

DS-2CD2020F-I(W)



Key Features

- Up to 2 megapixel (1920 × 1080) resolution
- Standard video compression with high compression ratio, ROI (region of interest) encoding
- Progressive scan CMOS, capture motion video without incised margin
- Support dual stream, and the sub-stream for mobile surveillance
- High-performance and long service life Infrared LED, Approx. 20 to 30 meters IR range
- IR cut filter with auto switch
- Built-in Micro SD / SDHC / SDXC card slot, up to 64GB
- PoE (Power over Ethernet)
- Ingress Protection level: IP66
- Electronic shutter for different surveillance environments
- Other functions: alarm, reset button, mirror, etc
- Support intrusion detection and line crossing detection
- Support VCA, which is compatible with NVR for the second time of video searching and analysing

Specification

Model	DS-2CD2020F-I(W)	
Parameter	2 Megapixel CMOS ICR Infrared Network Bullet Camera	
Camera		
Image Sensor	1/2.8" Progressive Scan CMOS	



Min. Illumination	0.01Lux @ (F1.2, AGC ON) ,0 Lux with IR
	0.028Lux @ (F2.0, AGC ON) ,0 Lux with IR
Shutter Speed	1/3 s to 1/100,000 s
Lens	4mm@ F2.0, Angle of view: 85°
	(6mm optional)
Lens Mount	M12
Day &Night	IR cut filter with auto switch
Digital Noise	3D DNR
Reduction	
Wide Dynamic Range	Digital WDR
Compression Standard	
Video Compression	H.264/ MJPEG
Video Bit Rate	32 Kbps – 8 Mbps
Dual Stream	Yes
Image	
Max. Resolution	1920 × 1080
Frama Data	50Hz: 25fps(1920 × 1080), 25fps (1280 × 960), 25fps (1280 × 720)
Frame Rate	60Hz: 30fps(1920 × 1080), 30fps (1280 × 960), 30fps (1280 × 720)
Image Settings	Rotate mode, Saturation, Brightness, Contrast adjustable by client
illiage Settings	software or web browser
Backlight	Yes, zone optional
compensation	res, zone spaintal
ROI	Support
Network	
Network Storage	NAS (Support NFS,SMB/CIFS)
	Intrusion detection, Line crossing detection, Motion detection, Dynamic
Alarm Trigger	analysis, Tampering alarm, Network disconnect , IP address conflict,
	Storage exception
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP,RTCP,
110100013	PPPoE,NTP,UPnP,SMTP,SNMP,IGMP,802.1X,QoS,IPv6,Bonjour
	One-key reset, Flash-prevention, dual stream, heartbeat, mirror,
General	password protection, privacy mask, watermark, IP address filtering,
	Anonymous access
Standard	ONVIF, PSIA, CGI, ISAPI
Interface	
Communication	1 RJ45 10M/100M Ethernet interface
Interface	
On-board storage	Built-in Micro SD/SDHC/SDXC card slot, up to 64 GB
Reset Button	Yes
	y for the products with Wi-Fi module built-in)
Wireless Standards	IEEE802.11b, 802.11g, 802.11n



Channel Bandwidth 20/40MHz Support Protocols 802.11b: CCK, QPSK, BPSK 802.11g/n: OFDM Security 64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS Transmit Output Power 11b: 17±1.5dBm @ 11Mbps 11b: -90dBm @ 11Mbps (Typical) Receive Sensitivity 11g: -75dBm @ 54Mpbs (Typical) Transfer Rates 11g: 54Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption 5W MAX (Max. 7 W as IR cut filter on) Ingress Protection IP66 IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	VII 31014	
Receive Sensitivity 11b: -90dBm @ 11Mbps 11b: -90dBm @ 54Mpbs 11b: -90dBm @ 54Mpbs 11b: -90dBm @ 54Mpbs 11b: -17±1.5dBm @ 14Mps 11b: -90dBm @ 14Mps 11b: -90dBm @ 54Mpbs 11b: -175dBm @ 54Mpbs 11b: -90dBm @ 54Mpbs 11b: -90dBm @ 54Mpbs 11b: -18dBm @ 54Mpbs 11b: 11Mbps 11b: 11m	Frequency Range	2.4 GHz ~ 2.4835 GHz
Protocols 802.11g/n: OFDM Security 64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS Transmit Output Power 11b: 17±1.5dBm @ 11Mbps In: 12.5±1.5dBm Receive Sensitivity 11b: -90dBm @ 11Mbps (Typical) Receive Sensitivity 11g: -75dBm @ 54Mpbs (Typical) In: -74dBm (Typical) 11b: 11Mbps In: up to 150Mbps Wireless Range 50m(depend on environment) General -30 °C - 60 °C (-22 °F - 140 °F) Operating Conditions Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption 5W MAX (Max. 7 W as IR cut filter on) Ingress Protection IP66 IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Channel Bandwidth	20/40MHz Support
Security 64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS	Dretocolo	802.11b: CCK, QPSK, BPSK
Transmit Output 11b: 17±1.5dBm @ 11Mbps Power 11g: 14±1.5dBm @ 54Mbps 11b: -90dBm @ 11Mbps (Typical) 11b: -90dBm @ 11Mbps (Typical) Receive Sensitivity 11g: -75dBm @ 54Mpbs (Typical) 11n: -74dBm (Typical) 11b: 11Mbps Transfer Rates 11g: 54Mbps 11n: up to 150Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption 5W MAX (Max. 7 W as IR cut filter on) Ingress Protection level IP66 IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Protocois	802.11g/n: OFDM
Transmit Output 11g: 14±1.5dBm @ 54Mbps Power 11n: 12.5±1.5dBm I1b: -90dBm @ 11Mbps (Typical) 11g: -75dBm @ 54Mpbs (Typical) Receive Sensitivity 11g: -75dBm @ 54Mpbs (Typical) I1n: -74dBm (Typical) 11b: 11Mbps Transfer Rates 11g: 54Mbps Wireless Range 50m(depend on environment) General -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) Power Supply Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption 5W MAX (Max. 7 W as IR cut filter on) Ingress Protection level IP66 IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Security	64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS
Power	Transmit Output	11b: 17±1.5dBm @ 11Mbps
11n: 12.5±1.5dBm 11b: -90dBm @ 11Mbps (Typical) 11g: -75dBm @ 54Mpbs (Typical) 11n: -74dBm (Typical) 11b: 11Mbps 11p: 54Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General Operating Conditions Power Supply Power Consumption Ingress Protection level IR Range Dimensions 11b: -90dBm @ 11Mbps (Typical) 11p: -74dBm (Typical) 12p: -75dBm @ 54Mpbs (Typical) 12pical		11g: 14±1.5dBm @ 54Mbps
Receive Sensitivity 11g: -75dBm @ 54Mpbs (Typical) 11n: -74dBm (Typical) 11b: 11Mbps 11g: 54Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General Operating Conditions Power Supply 12 V DC ± 10% , PoE (802.3af) Power Consumption Ingress Protection level IR Range Dimensions 11g: -75dBm @ 54Mpbs (Typical) 11b: 11Mbps 11c: 12 V DC ± 10Mps 12 V DC ± 10 °F) 12 V DC ± 10 °F) 12 V DC ± 10 °F) 13 V DC ± 10 °F) 14 V DC ± 10 °F) 15 V MAX (Max. 7 W as IR cut filter on) 16 V MAX (Max. 7 W as IR cut filter on)	Power	11n: 12.5±1.5dBm
11n: -74dBm (Typical) 11b: 11Mbps 11g: 54Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General Operating Conditions Power Supply 12 V DC ± 10% , PoE (802.3af) Power Consumption Ingress Protection level IR Range 50m(4epend on environment) 11n: up to 150Mbps 12 V DC ± 0° C (-22 °F - 140 °F) 12 V DC ± 10% , PoE (802.3af) 13 V DC ± 10% , PoE (802.3af) 14 V DC ± 10% , PoE (802.3af) 15 V DC ± 10% , PoE (802.3af) 16 C D D D D D D D D D D D D D D D D D D		11b: -90dBm @ 11Mbps (Typical)
Transfer Rates 11b: 11Mbps 11g: 54Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption Ingress Protection level IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Receive Sensitivity	11g: -75dBm @ 54Mpbs (Typical)
Transfer Rates 11g: 54Mbps 11n: up to 150Mbps Wireless Range 50m(depend on environment) General Operating Conditions Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption Ingress Protection level IR Range 30 meters Dimensions 11g: 54Mbps 11n: up to 150Mbps 12 V DC ± 0°C (-22 °F – 140 °F) Humidity 95% or less (non-condensing) Fower (802.3af) 1P66 1P66		11n: -74dBm (Typical)
Mireless Range 50m(depend on environment) General Operating Conditions Power Supply Power Consumption Ingress Protection level IR Range Dimensions 11n: up to 150Mbps 50m(depend on environment) -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) 12 V DC ± 10% , PoE (802.3af) Power Consumption IP66 IP66 B 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")		11b: 11Mbps
Wireless Range 50m(depend on environment) General Operating Conditions	Transfer Rates	11g: 54Mbps
General Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption SW MAX (Max. 7 W as IR cut filter on) Ingress Protection level IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")		11n: up to 150Mbps
Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption SW MAX (Max. 7 W as IR cut filter on) Ingress Protection level IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Wireless Range	50m(depend on environment)
Operating Conditions Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption SW MAX (Max. 7 W as IR cut filter on) Ingress Protection level IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	General	
Humidity 95% or less (non-condensing) Power Supply 12 V DC ± 10%, PoE (802.3af) Power Consumption 5W MAX (Max. 7 W as IR cut filter on) Ingress Protection level IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F)
Power Consumption 5W MAX (Max. 7 W as IR cut filter on) Ingress Protection IP66 IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Operating Conditions	Humidity 95% or less (non-condensing)
Ingress Protection IP66 level 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Power Supply	12 V DC ± 10% , PoE (802.3af)
IP66 IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Power Consumption	5W MAX (Max. 7 W as IR cut filter on)
level IR Range 30 meters Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	Ingress Protection	Inco
Dimensions 60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")	level	IP66
	IR Range	30 meters
500 (4.4 !!)	Dimensions	60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")
Weight 500g (1.1 lbs)	Weight	500g (1.1 lbs)

Order Models

DS-2CD2020F-I, DS-2CD2020F-IW



Dimensions

