

5G/4G Built-in Battery Bullet IP Camera

F-SC921

Introduction

F-SC921 5G/4G built-in battery bullet IP camera as the main product of the intelligent IoT surveillance system, specially designed for industrial-grade IoT applications. The camera can provide long distances and low latency HD video wirelessly by using the industrial 5G/4G module. At the same time, the built-in battery can support the solar panel for recharging the battery power that can achieve the long-time standby monitoring.

High Performance

- Support various IoT protocol
- Embedded RTU function allow user to do active acquisition from sensors
- Integrated with most common IoT interfaces
- Remote management SYSLOG/SNMP/TELNET/SSH/HTTPS
- H.265, optimized in bit rate, bandwidth, and storage usage, 50% off than H.264.
- Super WDR, up to 140dB wide dynamic range
- 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
- SIM/UIM card interface built-in 15KV ESD protection
- Built-in reverse phase protection and over voltage protection for power interface

Standard & Convenience

- Standard RS232, RS485 and Ethernet interfaces
- Front-end edge integration and equipment intercommunication linkage
- Easy to use, flexible, multiple working mode options
- Support DIN-rail, pole-mounted installation

5G/4G Built-in Battery Bullet IP Camera F-SC921



Industrial-grade Design

- High-performance industrial-grade wireless module
- SONY top-level CMOS sensor
- Metal casing, protection grade IP67. Metal housing and system safety isolation
- Industrial-grade components

Product Specification

Camera	
Model	**F-SC921 (Fixed Len)**
Items	**Contents**
Lens	Fixed Lens 2.8mm @F2.0
Field of View	H123°/D142°/V68°
Shutter Time	1/100000s~1/5s
IR Distance	50m
Day & Night	ICR Filter Auto Switch
Video	
Items	**Contents**
Max. Image Resolution	1920×1080 / 2650×1920
Primary Stream	30fps@(1920×1080, 1280×960,1280×720, 704x576)
Secondary Stream	30fps@(704x576, 640×480, 640×360, 352x288, 320x240, 320x192, 320x176)
Tertiary Stream	30fps@(1920×1080, 1280×720, 704×576, 640×480, 640×360, 320×240, 320x192, 320x176)
Video Compression	H.265(HEVC)/H.264/MJPEG
Bit Rate	16Kbps~16Mbps (CBR/VBR Adjustable)
Image Setting	Brightness/Contrast/Saturation/Sharpness

5G/4G Built-in Battery Bullet IP Camera F-SC921



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)
Cellular (Optional)	
Items	**Contents**
Standard & Band	5G, LTE FDD, LTE TDD, EVDO, WCDMA, TD-SCDMA, CDMA1X, GPRS/EDGE
Bandwidth	5G NR: Downstream rate 3.4Gbps, uplink rate 350Mbps FDD-LTE: Downstream rate 150Mbps, uplink rate 50Mbps TD-LTE: Downstream rate 130Mbps, uplink rate 35Mbps
Transmit Power	<23dBm
Sensitivity	<-97dBm
GPS (Optional)	
Items	**Contents**
GPS Module	Industrial GPS module，compatible with Beidou, GLONASS
Accuracy	Positioning: 2.5m CPE SBAS: 2.0m CPE
Sensitivity	Tracking: -160dBm Recapture: -160dBm Cold Boot: -146dBm

5G/4G Built-in Battery Bullet IP Camera F-SC921



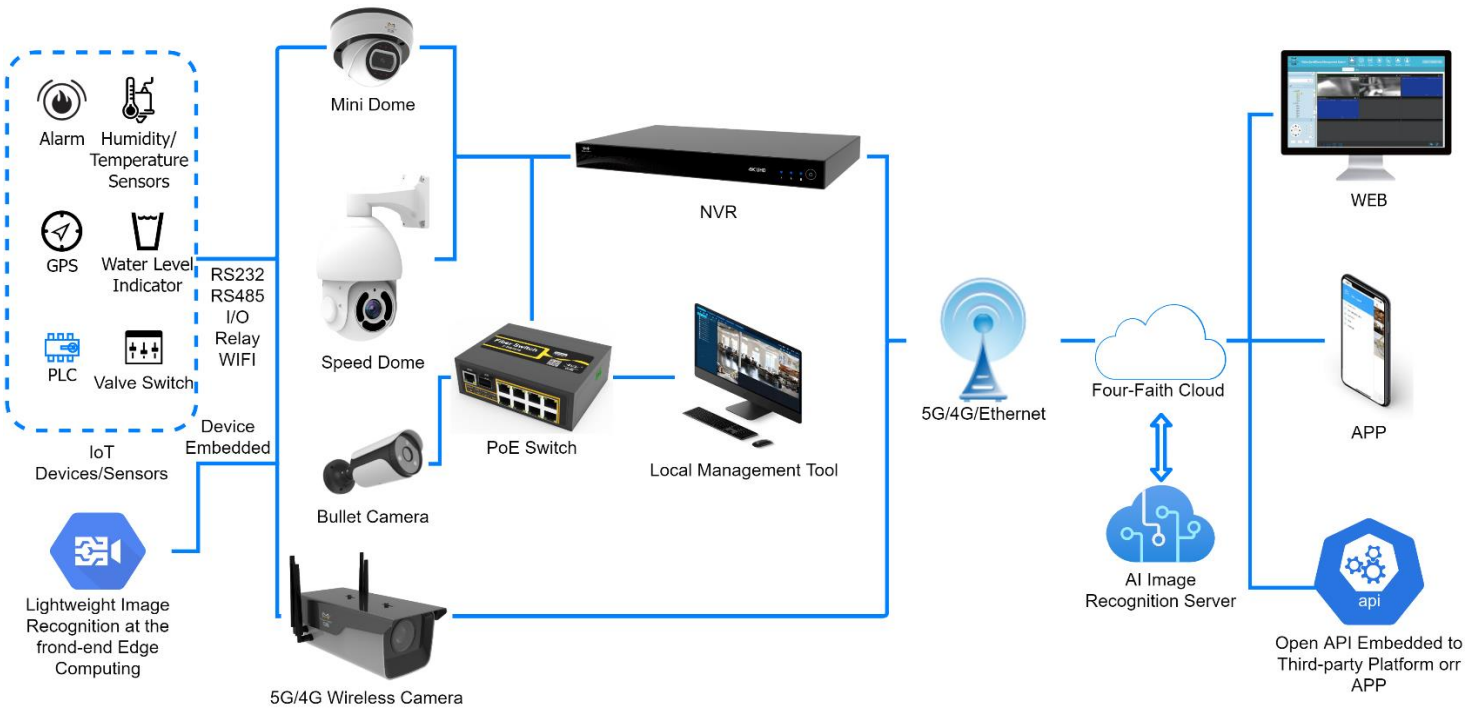
Interfaces	
Items	**Contents**
DC-12V IN	Battery Version: Standard DC12V charging adapter (DC 5.5*2.5mm) Non Battery Version: Optional 12-60V wide voltage input (terminal connector)
Audio I/O @Audio Compression*	1/1&G.711/AAC
IO & Relay	2 x DI, 2 x DO, 2 x Relay
ADC	2@12bit
UART	2 x RS232 & 2 x RS485
Power Return	12V@500MA & 5V@1000MA
Storage	Internal Micro SD Slot, support Micro SD/Micro SDHC/Micro SDXC card (Support Maximum 512G)
Network	1 x RJ45 (POE)
Interface Type	M16 Waterproof Interface
Protocol & Industrial Standard	
Items	**Contents**
Protocol & Industrial Standard	Onvif Profile S GB/T28181-2016 Modbus RTU MQTT IEC101*, IEC104* (*In development)
Battery	
Items	**Contents**
Battery Type	Ternary lithium battery
Battery Parameter	Rated capacity 7.8Ah Rated voltage 11.1V Maximum charge/discharge current 4A/4A Charge/discharge cut-off voltage 12.6V/8.25V
Battery Metering Module	Yes

5G/4G Built-in Battery Bullet IP Camera F-SC921



Others	
Items	**Contents**
Working Temperature	-35℃~75℃
Working Humidity	0~90% (Non-condensing)
Power Supply	PoE (802.3at)
Power Consumption	Standby < 0.3W 4G Date Mode < 4W 4G Night Mode < 6W
Protection Level	IP67
Explosion-proof	IK09
Weight	2.5 KG
Dimensions	185*125*105mm （Without Accessories）
Warranty	1 Year

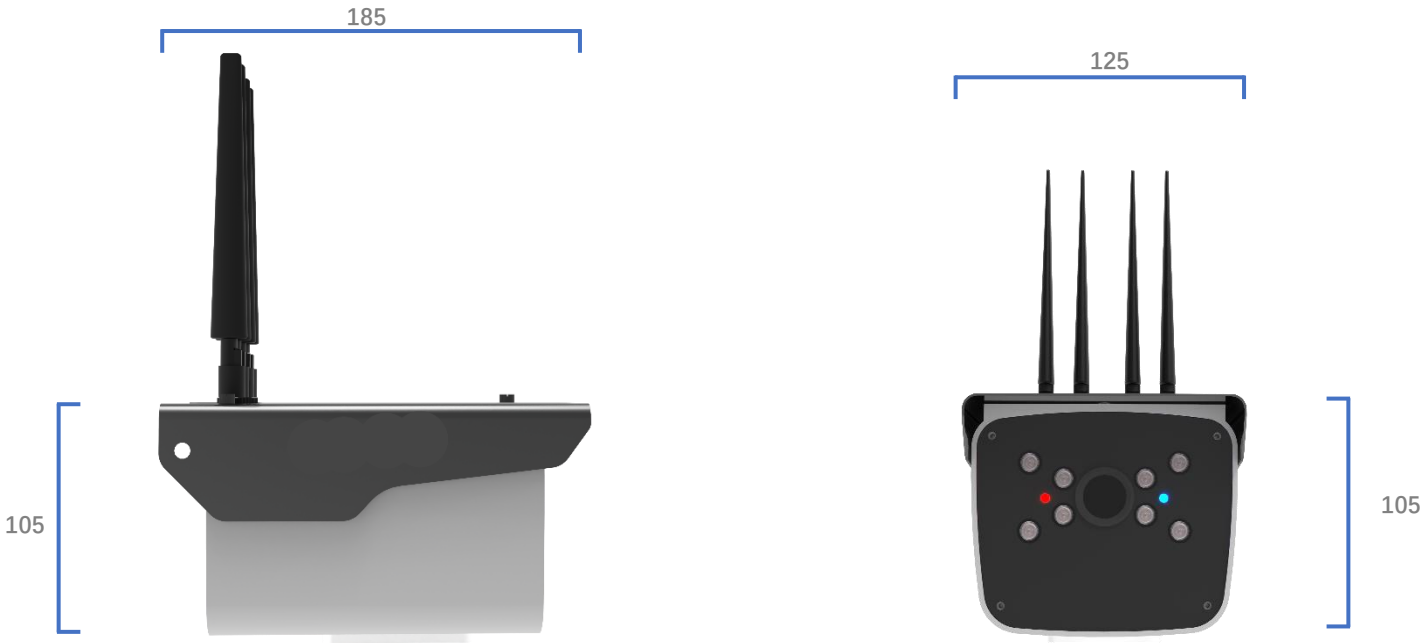
Topology



5G/4G Built-in Battery Bullet IP Camera F-SC921



Dimension (mm)



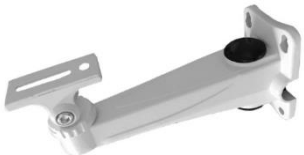
Note: There may be differences between models of accessories and interfaces, actual products shall prevail

Accessories (Optional)

Cardan Joint 1	Solar Panel	Straight Bracket







5G/4G Built-in Battery Bullet IP Camera F-SC921



Order Information

Models	Megapixel	Lens	Description
F-SC921-21-4GGP	2MP	Fixed Lens	SD, DC&POE, 4G High-speed Module
F-SC921-21-4GSL	2MP	Fixed Lens	SD, DC&POE, 4G High-speed Module, Solar Charging
F-SC921-21-5GGP	2MP	Fixed Lens	SD, DC&POE, 5G High-speed Module
F-SC921-21-5GSL	2MP	Fixed Lens	SD, DC&POE, 5G High-speed Module, Solar Charging

Naming Convention

