

# Speed Dome IP Camera

F-SC431



## Introduction

F-SC431 is a large size HD Speed Dome Camera, can do 360° pan and 90° tilt precisely. Up to 255 preset patrolling positions and scheduled PTZ tasks allowed users to monitor the different areas. Speed Dome Camera can be customized to add multiple IoT interfaces such as RS232, RS485, I/O, Relay, Analog Input and, etc. To provides an all-in-one IoT surveillance solution to save your resource as well as improve system integration.



High Performance

- ▶ 30X AF Lens, keep the clarity and focus on the correct objects rapidly
- ▶ Super WDR, up to 140dB wide dynamic range
- ▶ Endless 360° pan and 90° tilt precise movement
- ▶ Video analysis function (Optional), like people counting, water gauge reading, etc.
- ▶ H.265, optimized in bit rate, bandwidth, and storage usage, 50% off than H.264.
- ▶ Support remote management & upgrade



Stability & Reliability

- ▶ WDT Watchdog design to ensure system stability
- ▶ Adopt a complete anti-drop mechanism
- ▶ Built-in 1.5KV electromagnetic isolation protection for Ethernet interface
- ▶ RS232/RS485 interface power and data isolation with CSA, UL and IEC standards
- ▶ Built-in reverse phase protection and over voltage protection for power interface



Standard & Convenience

- ▶ Standard RS232/RS485 and Ethernet interfaces
- ▶ Support MQTT, Modbus RTU, ONVIF Profile S, and other protocols.
- ▶ Easy to use, flexible, multiple working mode options

# Speed Dome IP Camera F-SC431



Industrial-grade Design

- ▶ Wide range operating temperature (-35°C~75°C)
- ▶ SONY top-level CMOS sensor
- ▶ Metal casing, protection grade IP67. Metal housing and system safety isolation
- ▶ Industrial-grade components

## Product Specification

Camera	
Model	F-SC431
Items	Contents
Image Sensor	1/2.8" Progressive Scan CMOS
Resolution	2MP
Min. Illumination	Color: 0.002Lux@F1.2 B/W: 0Lux with IR on
WDR	Super WDR up to 140dB
Lens	AF Motorized Lens 4.7~141mm @F1.5~F4.0, 30x Optical Zoom
Zoom Speed	4s
Field of View	H62°~H3°/D70°~D3°/V37°~V1°
Shutter Time	1/100000s~1s
IR Distance	Up to 150m
Day & Night	ICR Filter Auto Switch
Video	
Items	Contents
Max. Image Resolution	1920×1080
Primary Stream	30fps @ (1920×1080, 1280×960, 1280×720, 704×576)
Secondary Stream	30fps @ (704×576, 640×480, 640×360, 352×288, 320×240, 320×192, 320×176)
Tertiary Stream	30fps @ (1920×1080, 1280×720, 704×576, 640×480, 640×360, 320×240, 320×192, 320×176)
Video Compression	H.265(HEVC)/H.264/MJPEG
Bit Rate	16Kbps~16Mbps (CBR/VBR Adjustable)
Image Setting	Brightness/Contrast/Saturation/Sharpness

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PTZ	
Items	Contents
Pan Range	360° endless
Pan Speed	Pan Manual Speed: 0.5°~180°/s, Pan Preset Speed: 240°/s
Tilt Range	0°~90°
Tilt Speed	Tilt Manual Speed: 0.5°~120°/s, Tilt Preset Speed: 200°/s
Preset Quantity	255
Patrol	8 Patrols, up to 48 presets each patrol
Pattern	4 Patterns
PTZ Position Display	ON/OFF
Support Function	Proportional Zoom, Preset Freezing, Power Off Memory
Network	
Items	Contents
Ethernet	1*RJ45 10M/100M Ethernet Port
Network Storage	NAS (Support NFS, SMB/CIFS)
Protocol	IPv4/IPv6, TCP, UDP, RTP, RTSP, RTCP, HTTP, HTTPS, DNS, DHCP, NTP, SNMP, NFS, CIFS
System	
Items	Contents
Storage	Support microSD/SDHC/SDXC Card Local Storage, up to 512G
Advanced Function	Motion Detection, Privacy Masking, Backlight Compensation, HLC, 2D DNR, 3D DNR, ROI, Anti-fog, White Balance, EIS, IP Address Filtering
Event Trigger	Motion Detection, Network Disconnection, External Input, etc.
Event Action	FTP Upload/SMTP Upload/SD Card Record
Video Analysis (Optional)	Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering, Human Detection, People Counting, Object Left, Object Removed (* In development)
System Compatibility	ONVIF Profile S GB/T28181-2016 Modbus RTU MQTT IEC101*, IEC104* (*In development)

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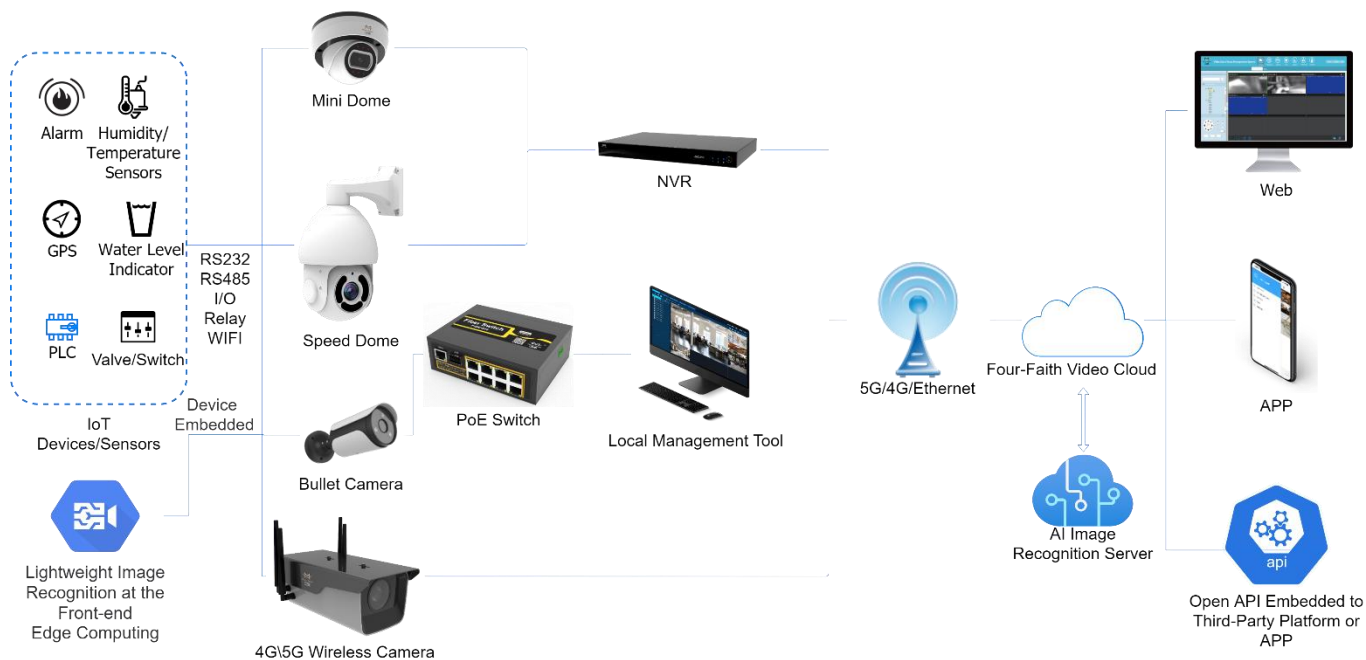


Interfaces ( * = Optional )	
Items	Contents
DC-12V IN*	1, Support 802.AT(POE Version)
Audio I/O @ Audio Compression*	1/1&G.711/AAC
Alarm In*	1
Alarm Out*	1 (Port can Drive 12V or 5V Relay)
Relay Out*	1
Power Return Out*	12V@500MA or 5V@1000MA
ADC In*	1 @ 8bit
UART Port*	1 x RS232/RS485
General	
Items	Contents
Working Temperature	-35°C~75°C
Working Humidity	0~90% (Non-condensing)
Power Supply	PoE (802.3at)
Power Consumption	10W MAX
	30W MAX (With IR on)
Protection Level	Up to IP67-rated for Weather-resistant Performance
Weight	5.2kg (Junction Box Version)
	4.2kg (Cable Out Version)
Dimensions	Φ204.8mmX308mm
Warranty	1 Year

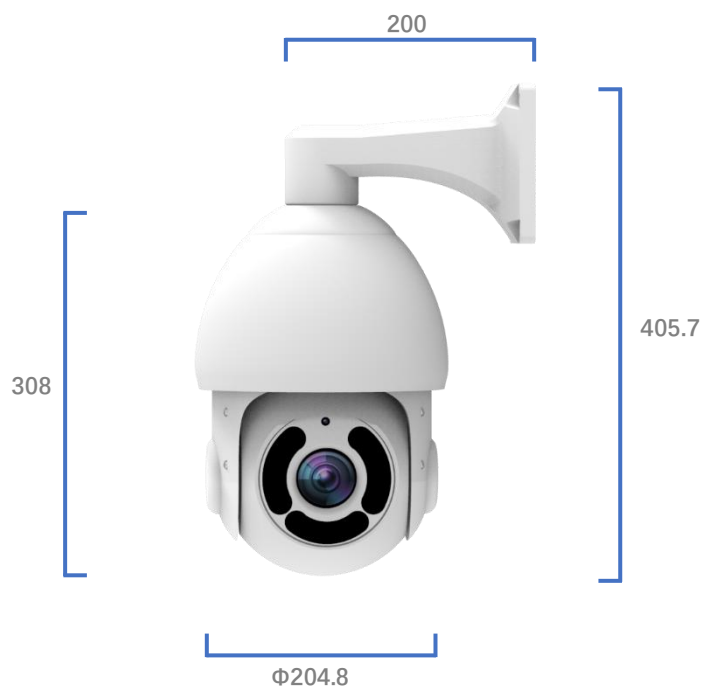
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## Topology



## Dimension (mm)



**Note: There may be differences between models of accessories and interfaces, actual products shall prevail**

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## Accessories (Optional)

### F-SC431 Junction Box



Weight: 1000g  
Dimensions: 230\*170\*290 mm  
1 x Cable Connector  
IP67 Protection

## Order Information

Models	Megapixel	Lens	Description
F-SC431-230	2MP	30X AF Motorized Lens	SD, DC&POE

## Naming Convention

