

## Available Models:

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

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



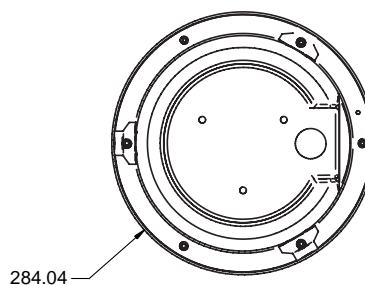
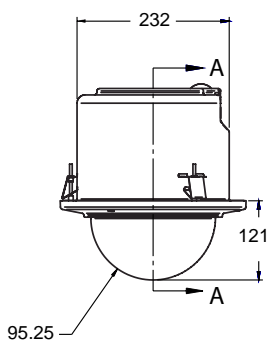
Indoor



Outdoor

mm

Dimensions  
are in  
millimeters





## Highlighted Features



Standard & High Definition



DIS



Wide Dynamic Range



PTZ Capability



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

## 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

## Housing and Mounts



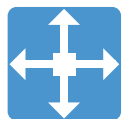
Indoor



Outdoor



In-Ceiling Mount



High Speed PTZ

## Materials and Finish



Aluminum



Tamper Protection



Housing Color



Glass Color

## Certifications



ONVIF



CE Certified



FCC Certified



IP Rating

	7-SD10	7-SD18	7-SD36
<b>Lens</b>			
<b>Image sensor</b>	1/3 Super HAD CCD II	1/4 Ex-view HAD CCD progressive scan	1/4 Ex-view HAD CCD progressive scan
<b>Angle view</b>	52° wide to 5.4° tele	48° wide to 2.8° tele	57.8° wide to 1.7° tele
<b>Lens</b>	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
<b>Minimum illumination</b>	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
<b>Digital zoom</b>	12x (120x with optical zoom)	12x (216x with optical zoom)	12x (432x with optical zoom)
<b>Shutter</b>	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
<b>TV lines</b>	530 TVL	550 TVL	550 TVL
<b>Video</b>			
<b>Compression</b>	H.264 dual stream	H.264 dual stream	H.264 dual stream
<b>Bit rate</b>	16k to 1Mbps controllable	16k to 1Mbps controllable	16k to 1Mbps controllable
<b>Video resolution</b>	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)
<b>Frame rate</b>	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)
<b>Image enhancement</b>	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
<b>Preset points</b>	128	128	128
<b>Audio</b>			
<b>Audio input</b>	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
<b>Audio output</b>	one channel, RCA interface, linear output	one channel, RCA interface, linear output	one channel, RCA interface, linear output
<b>Audio compression</b>	G.726, G.711, ADPCM	G.726, G.711, ADPCM	G.726, G.711, ADPCM
<b>Alarm System Integration</b>			
<b>Alarm input</b>	one channel on/off input NO/NC	one channel on/off input NO/NC	one channel on/off input NO/NC
<b>Alarm output</b>	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
<b>Serial port</b>	RS485 transparent protocol	RS485 transparent protocol	RS485 transparent protocol
<b>Recording</b>	motion trigger, alarm trigger, manual or schedule	motion trigger, alarm trigger, manual or schedule	motion trigger, alarm trigger, manual or schedule
<b>Network and Storage</b>			
<b>Ethernet port</b>	10/100M Base-t self-adapting Ethernet port	10/100M Base-t self-adapting Ethernet port	10/100M Base-t self-adapting Ethernet port
<b>Protocol</b>	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
<b>Web browser</b>	Internet Explorer 9.0 or above	Internet Explorer 9.0 or above	Internet Explorer 9.0 or above
<b>Wireless protocols</b>	802.11b/g supports WEP, WPA, WPA2 (optional)	802.11b/g supports WEP, WPA, WPA2 (optional)	802.11b/g supports WEP, WPA, WPA2 (optional)
<b>SD storage</b>	up to 32GB	up to 32GB	up to 32GB
<b>Operating Conditions</b>			
<b>Operating temp.</b>	-10° C ~ +60° C	-10° C ~ +60° C	-10° C ~ +60° C
<b>Storage temp.</b>	-20° C ~ +80° C	-20° C ~ +80° C	-20° C ~ +80° C
<b>Operating humidity</b>	10% ~ 85%	10% ~ 85%	10% ~ 85%
<b>Weight and Dimensions</b>			
<b>Input voltage</b>	24 VAC	24 VAC	24 VAC
<b>Power consumption</b>	20W	20W	20W
<b>Dimensions</b>	Ø 284.04 x 121 (R x H)	Ø 284.04 x 121 (R x H)	Ø 284.04 x 121 (R x H)
<b>Weight</b>	4.6 Kg	4.6 Kg	4.6 Kg
<b>Colors</b>	white, black, silver, blue	white, black, silver, blue	white, black, silver, blue
<b>Glass color</b>	transperant, smoked	transperant, smoked	transperant, smoked

	7-HD12	7-HD20	7-HD30
<b>Lens</b>			
<b>Image sensor</b>	1/4-Type CMOS	1/2.8" Exmor CMOS	1/2.8" Exmor CMOS
<b>Angle view</b>	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)
<b>Lens</b>	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
<b>Minimum illumination</b>	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)
<b>Digital zoom</b>	12x (144x with optical zoom)	12x (240x with optical zoom)	12x (360x with optical zoom)
<b>Shutter</b>	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
<b>Effective pixels</b>	1.43 megapixels	3 megapixels	3 megapixels

	7-HD12	7-HD20	7-HD30
<b>Video</b>			
<b>Compression</b>	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
<b>Bit rate</b>	32Kbps to 8Mbps	32Kbps to 8Mbps	32Kbps to 8Mbps
<b>Video resolution</b>	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)
<b>Signal system</b>	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
<b>Frame rate</b>	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)
<b>Image enhancement</b>	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
<b>Preset points</b>	128	128	128

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<b>Operating temp.</b>	-10° C ~ +60° C	-10° C ~ +60° C	-10° C ~ +60° C
<b>Storage temp.</b>	-20° C ~ +80° C	-20° C ~ +80° C	-20° C ~ +80° C
<b>Operating humidity</b>	10% ~ 85%	10% ~ 85%	10% ~ 85%

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<b>Glass color</b>	transperant, smoked	transperant, smoked	transperant, smoked