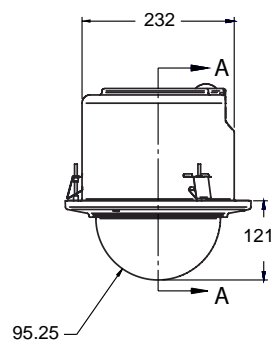Indoor

Outdoor

mm
Dimensions are in millimeters

232

A

121

95.25

A

284.04

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Highlighted Features

SD / HD	DIS	**WDR**	PTZ
Standard & High Definition	DIS	Wide Dynamic Range	PTZ Capability
IP	**PoE**	Local Storage	**Audio**
IP Output	PoE Connection	Local Storage	Two-way Audio

Description

The Model 7 is offered as an indoor/outdoor in-ceiling camera designed for a variety of surveillance and monitoring applications. The camera is mounted discretely in-ceiling inside a vandal resistant, plenum rated aluminum housing and an impact-resistant polycarbonate dome. During cold weather an internal heater unit enables the camera to continue operating in low temperatures.

The highly sensitive HAD CCD sensors and Day & Night ICR function make the Model 7 suitable for daytime as well as low light applications. Advanced DSP technology, combined with an H.264 compression stream delivers crystal clear images and provides improved picture quality in nearly all lighting conditions

Housing and Mounts

Indoor	Outdoor	In-Ceiling Mount	High Speed PTZ

Materials and Finish

Aluminum	Tamper Protection	Housing Color	Glass Color

Suggested Applications

- Air and Sea Port Facilities
- Banking and Treasuries
- Commercial Real Estate
- Educational and Research Facilities
- Energy Infrastructures
- Governmental Facilities
- High Security Facilities
- Stadiums, Arenas and Public Venues
- Towers and Large Buildings
- Traffic and Transportation Infrastructures

Certifications

ONVIF	CE Certified	FCC Certified	IP 67+ IP Rating

7-SD

	7-SD10	7-SD18	7-SD36
Lens			
Image sensor	1/3˝ Super HAD CCD II	1/4˝ Ex-view HAD CCD progressive scan	1/4˝ Ex-view HAD CCD progressive scan
Angle view	52º wide to 5.4º tele	48º wide to 2.8º tele	57.8º wide to 1.7º tele
Lens	10x optical zoom f=5.1mm wide to 51.0mm tele, f1.8 to f2.1	18x optical zoom f=4.1mm wide to 73.8mm tele, f1.4 to f3.0	36x optical zoom f=3.4mm wide to 122.4mm tele, f1.6 to f4.5
Minimum illumination	0.25 lux at 1/50 s (f1.8, 50 IRE) 0.0004 lux at 1/4 s ICR - on	0.7 lux at 1/50 s (f1.4, 50 IRE) 0.01 lux at 1/4 s ICR - on	1.4 lux at 1/50 s (f1.4, 50 IRE) 0.01 lux at 1/4 s ICR - on
Digital zoom	12x (120x with optical zoom)	12x (216x with optical zoom)	12x (432x with optical zoom)
Shutter	1/1 s ~ 1/10,000 s, 22 steps	1/1 s ~ 1/10,000 s, 22 steps	1/1 s ~ 1/10,000 s, 22 steps
TV lines	530 TVL	550 TVL	550 TVL
Video			
Compression	H.264 dual stream	H.264 dual stream	H.264 dual stream
Bit rate	16k to 1Mbps controllable	16k to 1Mbps controllable	16k to 1Mbps controllable
Video resolution	NTSC CIF (352x240), QCIF (176x120), full D1 (720x480) PAL CIF (352x288), QCIF (176x144), full D1 (720x576)	NTSC CIF (352x240), QCIF (176x120), full D1 (720x480) PAL CIF (352x288), QCIF (176x144), full D1 (720x576)	NTSC CIF (352x240), QCIF (176x120), full D1 (720x480) PAL CIF (352x288), QCIF (176x144), full D1 (720x576)
Frame rate	25 fps at full D1 (PAL) , 30 fps at full D1 (NTSC)	25 fps at full D1 (PAL) , 30 fps at full D1 (NTSC)	25 fps at full D1 (PAL) , 30 fps at full D1 (NTSC)
Image enhancement	auto white balance, AGC, backlight compensation, auto exposure	auto white balance, AGC, backlight compensation, auto exposure, 2D/3D noise reduction, auto WDR	auto white balance, AGC, backlight compensation, auto exposure, 2D/3D noise reduction, auto WDR, digital image stabilizer
Preset points	128	128	128
Audio			
Audio input	one channel MIC in or line input unbalanced 1.4 Vp-p	one channel MIC in or line input unbalanced 1.4 Vp-p	one channel MIC in or line input unbalanced 1.4 Vp-p
Audio output	one channel, RCA interface, linear output	one channel, RCA interface, linear output	one channel, RCA interface, linear output
Audio compression	G.726, G.711, ADPCM	G.726, G.711, ADPCM	G.726, G.711, ADPCM
Alarm System Integration			
Alarm input	one channel on/off input NO/NC	one channel on/off input NO/NC	one channel on/off input NO/NC
Alarm output	one channel on/off output 120 VAC 1A / 24 VDC 1A	one channel on/off output 120 VAC 1A / 24 VDC 1A	one channel on/off output 120 VAC 1A / 24 VDC 1A
Serial port	RS485 transparent protocol	RS485 transparent protocol	RS485 transparent protocol
Recording	motion trigger, alarm trigger, manual or schedule	motion trigger, alarm trigger, manual or schedule	motion trigger, alarm trigger, manual or schedule
Network and Storage			
Ethernet port	10/100M Base-t self-adapting Ethernet port	10/100M Base-t self-adapting Ethernet port	10/100M Base-t self-adapting Ethernet port
Protocol	TCP/IP, UDP, RTP, RTSP, RTCP, HTTP, DNS, DDNS, DHCP, FTP, NTP, PPPOE, SMTP, UPNP	TCP/IP, UDP, RTP, RTSP, RTCP, HTTP, DNS, DDNS, DHCP, FTP, NTP, PPPOE, SMTP, UPNP	TCP/IP, UDP, RTP, RTSP, RTCP, HTTP, DNS, DDNS, DHCP, FTP, NTP, PPPOE, SMTP, UPNP
Web browser	Internet Explorer 9.0 or above	Internet Explorer 9.0 or above	Internet Explorer 9.0 or above
Wireless protocols	802.11b/g supports WEP, WPA, WPA2 (optional)	802.11b/g supports WEP, WPA, WPA2 (optional)	802.11b/g supports WEP, WPA, WPA2 (optional)
SD storage	up to 32GB	up to 32GB	up to 32GB
Operating Conditions			
Operating temp.	-10° C ~ +60° C	-10° C ~ +60° C	-10° C ~ +60° C
Storage temp.	-20° C ~ +80° C	-20° C ~ +80° C	-20° C ~ +80° C
Operating humidity	10% ~ 85%	10% ~ 85%	10% ~ 85%
Weight and Dimensions			
Input voltage	24 VAC	24 VAC	24 VAC
Power consumption	20W	20W	20W
Dimensions	Ø 284.04 x 121 (R x H)	Ø 284.04 x 121 (R x H)	Ø 284.04 x 121 (R x H)
Weight	4.6 Kg	4.6 Kg	4.6 Kg
Colors	white, black, silver, blue	white, black, silver, blue	white, black, silver, blue
Glass color	transperant, smoked	transperant, smoked	transperant, smoked

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	7-HD12	7-HD20	7-HD30
Lens			
Image sensor	1/4-Type CMOS	1/2.8" Exmor CMOS	1/2.8" Exmor CMOS
Angle view	53.4° (wide end) to 2.9° (tele end)	55.4° (wide end) to 2.9° (tele end)	54.1° (wide end) to 2.9° (tele end)
Lens	12x optical zoom f=3.7mm wide to 44.4mm tele, f1.6 to f2.5	20x optical zoom f=4.7mm wide to 94.0mm tele, f1.6 to f3.5	30x optical zoom f=4.6 mm wide to 138.0mm tele, f1.8 to f4.7
Minimum illumination	0.3 lux (f1.6, ICR off) / 0.06 lux (f1.6, ICR on)	0.5 lux (f1.6, ICR off) / 0.095 lux (f1.6 ICR on)	0.5 lux (f1.6, ICR off) / 0.095 lux (f1.6, ICR – on)
Digital zoom	12x (144x with optical zoom)	12x (240x with optical zoom)	12x (360x with optical zoom)
Shutter	1/1 s ~ 1/10,000 s, 22 steps	1/1 s ~ 1/10,000 s, 22 steps	1/2 s ~ 1/10,000 s, 21 steps
Effective pixels	1.43 megapixels	3 megapixels	3 megapixels
Video			
Compression	H.264 / M-JPEG support dual stream/ MPEG4/ ASP/ MxPEG	H.264 / M-JPEG support dual stream/ MPEG4/ ASP/ MxPEG	H.264 / M-JPEG support dual stream/ MPEG4/ ASP/ MxPEG
Bit rate	32Kbps to 8Mbps	32Kbps to 8Mbps	32Kbps to 8Mbps
Video resolution	1920 (H) x 1080 (V) / 1280 (H) x 720 (V) / 720 (H) x 576 (V) / 352 (H) x 288 (V)	1920 (H) x 1080 (V) / 1280 (H) x 720 (V) / 720 (H) x 480 (V) / 720 (H) x 576 (V)	1920 (H) x 1080 (V) / 1280 (H) x 720 (V) / 720 (H) x 576 (V) / 352 (H) x 288 (V)
Signal system	1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/50, 720p/29.97, 720p/25	1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/50, 720p/29.97, 720p/25	1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/50, 720p/29.97, 720p/25
Frame rate	25 fps at full D1 (PAL) 30 fps at full D1 (NTSC)	25 fps at full D1 (PAL) 30 fps at full D1 (NTSC)	25 fps at full D1 (PAL) 30 fps at full D1 (NTSC)
Image enhancement	auto white balance, AGC, backlight compensation, auto exposure, WDR, Tour Recording, Guard tour, Auto track, Iris Control, On-Screen Display	auto white balance, AGC, backlight compensation, auto exposure, WDR, Tour Recording, Guard tour, Auto track, Iris Control, On-Screen Display	auto white balance, AGC, backlight compensation, auto exposure, WDR, Tour Recording, Guard tour, Auto track, Iris Control, On-Screen Display
Preset points	128	128	128
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Audio input	one channel MIC in or line input unbalanced 1.4 Vp-p	one channel MIC in or line input unbalanced 1.4 Vp-p	one channel MIC in or line input unbalanced 1.4 Vp-p
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