

The all-new SCZ-800 series utilizes an original stepper motor drive that is extremely fast and accurate; the powerful AI ISP along with in-house Vmage imaging algorithm, significantly improve the performance of noise reduction and heat haze reduction, ensuring great visibility and a high dynamic image in any light conditions. All top tier technical specs are packed in a compact but solid form factor, can be perfectly embedded in a variety of heavy-duty PTZ systems.



## Features

### Superior Graphics

Featuring a 1/1.8-inch 4-megapixel Sony Starvis sensor and the industry leading Vmage AI ISP, it delivers clear and crisp images up close or at a distance, day or night.

### Reliable focus and stabilization

Adopting stepper motor drive, the focus speed is fast and accurate. The stepper motor has a durable life of 1 million times, which is 5 times longer than the life of the traditional DC brushless motor. The newly developed optical image stabilization system can effectively reduce image shake, the angle at which stabilization can be performed has been increased by a factor of 1.5.

### Long Range Coverage

The 52x optical zoom lens covers a wide range of focal lengths from the wide end of 15mm to the telephoto end of 775mm, complemented by another 16x digital zoom.

### Adaptation to the environment

The lens comes with temperature compensation, suitable for 24-hour continuous inspection, fearless of temperature changes. The system also comes with three major functions: optical defog, heat haze reduction and optical image stabilization, which can present excellent images even in extremely harsh environments.

### Feature-rich compatibility

The product also has rich interfaces to support network and MIPI dual output, with full functions, including heartbeat, PTZ control, intelligent alarm, ROI enhancement and customized OSD. MIPI has the advantages of fast speed, large data bandwidth, low power consumption and good anti-interference, support up to 4MP@50/60fps output.

### Elaborate design

Length of only 32 cm, weighing 3.1 kg, more than 30% lighter than competitors with similar specifications. Greatly reducing the volume and payload required, which contributes to a significant cost down of your PTZ Camera design while improving the ease of camera installation at same time.

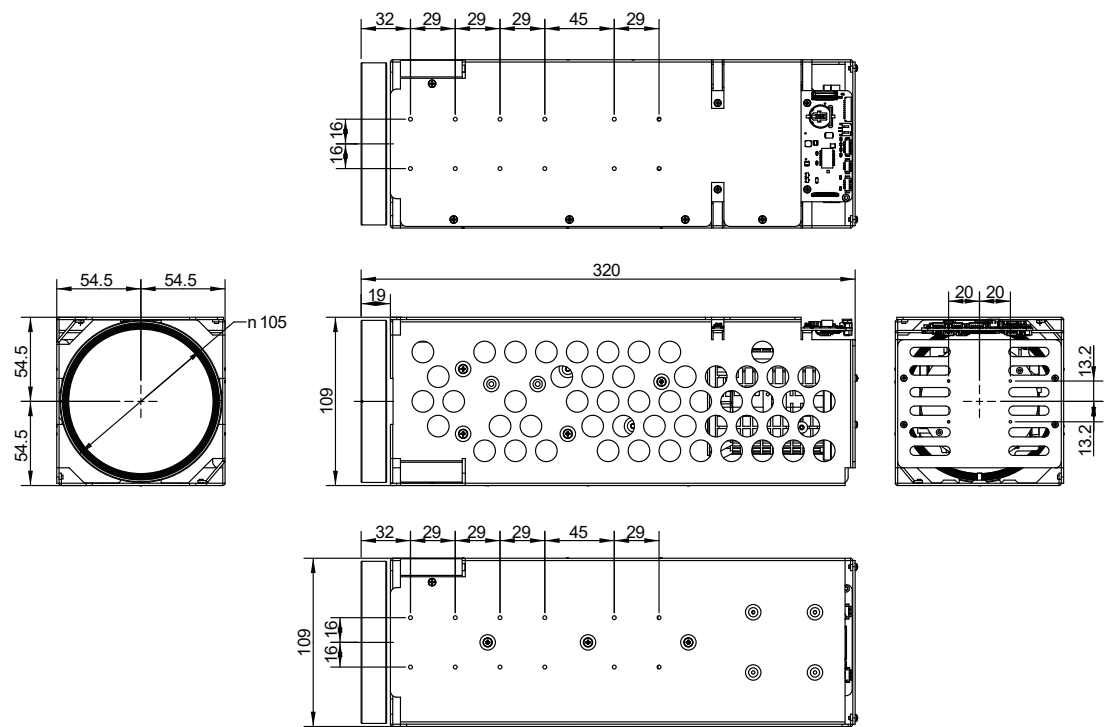
## Technical Specs

Camera				
Image Sensor	1/1.8" 4.53 M STARVIS progressive scan CMOS			
Resolution	2688x1520, 4MP			
S/N Ratio	≥55dB (AGC Off ,Weight ON)			
Min. Illumination	Color: 0.002 lux (F2.8); Black and white: 0.002 lux (F2.8)			
Shutter Speed	1/3~1/30000s			
Day & Night	Automatic (ICR)/Manual			
Focus Modes	Semi-automatic/Automatic/Manual/ One-time focusing			
Lens				
Type	Motorized zoom lens			
Focal Length	15~775mm, 52x Optical, 16x Digital			
Aperture	F: 2.8~8.2			
Field of View(H, V, D)	Wide	29.13°(±5%)	16.72°(±5%)	33.24°(±5%)
	Tele	0.58°(±5%)	0.33°(±5%)	0.66°(±5%)
Near Focus Distance	1~10m			
Zoom Speed	<7s(W~T)			
<b>DORI Ratings*</b>	Detection	Observation	Recognition	Identification
Human (1.8 x 0.5m)   CD: 0.95m	10155m	4030m	2031m	1016m
Vehicle (2.3 x 2.3m)   CD: 2.3m	24586m	9756m	4917m	2459m
<i>*The DORI standard (based on the IEC EN62676-4:2015 international standard) defines different levels of detail for detection (25PPM), observation (62PPM), recognition (125PPM), and Identification (250PPM). This table is for reference only and performance may vary depending on the environment.</i> <b>CD: CRITICAL DIMENSION</b>				
Video				
Video Compression	H.265/H.264/H.264H/ H.264B/MJPEG			
Main Stream	Network: 2880 × 1620 @ 25/30fps; MIPI : 2880 × 1620 @ 50/60fps			
Sub Stream	Network: 1920 × 1080 @ 25/30fps			
Bit Rate Control	CBR/VBR			
Image Stabilization	OIS/EIS			
Defog	Optical/Electric			
Heat Haze Reduction	Support			
Exposure	Auto/Manual/Aperture Priority/Shutter Priority			
WDR	Support			
BLC	Support			
HLC	Support			
White Balance	Auto/Manual/Indoor/Outdoor/ATW/Sodium Lamp/Natural/Street Lamp/One Push			
AGC	Support			
Noise Reduction	2D/3D/AI De-noise			
Flip	Center			

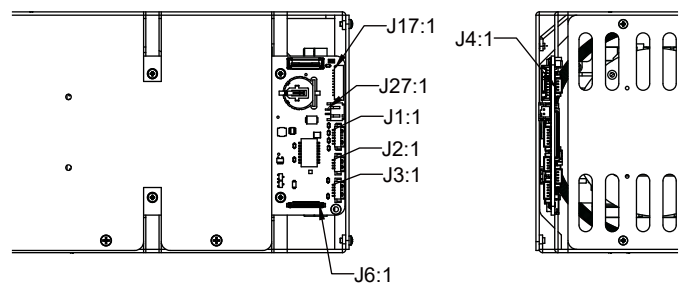
AF Tracking	Support
ROI Area	Support
<b>Image</b>	
Image Compression	JPEG, 1~7fps (2688 x 1520)
<b>Audio</b>	
Two-way Talk	1*Audio-in & 1*Audio-out
Audio compression	AAC (8/16kHz), MP2L2(16kHz)
<b>Network</b>	
Network Protocols	IPv4, IPv6, HTTP, HTTPS, TCP, UDP, RTSP, RTCP, RTP, ARP, NTP, FTP, DHCP, PPPoE, DNS, DDNS, UPnP, IGMP, ICMP, SNMP, SMTP, QoS, 802.1x, Bonjour
API	ONVIF(Profile S, Profile G, Profile T), HTTP API, SDK
Cyber Security	User authentication (ID and password), IP/MAC address filtering, HTTPS encryption, IEEE 802.1x network access control
Web Browser	IE, Edge, Firefox, Chrome
Web Languages	English/Chinese (modifiable)
OSD Overlay	Channel Title, Time Title, Preset, Temperature, Coordinates, Zoom, Test overlay, Picture overlay, Crosshair, OSD warning
User	Up to 20 users, 2 level: Administrator, User
Firmware Upgrade	Support
Storage	MicroSD/SDHC/SDXC card (Up to 1TB) edge storage, FTP, NAS
<b>Analytics</b>	
Perimeter Protection	Line crossing, Fence crossing, Intrusion
Target Distinction	Human/Vehicle/Vessel Classification
Behavioral Detection	Object left in area, Object removal, Fast moving, Gathering, Loitering, Parking
Events Detection	Motion, Masking, Scene change, Audio detection, SD card error, Network disconnection, IP conflict, Illegal network access
<b>Interface</b>	
Ethernet	1-ch RJ45 10M/100M
Audio Input	1-ch
Audio Output	1-ch
External Control	1 -ch TTL(3.3V) VISCA 1 -ch TTL(3.3V) PELCO
Video Output	Network & MIPI Dual output
<b>General</b>	
Power	DC:9V~12V, typical 4.5W, max 10W
Operating Conditions	Temperature : -30℃ ~ +60℃/-22°F~140°F, Humidity : 20%~80%RH
Storage Conditions	Temperature : -40℃ ~ +70℃/-40°F~158°F, Humidity : 20%~95%RH

Weight	3200g
Dimensions	320×109×109mm (L×W×H)

Dimensions



Pin Assignment






Type	Pin No.	PIN Name	Remark
J1_6PIN Power serial port	1	DC_IN	DC power input port, required: DC +9 ~ +12V
	2	GND	Power GND
	3	RXD1	TTL level(3.3V),Camera serial port receives signal, using the Pelco protocol
	4	TXD1	TTL level(3.3V),Camera serial port sends signal, using the Pelco protocol
	5	RXD0	TTL level(3.3V),Camera serial port receives signal, using the Visca protocol
	6	TXD0	TTL level(3.3V),Camera serial port sends signal, using the Visca protocol
J2_4PIN	1	ETHRX -	Adaptive network port, physical receiving signal (-differential)

Network Interface	2	ETHRX +	Adaptive network port, physical receiving signal (+differential)
	3	ETHTX -	Adaptive network port, physical receiving signal (-differential)
	4	ETHTX +	Adaptive network port, physical receiving signal (+differential)
J3_5PIN Audio port	1	AUDIO_OUT	Audio output signal, support LINE OUT output mode
	2	GND	GND
	3	AUDIO_IN	Audio input signal, support LINE IN output mode
	4	GND	GND
	5	NC	NC
J4_4PIN USB	1	+5V	
	2	USB1_DP	Differential data+
	3	USB1_DM	Differential data -
	4	GND	
J17_10PIN USB Power (SM10B-GHS-TB 1.25mm)	1	+12V	DC power input
	2	+12V	DC power input
	3	GND	
	4	GND	
	5	GND	
	6	USB1_DP	Differential signal+
	7	USB1_DM	Differential signal-
	8	NC	
	9	NC	
	10	NC	
J27_2PIN Power Interface	1	GND	
	2	+12V	DC power input
J6_30PIN MIPI interface (HK-IP030-001 0.4mm)	1	GND	
	2-3	NC	
	4	GND	
	5-6	NC	
	7	GND	
	8-9	NC	
	10	GND	
	11-12	NC	
	13	GND	
	14	CSI_D3N	Differential data pair 3-
	15	CSI_D3P	Differential data pair 3+
	16	CSI_D2N	Differential data pair 2-
	17	CSI_D2P	Differential data pair 2+
	18	CSI_DKN	Differential data pair clock signal-
	19	CSI_DKP	Differential data pair clock signal+
	20	CSI_D1N	Differential data pair 1-
	21	CSI_D1P	Differential data pair 1+
	22	CSI_D0N	Differential data pair 0-
	23	CSI_D0P	Differential data pair 0+
	24	UART1_RX	TTL level (3.3V), the camera serial port receives signals, using Visca protocol
	25	UART1_TX	TTL level (3.3V), the camera serial port sends signals, using Visca protocol

	26	NC	
	27-30	+12V	DC power input

## Camera Accessories

Model	Description
	485 Alarm Tail Board
	SDI&CVBS Video Output Tail Board
	MIPI Cable

## Ordering Information

Model No.	Description
SCZ4052YIO-8	4MP 52X Zoom AI ISP Camera Module



For more info, visit [www.viewsheen.com](http://www.viewsheen.com)

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