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DATA SHEET

FortiCamera[™] Video Security IP Camera



FortiCamera

FortiCamera FD40, FD20, MD20, CB20, SD20 and FortiAPCam 214B

Get complete visual coverage inside and out with FortiCameras. With options for indoor and outdoor, vandal-proof, weatherproof, lowlight night vision, fixed and motorized zoom lenses and 2-way audio, there's a FortiCam that fits every environment. All FortiCams deliver crisp, high-resolution HDTV-quality images to any FortiRecorder NVR, either continuously or triggered by a range of events, including motion and/or audio detection.

Easy to set up, license-free

With FortiCameras, installation is a breeze. They support PoE, eliminating the need for AC power. Just connect the camera to the FortiRecorder network via a PoE switch and you're up and running. No software installation, no patches and, unlike using third-party cameras, no license fees.

Key Features & Benefits

Clear high-definition visuals, even in the dark	Your security footage won't be much use if you can't see what's going on. HDTV-quality and advanced low-light and infrared ensure that you can see the details.
Continuous or event-based surveillance	Capture everything or capture selectively based on events including motion detection, sound detection or scheduled times.
Auto-discovery by FortiRecorder NVRs	Setup is a snap: plug into FortiRecorder network and the rest is automatic.

The Power to See Everything: the Complete Video Security Solution

Combined with the FortiRecorder NVR, FortiCameras give you everything you need for complete facility video security.

- Scheduled and manual recording
- Motion detection and continuous recordings
- Snapshot notifications and alerts
- Web-based interface (no software installation required)
- Camera live view and video playback
- Event monitor with timeline
- RADIUS, LDAP, SNMP and remote data storage support for flexible network integration
- Powerful Windows client FortiRecorder Central
- Mobile access on iOS and Android





HIGHLIGHTS

FortiCamera FD40

A flagship of Fortinet's Network camera lineup this model has it all. High-performance 4MP resolution at 30 fps captures the smallest detail through a precision motorized 3x autofocus zoom lens. Complicated or low light situations are mastered with ease using True Shutter Ultra-WDR (>120 dB) and excellent low light sensitivity (0.01lx in b/w). In case this is not enough, a long range 130-foot IR spot will brighten the darkest scene. Triple-axis wall or ceiling mount plus 3/4" EMT conduit compatibility are the professional choice for installation. This rugged camera is designed to IK10 rating for vandalism and is suitable for extreme temperatures from -55°C to +55°C while still using standard PoE 802.3af.





FortiCamera FD20

This fixed dome camera is a popular configuration and delivers outstanding flexibility and utility at an affordable price. The crisp 1080p resolution image can cover up to 91degrees horizontal making it perfect for left to right corner views. Its direct wall mountable triple-axis modular design allows mounting flexibility by installing the baseplate and housing first while adding the camera module later. Rated IK10 for vandalism, removable sun shield and indoor/outdoor capabilities with good 100-foot IR range round this versatile camera model.

FortiCamera MD20

With smooth lines and unobtrusive size, this camera looks good indoors and it is tough enough for sheltered outdoor positions. Despite the small package it has full HD 1080p resolution at 30 fps. The easy to adjust eyeball design can point the 70-degree view fixed lens at doors, customer areas, reception desks or hallways. When the lights go out a high powered IR LED steps in giving you carefree 24/7 surveillance.



HIGHLIGHTS

FortiCamera CB20

The FortiCam CB20 offers great quality video in almost any situation. It's compact design looks good indoors and out. The wide angle varifocal lens delivers crisp panoramic views or zoomed-in views for details. Advanced infrared LED technology delivers an extended 100-foot range at night. Mounting in any direction is a breeze with the sturdy cable-managed bracket. A no-frills approach and focus on core features makes this model a price/performance winner.





FortiCamera SD20

Any video surveillance project will benefit from the addition of professional-grade FortiCamera FCM-SD20 high-speed dome cameras in strategic positions. Its 360-degree continuous pan operation and above-horizon tilt provides a watch-tower overview. Quickly look around and smoothly follow incidents with precision mechanics and high-quality autofocus. Then narrow it down utilizing ultra-fine adjustment/positioning.

View close-up detail, identify faces and read license plates at long distances with 2MP HD digital clarity. The superior optical 30x zoom range is supported by electronic image stabilization to allow steady shots at long range even if wind or vibration is present.

For ease of mind, true wide dynamic range (shutter WDR >96dB) masters tricky light situations while 0.09lx night sensitivity generates great images even in dimly lit areas.

FortiAPCam 214B

Integrating a camera plus WiFi access point, the FortiAPCam 214B cuts clutter and simplifies the installation of your security and your wireless systems by combining the two. It delivers the high-security wireless networking that Fortinet's access points are known for in the body of a high-resolution day and night security camera with a wide dynamic range, passive infrared sensor, DI/DO and tamper detection.

Wide dynamic range (WDR) technology compensates for lighting imbalances, capturing detail that other cameras can miss. Built-in infrared LED lights allow it to see in the dark up to 45 feet away. Varifocal lens with wide viewing angle to match almost any situation. The passive infrared (PIR) sensor detects motion up to 15 feet away, automatically activating the infrared lights.

The built-in wireless access point delivers secure, identity-driven WiFi access. Managed by a FortiGate or FortiWiFi platform with its integrated wireless controller, the FortiAPCam 214B allows you to

deploy a comprehensive integrated security solution for your wireless and wired networks. The access point is 802.11 a/b/g/n standards-based and operates on both 2.4 GHz b/g/n and 5 GHz a/n.



SPECIFICATIONS







	FORTICAMERA FD40	FORTICAMERA FD20	FORTICAMERA MD20	
Description	Ultra-WDR Day/Night IP Video Security Camera	Versatile Day/Night IP Video Security Camera	Day/Night IP Video Security Camera	
Format	Fixed Dome, Indoor/Outdoor, vandal	Fixed Dome, Indoor/Outdoor, vandal	al Mini Dome, Indoor/Outdoor	
Sensor Type	4 mega-pixel, 1/3" Progressive CMOS	2 mega-pixel, 1/2.8" Sony CMOS	2 mega-pixel, 1/2.8" Sony CMOS	
Iris	F1.6, P-Iris	F1.4, fixed	F1.4, fixed	
Optical Zoom	Зх	4x	-	
Digital Zoom	-	-	-	
Focal Length	3–9 mm (motorized, autofocus)	f = 2.8 mm–12 mm varifocal	f = 3.6 mm	
View Angle	H: 109°–33°	H: 91°–31° V: 79°–23° D: 138°–40°	H: 70° V: 59° D: 107°	
Minimum Illumination	0.1 Lux (Color), 0.01Lux (B/W) @ F1.2	0.05 Lux (Color), 0.01Lux (B/W) @ F1.4	0.05 Lux (Color), 0.01Lux (B/W) @ F1.4	
Wide Dynamic Range	Shutter WDR (>120 dB)	Digital	Digital	
Streaming Protocols	RTSP	RTSP	RTSP	
Video Compression	MJPEG / H.264 (MPEG-4 Part 10/AVC) Baseline / Main / High Profile	H.264	H.264	
Image Resolution	2688 x 1512 at 30 frames per second Full HD 1080P / SXGA / 720P / XGA / SVGA / D1 / VGA / CIF	1920 x 1080 at 25 frames per second 1280 x 720 at 25 frames per second"	1920 x 1080 at 25 frames per second 1280 x 720 at 25 frames per second	
Audio	Line in/out	Line in/out	-	
Interface	1 DI, 1 DO, RJ45 Ethernet 10/100 Mbps	1 DI, 1 DO, RJ45 Ethernet 10/100 Mbps	RJ45 Ethernet 10/100 Mbps	
Mounting	Wall, ceiling, 3/4" Conduit	Wall, ceiling, 3-axis, optional sunshield	Wall, ceiling, 3-axis	
Operation				
Pan / Tilt	_	-	_	
Presets / Accuracy / Speed	-	-	_	
IRLED / IRC	40m / Yes	30m / Yes	25m / Yes	
EIS / DNR	– / 3DNR	– / 3DNR	– / Yes	
Dimensions				
Height x Width x Length (inches)	4.6 x 5.2 x 5.2	6.3 x 4.5 x 4.5	2.6 x 4.8 x 5.0	
Height x Width x Length (mm)	117 x 134 x 134	161 x 115 x 115	65 x 123 x 126	
Weight	1.69 lbs (770 g)	2.13 lbs (965 g)	0.68 lbs (310 g)	
Environment				
Power Source	PoE (802.3af) / DC 10–48V / AC 24V	PoE (802.3af) / DC12V±10% / AC 24V±10%	PoE (802.3af) / DC12V±10%	
Power Consumption (Average)	Cold start 8.5 W > Operation 13.34 W max with heater	3.5 W (9 W IR ON)	5W	
Operating Temperature	-67–131°F (-55–55°C)	14–122°F (-10–50°C)	14–122°F (-10–50°C)	
Humidity	10–90% non-condensing	0–85% non-condensing	0–85% non-condensing	
Compliance	-		•	
Regulatory and Standards	CE / FCC / RoHS / IP66 / IK10 / ONVIF Profile S	FCC Class B, CE Mark, weatherproof (IP66), IK10, ONVIF2.2	FCC Class B, CE Mark, IP65, ONVIF2.2	

SPECIFICATIONS







	FORTICAMERA CB20	FORTICAMERA SD20	FORTIAPCAM 214B	
Description	Day/Night IP Video Security Camera	Ultra-WDR IP PTZ Camera	Access point and IP Video Security Camera	
Format	Compact Bullet, Indoor/Outdoor	Speed Dome, Indoor/Outdoor	Fixed Dome, Indoor	
Sensor Type	2 mega-pixel, 1/2.8" Sony CMOS	2 mega-pixel, 1/2.8" Sony Progressive CMOS	2 mega-pixel, 1/2.7" CMOS	
ris	F1.4 fixed	F1.6 (W), F4.7 (T) P-Iris	F1.2 P-Iris	
Optical Zoom	4χ	30x	Зх	
Digital Zoom	_	12x	_	
ocal Length	f = 2.8 mm–12 mm varifocal	f = 4.3 mm-129 mm (motorized, autofocus)	f = 3 mm–9 mm varifocal	
/iew Angle	H: 91°–31° V: 79°–23° D: 138°–40°	H: 65°–3.1°	H: 93°–31.7°	
Ainimum Illumination	0.05 Lux (Color), 0.01Lux (B/W) @ F1.4	0.5 Lux (Color), 0.095 Lux (B/W) @ F1.6	0.2 Lux (Color), 0.01Lux (B/W) @ F1.2	
Vide Dynamic Range	Digital	Shutter WDR (>96 dB)	Digital	
Streaming Protocols	RTSP	RTSP	RTSP	
/ideo Compression	H.264	H.264 (MPEG-4 Part 10/AVC)	H.264 / MJPEG / MPEG-4	
mage Resolution	1920 x 1080 at 25 frames per second 1280 x 720 at 25 frames per second	1920 x 1080 at 30 frames per second 1280 x 720 at 30 frames per second 720 x 480 at 30 frames per second	1920 x 1080 at 30 frames per second 1280 x 720 at 30 frames per second 720 x 480 at 30 frames per second	
Audio	-	Line in/out	Two-way line in/line out, built-in mic	
nterface	RJ45 Ethernet 10/100 Mbps	4 DI, 2 DO, RJ45 Ethernet 10/100 Mbps	1 DI, 1 DO, RJ45 Ethernet 10/100 Mbps, PIR 15 ft (5 m)	
Nounting	Wall, ceiling, bracket included	Wall, pole, ceiling (see "Optional Accessories")	Ceiling, 0–90°V	
peration				
Pan / Tilt	-	360° endless / -10°–190°	_	
Presets / Accuracy / Speed	–	256 / 0.225° / 5°–400° /s	-	
RLED / IRC	30m / Yes	– / Yes	15m / Yes	
tis / DNR	– / Yes	Yes / 3DNR	– / Yes	
Dimensions				
leight x Width x Length (inches)	2.8 x 3.3 x 9.4	11.1 x 7.6 \times 7.6 (with sunshield)	3.9 x 5.5 x 5.5	
leight x Width x Length (mm)	70 x 85 x 240	282 x 192 x 192 (with sunshield)	100 x 140 x 140	
Veight	1.25 lbs (569 g) 5.07 lbs (2.30 kg)		1.5 lbs (0.68 kg)	
invironment				
Power Source	PoE (802.3af)	802.3at PoE+ (60 W) / AC 24V ± 10%	PoE 802.3af, 12.5 W	
Power Consumption (Average)	1.2 W (6 W IR ON)	59 W (with heater)	5.5 W	
perating Temperature	14–122°F (-10–50°C)	-40–122°F (-40–50°C)	32-104°F (0-40°C)	
lumidity	0–85% non-condensing	10-80% non-condensing	10-80% non-condensing	
compliance				
Regulatory and Standards	FCC Class B, CE Mark, weatherproof (IP66), ONVIF2.2	CE / FCC / RoHS / IP66 / ONVIF Profile S	FCC Part 15 Subpart B, Subpart C and Subpart E / IEC 62471	
	FORTIAPCAM 214B			

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Access Point		
Number of Antennas	2 internal	
Peak Antenna Gain	3 dBi for 2.4 GHz, 4 dBi for 5 GHz	
Frequency of Radio	2.4 GHz b/g/n or 5 GHz a/n	
Tx/Rx Streams (802.11n mode)	2x2 MIMO dual spatial stream – 300 Mbps/Radio	
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)	
Simultaneous SSIDs	8	
EAP Type(s)	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	
User/Device Authentication	WPATM and WPA2TM with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist and whitelist	
Maximum Tx Power	17 dBm (50 mW)	
IEEE Specifications	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1X, 802.3af	
802.11n Features	20 Mhz and 40 Mhz High-Throughput (HT) Support Increased maximum frame transmission by incorporating A-MPDU and A-MSDU Packet Aggregation. Conserve power via Dynamic MIMO power save. Low-density parity check (LDPC) encoding. Maximum likelihood demodulation (MLD). Transmit beamforming (TxBF). Maximum Ratio Combining (MRC) for improved receiver performance.	
Wireless Monitoring Capabilities	Background scan with client access on 2.4 and 5 GHz. Full-time scan as dedicated monitor option.	

ORDER INFORMATION

Product	SKU	Description
FortiCam FD40	FMC-FD40	4 mega-pixel fixed dome IP camera, IR/night vision, shutter WDR, indoor/outdoor, motorized zoom, AF.
FortiCam FD20	FCM-FD20	2 mega-pixel fixed dome IP camera, IR/night vision, sunshield, indoor/outdoor, varifocal.
FortiCam MD20	FCM-MD20	2 mega-pixel mini done IP camera, IR/night vision, indoor/outdoor, fixed lens.
FortiCam CB20	FCM-CB20	2 mega-pixel compact bullet IP camera, IR/night vision, indoor/outdoor, varifocal.
FortiCam SD20	FCM-SD20	2 mega-pixel speed dome PTZ IP camera, DIDO, 1x 10/100 port, 802.3at PoE, outdoor use, rated IP66.
FortiAPCam 214B	FCM-AP214B	2 mega-pixel indoor fixed dome IP camera with LED night vision, PIR, audio, DIDO. Includes built-in wireless AP — 1x GE RJ45 port, single radio (802.11 a/b/g/n, 2x2 MIMO), integrated mount, 802.3af PoE.
Optional Accessories		
FortiCam SD20 Mount	FCM-SD2-PDT	Standard pendent antidrop wire mount kit for FCM-SD20.
	FCM-SD2-ICT	In-ceiling T-bar mount kit for FCM-SD20.
	FCM-SD2-ST25	Straight tube 25cm mount kit for FCM-SD20.
	FCM-SD2-CPM	Corner plate mini mount kit for FCM-SD20.
	FCM-SD2-TDM	Pole thin direct mount kit for FCM-SD20.
	FCM-SD2-HCM	Hard ceiling mount kit for FCM-SD20.
FortiRecorder Central	FREE	Video Management System for Windows.
FortiRecorder Mobile iOS App.	FREE	Monitor FortiRecorder from your iPhone or iPad.
FortiRecorder Mobile Android App.	FREE	Monitor FortiRecorder from your Android device.



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