



Professional Video-Centric AIOT Industry Product Provider

**DOWSE**  
Catalog 2021

**Shenzhen Dowse Electronics Co., Ltd.** was established in 2006. Dowse is engaged in the research and development, customization and production of AI smart products. Positioned as AI industry product manufacturer of more than 4000 square meters, 150 employees including about 50 R&D personnel, Hardware Engineers, Embedded Software Engineers, Structural Engineers, ISP Image Engineers, Test Engineer.

Product milestones:

- 2006 – 2010 Analog video products
- 2010 – 2016 Network HD video products
- 2016 – Present AI Smart video products

OEM services references: BOSCH (2012), PELCO (2012), Honeywell (2019)



In the field of artificial intelligence, we can in-depth cooperation and take advantage of Shenzhen's supply chain to provide your company with customized development and production delivery of various video-centric products. Dowse only focuses on the production of AI smart hardware.

We can cooperate in the following areas:

- Video capture equipment (provided by DOWSE) +
- AI algorithm (provided by 3rd party or your company) +
- System platform (provided by your company)

To provide your customers with a complete set of business intelligence solutions!







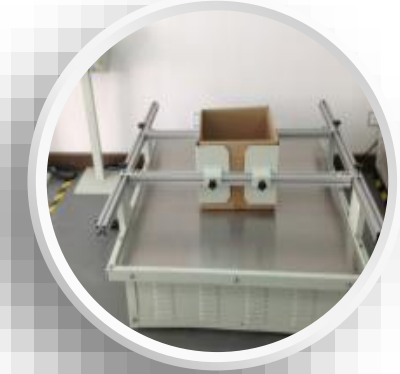
**Testing Room**



**Frequency Test**



**Cable Quality  
Inspection**



**Simulated  
Transportation  
Vibration Test**



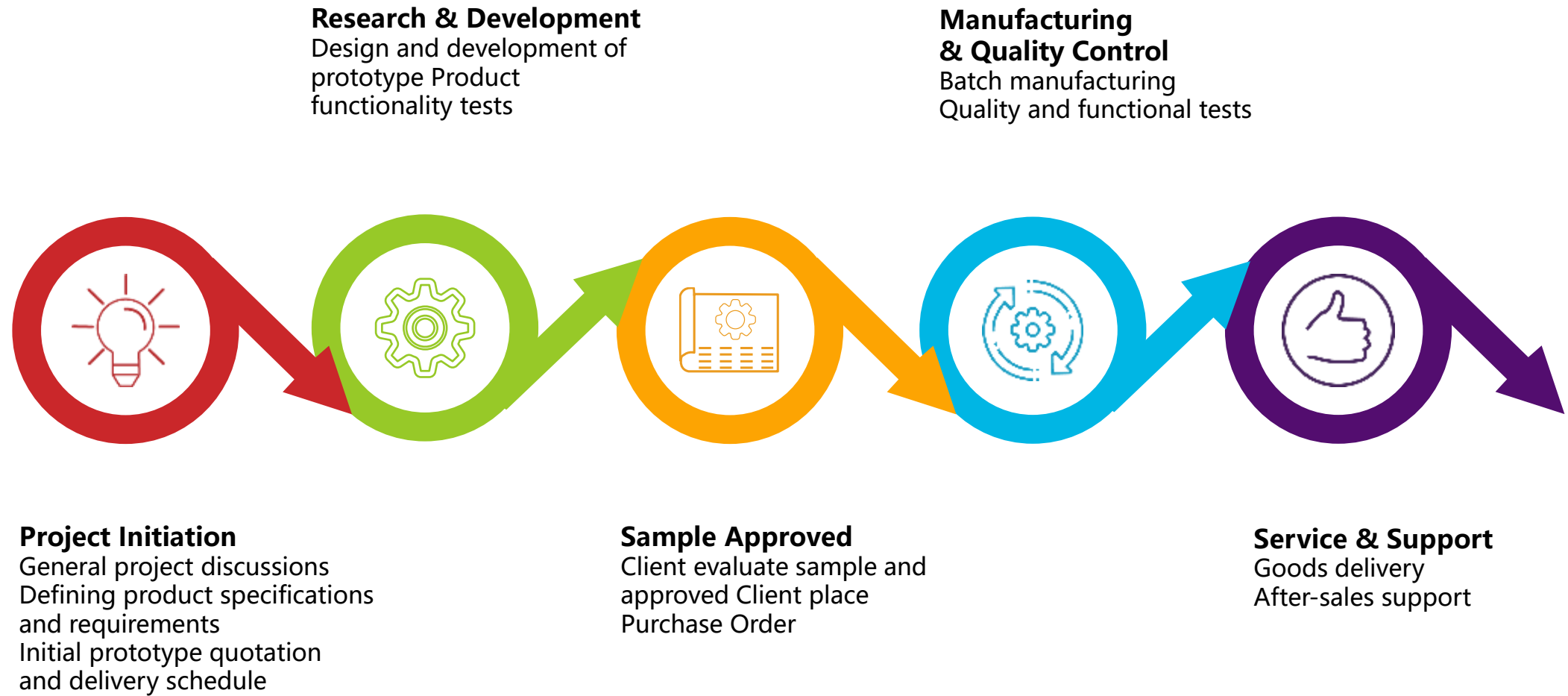
**Water-Proof Test**

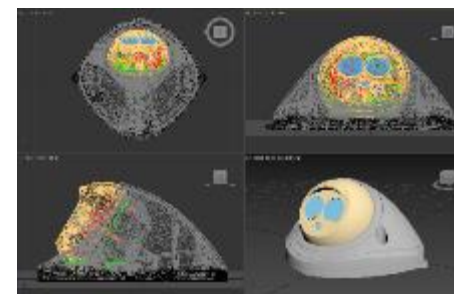
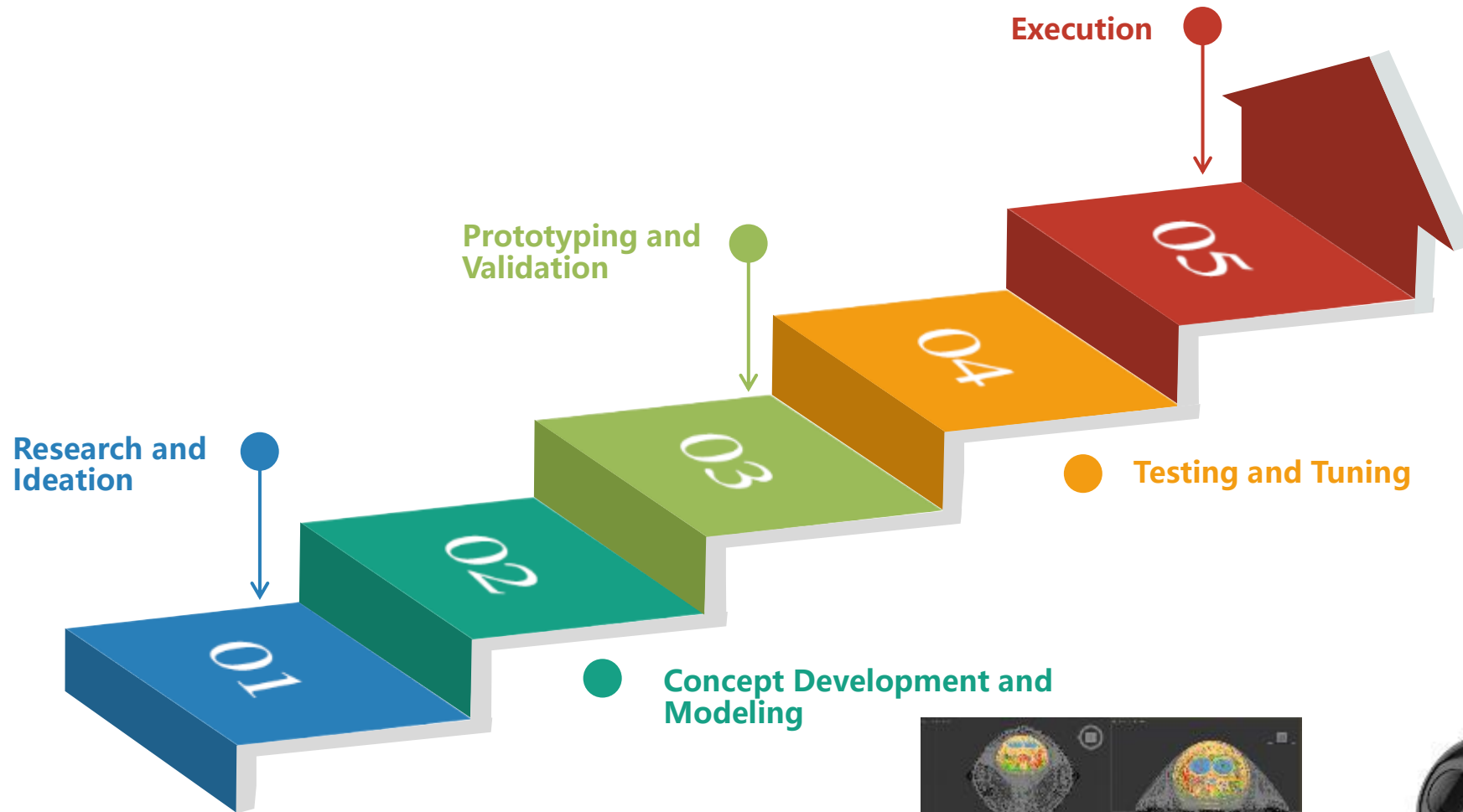


**Temperature  
Test**



**Salt Spray  
Test**





## Camera Series



### RV1109

- Dual core ARM Cortex-A7 and RISC-V MCU
- 1.2Tops NPU
- 5M H.264/H.265 encoder and decoder



### RV1126

- Quad core ARM Cortex-A7 and RISC-V MCU
- 2.0Tops NPU
- 4K H.264/H.265 encoder and decoder



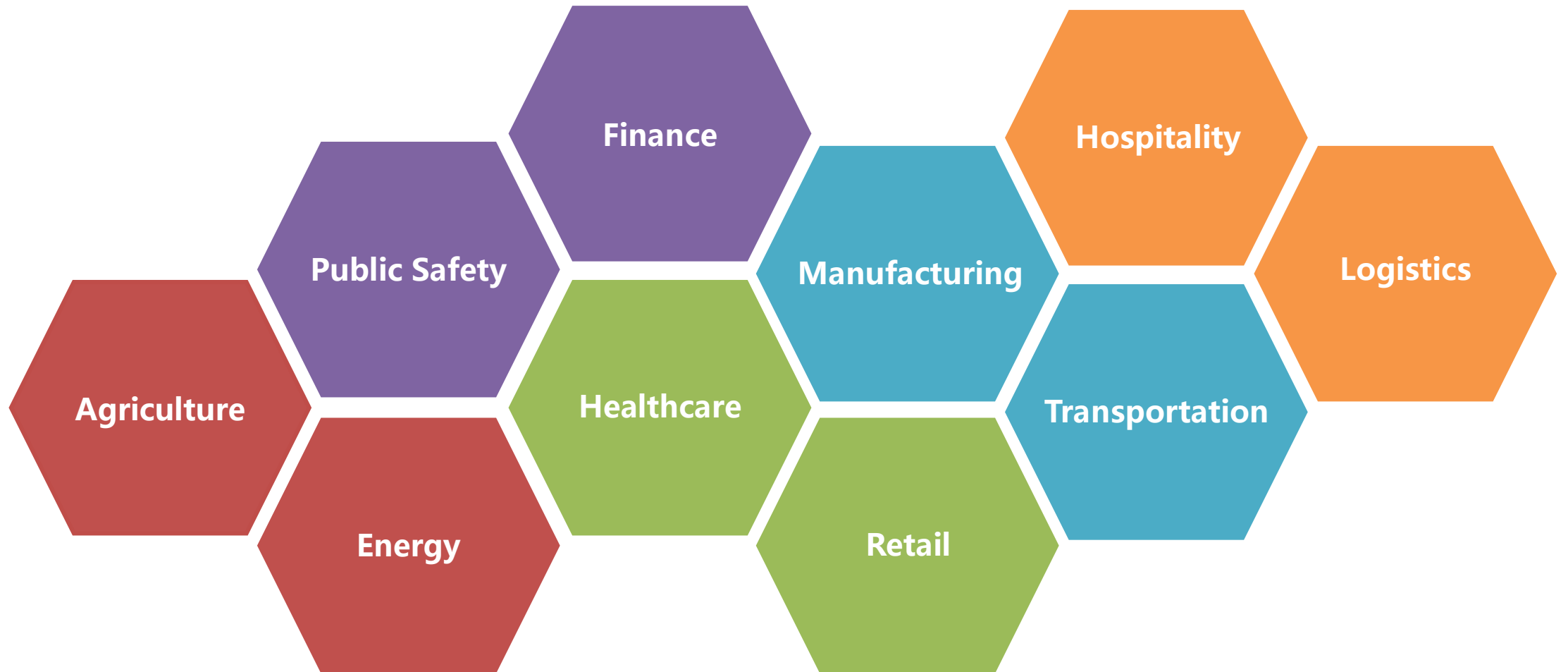
### Hi3516CV500

- Dual-core ARM Cortex-A7
- 0.5Tops NPU
- 3M H.264/H.265 encoding



### Hi3516DV300

- Dual-core ARM Cortex-A7
- 1.0Tops NPU
- 5M H.264/H.265 encoding and decoding





# Edge AI Camera

Real-Time Image Analysis at the Edge



## Sectors & Industries

Public Safety

ID Management

Banking & Payment

Automobile & Transportation

Retail & Marketing

Mobile & Entertainment

Healthcare

Education





	DS-AI6362ZR	DS-AI6362ZRH	DS-AI6364ZR	DS-AI6368ZR
<b>NPU</b>	1.2Tops	1.2Tops	1.2Tops	2Tops
<b>Image Sensor</b>	1/2.8"CMOS sensor	1/2"CMOS Sensor	1/1.8"CMOS sensor	1/1.8"CMOS sensor
<b>Resolution</b>	2.0MP	2.0MP	4.0MP	8.0MP
<b>Motorized Lens</b>	2.7-13.5mm		3.6-10mm	
<b>IR Range</b>	up to 30M			
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot			
<b>Power</b>	DC12V / POE			

	DS-AI6372ZR	DS-AI6372ZRH	DS-AI6374ZR	DS-AI6378ZR
<b>NPU</b>	1.2Tops	1.2Tops	1.2Tops	2Tops
<b>Image Sensor</b>	1/2.8"CMOS sensor	1/2"CMOS sensor	1/1.8"CMOS sensor	1/1.8"CMOS sensor
<b>Resolution</b>	2.0MP	2.0MP	4.0MP	8.0MP
<b>Motorized Lens</b>	2.7-13.5mm		3.6-10mm	
<b>IR Range</b>	up to 30M			
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot			
<b>Power</b>	DC12V / POE			

	DS-AI8632Z	DS-AI8632ZH	DS-AI8634Z	DS-AI8638Z
<b>NPU</b>	1.2Tops	1.2Tops	1.2Tops	2Tops
<b>Image Sensor</b>	1/2.8"CMOS sensor	1/2"CMOS sensor	1/1.8"CMOS sensor	1/1.8"CMOS sensor
<b>Resolution</b>	2.0MP	2.0MP	4.0MP	8.0MP
<b>Motorized Lens</b>	2.7-13.5mm		3.6-10mm	
<b>IR Range</b>	up to 60M			
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot			
<b>Power</b>	DC12V / POE			

AI



	DS-AI8802Z	DS-AI8804Z	DS-AI8808Z
<b>NPU</b>	1.2Tops	1.2Tops	2Tops
<b>Image Sensor</b>	1/2"CMOS sensor	1/1.8"CMOS sensor	1/1.8"CMOS sensor
<b>Resolution</b>	2.0MP	4.0MP	8.0MP
<b>Lens</b>		8-32mm	
<b>IR Range</b>		up to 80M	
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		



	DS-AI8112Z	DS-AI8114Z	DS-AI8118Z
<b>Image Sensor</b>	1/2"CMOS sensor	1/1.8"CMOS sensor	1/1.8"CMO Sensor
<b>Resolution</b>	2.0MP	4.0MP	8.0MP
<b>Lens</b>		dual lens: 6mm + AF 8-32 mm	
<b>IR Range</b>		up to 100M	
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		

# H.265 Network IP Camera





## Economic Series



	DS-HD6182	DS-HD6184
<b>Image Sensor</b>	1/2.8" CMOS sensor	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP	4.0MP
<b>Lens</b>		3.6mm
<b>IR Range</b>		25M
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot	
<b>Power</b>	DC12V / POE	



	DS-HD8322	DS-HD8325	DS-HD8328
<b>Image Sensor</b>	1/2.8" CMOS sensor	1/2.8" CMOS sensor	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP	5.0MP	8.0MP
<b>Lens</b>		3.6mm / 6mm	
<b>IR Range</b>		up to 30M	
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		

## Medium Series



DS-HD6212R	
<b>Image Sensor</b>	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP
<b>Lens</b>	3.6mm
<b>IR Range</b>	up to 20M
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot
<b>Power</b>	DC12V / POE



	DS-HD6362ZR	DS-HD6365ZR	DS-HD6368ZR
<b>Image Sensor</b>	1/2.8" CMOS sensor	1/2.8" CMOS sensor	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP	5.0MP	8.0MP
<b>Lens</b>	2.7-13.5mm (Motorized & one push) lens		
<b>IR Range</b>	up to 30M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		

## Medium Series



	DS-HD637ZR	DS-HD6375ZR	DS-HD6378ZR
<b>Image Sensor</b>	1/2.8" CMOS sensor	1/2.8" CMOS sensor	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP	5.0MP	8.0MP
<b>Lens</b>	2.7-13.5mm (Motorized & one push) lens		
<b>IR Range</b>	up to 30M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		



	DS-HD8632Z	DS-HD8635Z	DS-HD8638Z
<b>Image Sensor</b>	1/2.8" CMOS sensor	1/2.8" CMOS sensor	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP	5.0MP	8.0MP
<b>Lens</b>	2.7-13.5mm (Motorized & one push) lens		
<b>IR Range</b>	up to 60M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		



## High Series



	DS-HD637ZR	DS-HD6375ZR	DS-HD6378ZR
<b>Image Sensor</b>	1/2.8"CMOS sensor	1/2.8"CMOS sensor	1/2.8"CMOS sensor
<b>Resolution</b>	2.0MP	5.0MP	8.0MP
<b>Lens</b>	2.7-13.5mm (Motorized & one push) lens		
<b>IR Range</b>	up to 30M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		



	DS-HD8632Z	DS-HD8635Z	DS-HD8638Z
<b>Image Sensor</b>	1/2.8"CMOS sensor	1/2.8"CMOS sensor	1/2.8"CMOS sensor
<b>Resolution</b>	2.0MP	5.0MP	8.0MP
<b>Lens</b>	2.7-13.5mm (Motorized & one push) lens		
<b>IR Range</b>	up to 60M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		

## High Series



	DS-HD8802Z	DS-HD8804Z	DS-HD8808Z
<b>Image Sensor</b>	1/1.8" CMOS sensor	1/1.8" CMOS sensor	1/1.8" CMOS sensor
<b>Resolution</b>	2.0MP	4.0MP	8.0MP
<b>Lens</b>	3.6-10mm (Motorized & one push) lens		
<b>IR Range</b>	up to 80M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		



	DS-HD8112Z	DS-HD8114Z	DS-HD8118Z
<b>Image Sensor</b>	1/1.8" CMOS sensor	1/1.8" CMOS sensor	1/1.8" CMOS sensor
<b>Resolution</b>	2.0MP	4.0MP	8.0MP
<b>Lens</b>	8-32mm (Motorized & one push) lens		
<b>IR Range</b>	up to 100M		
<b>Others</b>	Audio I/O, Alarm I/O, RS485, SD card slot		
<b>Power</b>	DC12V / POE		



# ATM Camera

Capture crystal-clear surveillance image at your ATM machine !!







DS-VTM6062SN	
<b>Image Sensor</b>	1/2.7" CMOS sensor
<b>Resolution</b>	2.0MP
<b>Lens</b>	3.7mm pinhole
<b>Video Out</b>	USB
<b>Power</b>	DC5V



DS-HD6062-290D	
<b>Image Sensor</b>	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP
<b>Lens</b>	3.7mm pinhole
<b>Video Out</b>	IP, Alarm I/O, Audio I/O, SD slot
<b>Power</b>	DC12V



DS-HD6052	
<b>Image Sensor</b>	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP
<b>Lens</b>	3.7mm pinhole
<b>Video Out</b>	IP, Alarm I/O, Audio I/O, SD slot
<b>Power</b>	DC12V

Analog



DS-605CV	
<b>Image Sensor</b>	1/2.8" CMOS sensor
<b>Resolution</b>	2.0MP
<b>Lens</b>	3.7mm pinhole
<b>Video Out</b>	BNC
<b>Power</b>	DC12V

IP



DS-HD6152-WD	
<b>Image Sensor</b>	1/3" CMOS sensor
<b>Resolution</b>	2.1MP
<b>Lens</b>	3.7mm pinhole
<b>Video Out</b>	IP, Alarm I/O, Audio I/O, SD slot
<b>Power</b>	DC12V

# AI Series Network PTZ

Embedded with Intelligent !!

\*\*\* Visible light camera + IR / Laser / Thermal \*\*\*





## Infrared Series



### DS-AI7832RHSP

AI Network PTZ (IR 120m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- IR range: 120m, 5°~60°
- Pan: 360°, 0.4 ~ 240°/s
- Tilt: -90° ~ +15°, 0.4 ~ 120°/s, auto-flip
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A

### DS-AI7842RHSP

AI Network PTZ (IR 120m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- IR range: 120m, 5°~60°
- Pan: 360°, 0.4 ~ 80°/s
- Tilt: -40° ~ 85°, 0.4 ~ 40°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A



## Laser Series



### DS-AI7832JHSP

AI Network PTZ (Laser 500m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- Laser range: 500m, 2.5°~60°
- Pan: 360°, 0.4 ~ 240°/s
- Tilt: -90° ~ +15°, 0.4 ~ 120°/s, auto-flip
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A

### DS-AI7842JHSP

AI Network PTZ (Laser 500m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- Laser range: 500m, 2.5°~60°
- Pan: 360°, 0.4 ~ 80°/s
- Tilt: -40° ~ 85°, 0.4 ~ 40°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A



## Infrared Series



### DS-AI7882RHSP

AI Network PTZ (IR 120m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- IR range: 120m, 5°~60°
- Pan: 360°, 0.4 ~ 80°/s
- Tilt: -90° ~ 90°, 0.4 ~ 60°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A



### DS-AI7912RHSP

AI Network PTZ (IR 120m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- IR range: 120m, 5°~60°
- Pan: 360°, 0.01 ~ 30°/s
- Tilt: -88° ~ 40°, 0.01 ~ 15°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A

## Laser Series



### DS-AI7882JHSP

AI Network PTZ (Laser 500m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- Laser range: 500m, 2.5°~60°
- Pan: 360°, 0.4 ~ 80°/s
- Tilt: -90° ~ 90°, 0.4 ~ 60°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A



### DS-AI7912JHSP

AI Network PTZ (Laser 500m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- Laser range: 500m, 2.5°~60°
- Pan: 360°, 0.01 ~ 30°/s
- Tilt: -88° ~ 40°, 0.01 ~ 15°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A



## Infrared Series

DS-AI7982RHSP

AI Network PTZ (IR 120m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- IR range: 120m, 5°~60°
- Pan: 360°, 0.02 ~ 48°/s
- Tilt: -60° ~ 60°, 0.02 ~ 24°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A



## Laser Series

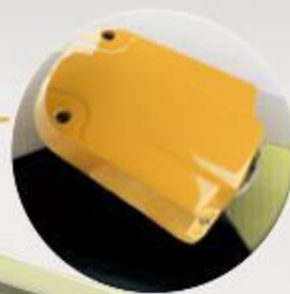
DS-AI7982JHSP

AI Network PTZ (Laser 500m + Visible Light Camera)

- 1/2.8" CMOS sensor, 2.0MP
- 16x digital zoom
- F=4.7 ~ 141mm, 30x optical zoom
- Laser range: 500m, 2.5°~60°
- Pan: 360°, 0.02 ~ 48°/s
- Tilt: -60° ~ 60°, 0.02 ~ 24°/s
- TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, ONVIF compatible, GB/T28181
- H.265 / H.264 / MPEG
- Micro SD / SDHC / SDXC(128G) / NAS
- Alarm In x 2, Alarm Out x 2, Relay Out x1
- AC24V / 3A

On board camera for external use for train/ bus / transportaion vehicles ...

**Better Security! Better Protection !**







## On Board Camera

### DS-HD6352R

On Board camera for vehicles

- 1/2.8" CMOS sensor, 2MP
- 6mm/8mm lens
- IR range: 10m
- RJ45, DC12V, POE
- casing K10, IP66/67
- temp. -40 °C ~ 70 °C

- Specially designed for side view monitoring on trains, buses, and transportation vehicles. Also can be used for identifying maintenance needs on rolling



## Dual Vision Intelligent Temperature Screening Camera

### DS-AI7122RS(IR)-07H16D

- range: 28-45°C, accuracy  $\pm 0.5^\circ\text{C}$ , distance 1-4m
- intelligent face tracking, mask detection

#### Thermal image:

- Uncooled VOX Microbolometer
- high resolution 160x120 (optional: 256x192)
- sensitivity <math>< 50\text{ MK}</math>
- Visible image:

- 1/2.8" CMOS sensor
- resolution 1920x1080

#### Interfaces

HDMI x 1, USB x 1, Ethernet x 1  
TF Card Slot, Alarm I/O, built-in speaker



Special design for Continuous Condition and Safety Monitoring



## Dual Vision Thermal Imaging Camera

### Dual Vision Thermal Imaging Camera

#### Temperature:

- range  $-20^\circ\text{C}$ - $150^\circ\text{C}$ ,  $0^\circ\text{C}$ - $550^\circ\text{C}$
- accuracy  $\pm 2$  degrees (or  $\pm 2\%$  of range)

#### Thermal image:

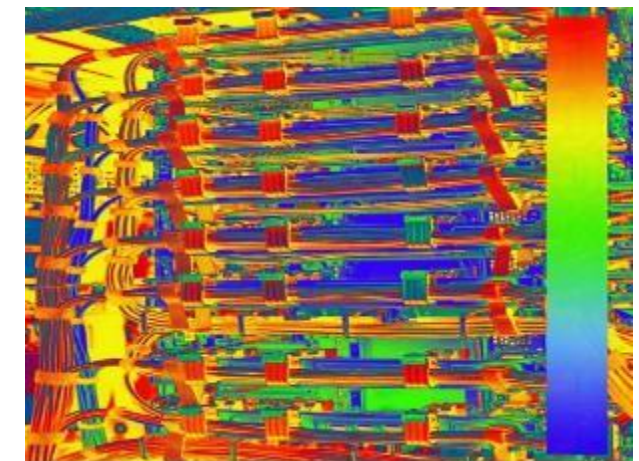
- uncooled VOX Microbolometer
- resolution 256 x 192
- lens 3mm | 7mm

#### Visible light image:

- 1/2.8" CMOS sensor
- resolution 1920 x 1080
- lens 4mm | 6mm

#### Power

- AC24V, DC 12 V, POE



\*Energy generation and distribution \*Electrical cabinets  
\*Manufacturing sector \*Storage facilities \*Transportation



Analog

## DS-781MKB

PTZ Controller (3D Joystick)

- 3D Joystick
- Multi control way (RS485)
- Support Multi Protocol Pelco D/P
- Support Multi DVR Protocols

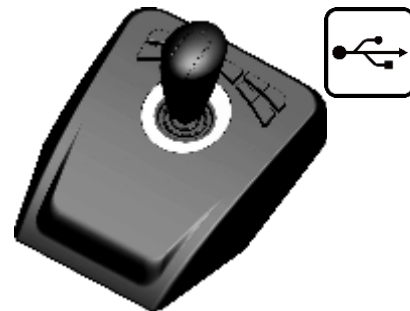


Analog

## DS-781DKB

PTZ Controller (8" LCD Multifunctional Keyboard)

- 8" Digital Monitor, Support 800\*600 or 1024\*768
- Support BNC,VGA Video Input
- Support multi-Dome Protocol, Pelco D/P etc.
- Support multi-DVR Protocols



## DS-782UKB

PTZ Controller (USB IP Keyboard)

- USB interface, 10 programmable control button
- Control IP camera PTZ through platform software
- Control IP camera PTZ through NVR
- Easy operation and accurate rotation through 3D Joystick

Coming Soon

DOWSE



Recessed-mount  
2MP Network Dome Camera  
embedded with **1.2Tops**

Best fit for **People Counting**  
applications

Easy recessed installation

Compact design blends with the environment

Magnetic lid allows angle adjustment easily





**THANK YOU**

