



Project: RENOVATION AND RECONFIGURATION OF COMPUTER LABORATORY ROOM IN CCSIT BUILDING WITH PROVISIONS FOR SMART CLASSROOM
Location: SLSU-MAIN, SOGOD CAMPUS, SOGOD, SOUTHERN LEYTE
Subject: SCOPE OF WORK/ MATERIAL SPECIFICATION/ WORKMANSHIP
ABC: 3,800,000.00

The Contractor shall furnish labor, tools, equipment, PPE, and supervision to perform satisfactorily all the required works for the project. The work shall include but is not limited to mobilization, demobilization, masonry works, plastering and housekeeping.

A. MATERIAL SPECIFICATIONS

A.01 GENERAL REQUIREMENTS

- Temporary Facility: Located at strategic site nearby the project
- Protection Fences:
 - PPE: Hard Hat, Protection Glasses (Clear Glass during night works), Safety Shoes
 - As-Built Plans: 1 original + 3 copies

A.02 CEILING AND PARTITION WORKS

- Ceiling: - Use Use 0.60m x 0.60m x 1/4" thk. Acoustic Board
- Framing (Ceiling): - Use T-runner 0.6mm x 3.6m and Wall Angle 1" x 1" x 4mm x 8'
- False Wall: - Use 6mm Fiber Cement Board.
- Framing (False Wall): - Use Metal Studs, 35mm x 75mm x 0.5mm x 3m spaced @ 0.40m from center.

A.03 DOORS AND WINDOWS

- Single-Swing Glass Doors: - Use 1/2" thk. Tempered Glass.
w/ Fixed Glass

Door Access Solution

- Package:**
- Attendance Door Entry System:**
 - Model Number : SC700
 - Product Name :RFID Card Door Access Control Time Clock Attendance Entrance System
 - Material: Plastic
 - Card Capacity: 30,000
 - Transaction Capacity: 50,000
 - Communication: TCP/IP, USB Host
 - RF Card: IN ID(standard), MF(optional)
 - Access Control Interface for 3rd party electric lock, door sensor, exit button, alarm, Door Bell
 - Wiegand Signal: Output and Input
 - Software: ZKACCESS3.5

Electric Frameless Glass Door Lock:

- Shear strength: 2000Lbs/1000kg
- Lock Status instructions: LED Display
- Door Status Sensors: Dry contact NO,NC,COM
- Relock Delay Timer: 0/ 2.5 /5 seconds available to set
- Optional Functions: Lock Status Sensors ,Buzzer
- Rated Operating Voltage DC 12V or 24V
- Start Current: 900mA, Standby Current:250mA
- Face place material: High Aluminum
- Face Plate Dimensions: 170Lx49WX43H(mm)
- Strike Plate Dimensions: 170Lx48Wx40H(mm)
- Weight in kg: 0.9kg

Door Access Centralized Power Supply:

- Open Frame Linear Power Supply, 220V ac Input,12V dc Output, 5A Output

Emergency Exit Button:

- Touchless Infrared Induction Door Release EXIT Buttonwith 2 Channels Remote Control for Access Control GateOpeners.

Other Installation Materials:

- 1x Roll UTP Cable
- 1x Roll Duplex Wire #16
- 1x Lot Auxillary materials
- 1x Lot Setup and Installation, Mobilization & Transportation

Awning Glass Window:

- Use 1/4" thk. Tinted Glass (Light Gray)

A.04 PAINTING WORKS

- Concrete Walls (Repaint): - **Primer Coat:** Use Flat Latex Primer. Apply 1 coat. **1 hour** drying time per coat.
Top Coat: Use White, Satin Finish. Apply 2 coats. **1 hour** drying time per coat.
Application: Use Roller Brush 7" and 4" Paint Brush for the corners.

False Walls:

- **Primer Coat:** Use Flat Latex Primer. Apply 1 coat. **1hour** drying time per coat.
Top Coat: Use Steel Blue, Satin Finish. Apply 2 coats. **1 hour** drying time per coat.

Application: Use Roller Brush 7" and 4" Paint Brush for the corners.

A.05 TILE WORKS

Installation: - Must be seamless

A.06 ELECTRICAL WORKS:

Switch: - Use Smart Switch. (see specs)
Convenience Outlets: - Use "Wide Series" type of outlets.
- Use 3-Gang Floor Mounted Convenience Outlet (see specs) per computer unit.

**Smart Education Solution:
EDUCATION SHARING SYSTEM:
MODEL: (DS-9604LNI-V/B12(STD)**

- - RecordingVideo Compression H.265/H.264Encoding Resolution
 - Main stream: 8MP/4MP/1080p/720p/WD1/4CIF/VGA/CIF
 - Sub-stream: 540p/WD1/4CIF/CIF
 - Only M1 direct channel supports 8 MP and 4 MP
 - Frame Rate: 1 to 25 fps
 - Video Bitrate: 32 Kbps to 16 Mbps
 - Stream Type: Video & Audio, Video
 - Audio Compression: AAC
 - Audio Bitrate: 128 Kbps
 - Video and AudioIP Video Input: 5-ch
- a. HDMI 1 Output**
 - 4K (3840 × 2160)/30 Hz, 2K (2560 × 1440)/60 Hz, 1920 × 1080/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz
 - HDMI 2 Output 1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
- b. HDMI Input**
 - 1-ch; 4K (3840 × 2160)/30 Hz, 1920 × 1080/60Hz, 1600 × 1200/60 Hz, 1280 × 1024/60 Hz, 1440 × 900/60 Hz, 1366 × 768/60 Hz, 1280 × 720/60Hz, 1024 × 768/60Hz, 800 × 600/60 Hz
 - HDMI Loopback 1-ch (matching HDMI video in)
- c. LCD Output**
 - 15.6" TFT LCD FHD (1920 × 1080)
 - Support touch screen
- d. Audio Output**
 - 1-ch dual track of 3.5 mm connector
 - 1-ch dual track of green connector
 - 2-ch dual track of HDMI interface
- e. Audio Input**
 - 1-ch dual track of 3.5 mm line in
 - 1-ch dual track of 3.5 mm mic in
 - 2-ch single track of green connector;
 - 1-ch dual track of HDMI in
- f. Audio Sampling Rate 48 KHz**
- - Built-In System**
 - Processor: Intel® Core i5 9400H
 - CPU Clock Speed: 2.5GHz
 - Platform Architecture: Intel® Coffeelake
 - PCH: Intel® Z370
 - Graphics: Intel® UHD Graphics 630
 - Memory: 8G
 - Storage: 256G
 - NIC: Integrated 10/100/1000M Adaption
 - Cooling System: Single Brass & Single Fan
 - Interface**
 - Network Interface: RJ45×1
 - Data Transmission Interface: Bluetooth 4.2
 - Antenna: 2
 - Video Output: HDMI×1, DP×1
 - - Power**
 - Input Voltage: 12V-19V DC
 - Max. Consumption: 60W
 - Standby Consumption: 0.5W
 - Working Environment
 - Storage Temperature: -20°C - 60°C
 - Storage Humidity: 10%-90%
 - Working Temperature: 0°C - 40°C
 - Working Humidity: 10%-90%
 - - General**
 - Product Dimensions (W × H × D): 180×195×30mm
 - Net Weight: About 1.24kg
 - Color: Black
 - - Display**
 - Screen Size: 86 inch LED Backlight
 - BacklightDLED
 - Pixel Pitch0.164 (H) × 0.493 (V) mm
 - Resolution3840 × 2160@60 Hz
 - Brightness350 cd/m²
 - Color Depth10 bit

**OPS
(Open Pluggable Specification):
Model: (DS-D5AC9C5-8S2)**

**86" INTERACTIVE DISPLAY WITH
STANDING AND WALL MOUNTED
BRACKET:
(Model: DS-D5B86R/C)**

- Contrast Ratio 4000 : 1 (Typ.)
- Response Time 6 ms
- Color Gamut 90% NTSC (CIE1931) (Typ.)
- Refresh Rate 60 Hz
- Viewing Angle 178° (H) / 178° (V)

Built-In System

- Operation System Android 11
- Processor A72*2 + A53*4, 1.8 GHz
- Memory 4 GB
- Built-In Storage 64 GB
- NIC Built-in 1000 Mbps NIC, supporting routing; IEEE 802.11 a/b/g/n/ac with 2 × 2 MIMO, supporting both 2.4 GHz and 5GHz bands

Touch

- Type Infrared touch screen
- Glass AG smooth glass
- Touch Point Max 45 point multi-touch
- Touch Response Time < 10 ms
- Touch Precision ± 1 mm (≥ 90% touching area)

Internal Function

- Loudspeaker Built-in 2 × 16 W loudspeaker
- Bluetooth Built-in BLE (Bluetooth Low Energy) module supports Bluetooth 5.0 and previous version

Interface

- Video & Audio Input HDMI IN × 2, MAX 4K @30 Hz, LINE IN × 1
- Video & Audio Output HDMI OUT (HDMI 2.0) × 1, MAX 4K @60 Hz, LINE OUT × 1
- Control Interface RS-232 × 1, Touch-USB × 1
- Network Interface RJ45 (1000 Mbps port) × 2
- Data Transmission Interface USB-C × 1, USB-A × 2 on front panel, USB-A × 2 on rear panel

Power

- Power Consumption ≤ 490 W (full load)
- Standby Consumption 0.5 W

Working Environment

- Working Temperature 0 °C to 40 °C (32 °F to 104 °F)
- Working Humidity 10% to 90% RH

General

- Power 100 to 240 V, AC, 50/60 Hz
- Product Dimensions 1963 × 1159 × 87.5 mm
- Package Dimensions (W × H × D) 2187 × 1366 × 274 mm
- Net Weight 65.12 kg
- Gross Weight 86.24 kg
- Lifespan 50000 hours

Inclusion:

- Wall Mount Bracket
- 960mm x 180mm x 600mm

Camera

- Image Sensor: 1/1.8" Progressive Scan CMOS
- Max. Resolution: 3840 × 2160
- Min. Illumination: Color: 0.002 Lux @ (F1.2, AGC ON); B/W: 0.0002 Lux @ (F1.2, AGC ON), 0 Lux with IR
- Shutter Time: 1 s to 1/100,000 s
- Day & Night: IR cut filter
- Blue glass module to reduce ghost phenomenon
- Angle Adjustment: Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°

Lens

- Focal Length & FOV: 2.8 to 12 mm, horizontal FOV: 112.3° to 41.2°, vertical FOV: 58° to 23.1°, diagonal FOV: 137.3° to 47.3°
- 8 to 32 mm, horizontal FOV: 41.8° to 14.9°, vertical - FOV: 22.92° to 8.48°, diagonal FOV: 48.7° to 17°
- Focus: Auto, semi-Auto, manual
- Iris Type: P-Iris
- Aperture: 2.8 to 12 mm: F1.2 to 2.5
- 8 to 32 mm: F1.7 to F1.73

DORI

DORI: Wide:

2.8 to 12 mm: D: 87 m, O: 34.5 m, R: 17.4 m, I: 8.7 m

8 to 32 mm: D: 218 m, O: 86.5 m, R: 43.6 m, I: 21.8 m

Tele:

2.8 to 12 mm: D: 216 m, O: 85.7 m, R: 43.2 m, I: 21.6 m

8 to 32 mm: D: 580 m, O: 230.2 m, R: 116 m, I: 58 m

Illuminator

- IR Wavelength: 850 nm
- Smart Supplement Light: Yes
- Supplement Light Range: 2.8 to 12 mm: 30 m
- 8 to 32 mm: 50 m

**4K DeepinViewVF Dome IPC
(Teacher's View) – 2 Pcs:
(IDS-2CD7186G0-IZS(2.8-12mm)
(HIK EDU)/TEA)**

Supplement Light Type: IR

AI Open Platform

- Model Specification: Up to 4 models, Model type: detection model, classification model, mixed model (detection model and classification model)

Video

- Main Stream: 50 Hz: 25 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)
60 Hz: 30 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)
- Sub-Stream: 50 Hz: 25 fps (704 × 480, 640 × 480)
60 Hz: 30 fps (704 × 480, 640 × 480)
- Third Stream: 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
- Fourth Stream: 50 Hz: 25 fps (704 × 480, 640 × 480)
60 Hz: 30 fps (704 × 480, 640 × 480)
- Fifth Stream: 50 Hz: 25 fps (704 × 480, 640 × 480)
60 Hz: 30 fps (704 × 480, 640 × 480)
- Video Compression: Main stream: H.265+/H.265/H.264+/H.264,
Sub-stream: H.265/H.264/MJPEG,
Third stream: H.265/H.264,
Fourth stream: H.265/H.264/MJPEG,
Fifth stream: H.265/H.264/MJPEG
- Video Bit Rate: 32 Kbps to 16 Mbps
- H.264 Type: Baseline Profile, Main Profile, High Profile
- H.265 Type: Main Profile
- Bit Rate Control: CBR, VBR
- Scalable Video Coding (SVC): H.264 and H.265 encoding
- Region Of Interest (ROI): 4 fixed region(s) for each stream
- Target Cropping: Yes

Audio

- Audio Bit Rate: 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)
- Audio Compression: G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
- Audio Sampling Rate: 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
- Audio Type: Mono sound
- Environment Noise Filtering: Yes

Network

- Protocols: TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
- Simultaneous Live View: Up to 20 channels
- API: Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP
- User/Host: Up to 32 users
3 user levels: administrator, operator, and user
- Network Storage: NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
Together with high-end Hikvision memory card, memory card encryption and health detection are supported.
- Security: Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
- Client: iVMS-4200, Hik-Connect
- Web Browser: Plug-in required live view: IE9+, Chrome 41.0 to 44, Firefox 30.0 to 51, Safari 8.0 to 11
Plug-in free live view: Chrome 45.0+, Firefox 52.0+
Not recommended: Safari 11+, Edge

Image

- Image Parameters Switch: Yes
- Image Settings: Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by client software or web browser
- Day/Night Switch: Day, Night, Auto, Schedule, Alarm Trigger
- Wide Dynamic Range (WDR): 120 dB
- Defog: Yes
- Image Enhancement: BLC, HLC, Defog, 3D DNR
- SNR: ≥ 52 dB
- Privacy Mask: 8 programmable polygon privacy masks, mask color or mosaic configurable
- Image Stabilization: EIS
- Picture Overlay: LOGO picture can be overlaid on video with 128 × 128 24bit bmp format

Interface

- Video Output: 1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)
- Ethernet Interface: 1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port
- On-Board Storage: Built-in memory card slot, support

microSD/microSDHC/microSDXC card, up to 1 TB

- Audio: 1 input (line in), 1 output (line out), 3.5 mm connector, 1 built-in microphone
- Alarm: 1 input, 1 output (max. 24 VDC, 1 A)
- RS-485: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
- Reset Key: Yes
- Power Output: 12 VDC, max. 100 mA

Event

- Basic Event: Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection
- Smart Event: Line crossing detection, intrusion detection, Region entrance detection, region exiting detection, audio exception detection, scene change detection, defocus detection
- Linkage: Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning

Deep Learning Function

- Multi-Target-Type Detection-: Supports simultaneous detection and capture of human body, face and vehicle

Gets 7 face features, 13 human body features and 2 vehicle features

- Face Capture: 1. Detects up to 60 faces simultaneously
- 2. Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°
- 3. Uploads face with background and closed-up face pictures
- Face Comparison: Up to 10 face libraries. Up to 30,000 faces for each library. 150,000 faces in total.

Supports face library encryption

• Perimeter protection: Line crossing, intrusion, Region entrance, Region exiting
Support alarm triggering by specified target types (human and vehicle)

- People Counting: Supports crossline people counting, Supports counting, displaying and exporting the people flow data of entering and exiting. (The data is stored in the flash.), The real-time people flow data is displayed on the screen. , Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°.,

Uploads face with background and closed-up face picture., Supports real-time uploading and uploading by statistic cycle

- Queue Management: Supports up to 8 detection regions, and independent arming schedule and linkage method

Supports 2 detection modes: regional people queuing-up, waiting time detection

Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue

Supports raw data export for further analysis.

Supports real-time data uploading and scheduled data uploading

Regional people queuing-up: supports 4 alarm trigger conditions, including greater than threshold, less than threshold, equal to threshold, not equal to threshold

Waiting time detection: supports 1 alarm trigger condition, including greater than threshold

- Heat Map: A graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area.,

Two report types are available, space heat map and time heat map line chart.

- Hard Hat Detection: Detects up to 30 human targets simultaneously Supports up to 4 shield regions

• Metadata: intrusion detection, Line crossing detection, Region entrance detection, region exiting detection, face capture, multi-target-type detection

- Regional People Counting: Supports up to 8 detection regions, and independent arming schedule and linkage method

Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection

Supports parameter settings: alarm times per exception, alarm interval, first alarm delay

Supports searching real-time number of people

People density detection: supports scheduled uploading, number of people change uploading, congestion level uploading

Number of people exception detection: supports 6 alarm trigger conditions, including greater than threshold A, less than threshold A, equal to threshold A, not equal to threshold A, greater than threshold A and less than threshold B, less than threshold A or greater than threshold B (threshold A should be less than threshold B)

Waiting time exception detection: supports 3 alarm trigger conditions, including greater than threshold A, less than threshold A, greater than threshold A and less than threshold B (threshold A should be less than threshold B)

- On/Off Duty Detection: Supports up to 8 detection regions, and independent arming schedule and linkage method
- Supports 2 detection modes: absence detection, on/off duty detection
- Supports parameter settings: person on duty, absence duration

General

- Power: 12 VDC± 20%, 1.02 A, max. 12.4 W, two-core terminal block
- 24 VAC± 20%, 0.49 A, max. 11.8 W, two-core terminal block
- PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.22 A to 0.29 A, max. 12.5 W
- Dimension: Ø140.5 × 122.6 mm (Ø5.5" × 4.8")
- Package Dimension: 244 × 174 × 173 mm (9.6" × 6.9" × 6.8")
- Weight: Approx. 875 g (1.93 lb.)
- With Package Weight: Approx. 1415 g (3.11 lb.)
- Startup And Operating Conditions: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
- Language: 33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
- Storage Conditions: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (noncondensing)
- General Function: Heartbeat, mirror, Password protection, watermark, Privacy mask, IP address filter, one-key reset, five streams

Approval

- EMC: FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7); KC (KN 32: 2015, KN 35: 2015)
- Safety: UL (UL 62368-1); CB (IEC 62368-1:2014+A11); CE-LVD (EN 62368-1:2014/A11:2017); BIS (IS 13252(Part 1):2010/IEC 60950-1 : 2005); LOA (IEC/EN 60950-1)
- Environment: CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
- Protection: IK10 (IEC 2003:62263)
- Other: PVC FREE

4K DeepinViewVF Dome IPC
(Student's View):
Model: IDS-2CD7186G0-IZS
(2.8-12mm)(HIK EDU)/STU

Camera

- Image Sensor: 1/1.8" Progressive Scan CMOS
- Max. Resolution: 3840 × 2160
- Min. Illumination: Color: 0.002 Lux @ (F1.2, AGC ON); B/W: 0.0002 Lux @ (F1.2, AGC ON), 0 Lux with IR
- Shutter Time: 1 s to 1/100,000 s
- Day & Night: IR cut filter
- Blue glass module to reduce ghost phenomenon
- Angle Adjustment: Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°

Lens

- Focal Length & FOV: 2.8 to 12 mm, horizontal FOV: 112.3° to 41.2°, vertical FOV: 58° to 23.1°, diagonal FOV: 137.3° to 47.3° 8 to 32 mm, horizontal FOV: 41.8° to 14.9°, vertical
- FOV: 22.92° to 8.48°, diagonal FOV: 48.7° to 17°
- Focus: Auto, semi-Auto, manual
- Iris Type: P-Iris
- Aperture: 2.8 to 12 mm: F1.2 to 2.5
8 to 32 mm: F1.7 to F1.73
- I authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
- Client: iVMS-4200, Hik-Connect
- Web Browser: Plug-in required live view: IE9+, Chrome 41.0 to 44, Firefox 30.0 to 51, Safari 8.0 to 11
Plug-in free live view: Chrome 45.0+, Firefox 52.0+
- Not recommended: Safari 11+, Edge

Image

- Image Parameters Switch: Yes
- Image Settings: Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by client software or web browser
- Day/Night Switch: Day, Night, Auto, Schedule, Alarm Trigger
- Wide Dynamic Range (WDR): 120 dB
- Defog: Yes
- Image Enhancement: BLC, HLC, Defog, 3D DNR

- SNR: ≥ 52 dB
- Privacy Mask: 8 programmable polygon privacy masks, mask color or mosaic configurable
- Image Stabilization: EIS
- Picture Overlay: LOGO picture can be overlaid on video with 128 × 128 24bit bmp format

Interface

- Video Output: 1 Vp-p Composite Output (75 Ω /CVBS) (Only for debugging)
- Ethernet Interface: 1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port
- On-Board Storage: Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB
- Audio: 1 input (line in), 1 output (line out), 3.5 mm connector, 1 built-in microphone
- Alarm: 1 input, 1 output (max. 24 VDC, 1 A)
- RS-485: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
- Reset Key: Yes
- Power Output: 12 VDC, max. 100 mA

Event

- Basic Event: Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection
- Smart Event: Line crossing detection, intrusion detection, region entrance detection, region exiting detection, audio exception detection, scene change detection, defocus detection
- Linkage: Upload to FTP/NAS/memory card, notify surveillance center, send email, Trigger alarm output, trigger recording, trigger capture, audible warning

Deep Learning Function

- Multi-Target-Type Detection: Supports simultaneous detection and capture of human body, face and vehicle Gets 7 face features, 13 human body features and 2 vehicle features
- Face Capture: 1. Detects up to 60 faces simultaneously
2. Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°
3. Uploads face with background and closed-up face pictures
- Face Comparison: Up to 10 face libraries. Up to 30,000 faces for each library. 150,000 faces in total.

Supports face library encryption

- Perimeter protection: Line crossing, intrusion, Region entrance, Region exiting Support alarm triggering by specified target types (human and vehicle)

- People Counting: Supports crossline people counting,

Supports counting, displaying and exporting the people flow data of entering and exiting. (The data is stored in the flash.),

The real-time people flow data is displayed on the screen. ,

Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°.,

Uploads face with background and closed-up face picture.,

Supports real-time uploading and uploading by statistic cycle

- Queue Management: Supports up to 8 detection regions, and independent arming schedule and linkage method

Supports 2 detection modes: regional people queuing-up, waiting time detection

Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue

Supports raw data export for further analysis.

Supports real-time data uploading and scheduled data uploading

Regional people queuing-up: supports 4 alarm trigger conditions, including greater than threshold, less than threshold, equal to threshold, not equal to threshold

Waiting time detection: supports 1 alarm trigger condition, including greater than threshold

- Heat Map: A graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area.,

Two report types are available, space heat map and time heat map line chart.

- Hard Hat Detection: Detects up to 30 human targets simultaneously

Supports up to 4 shield regions

- Metadata: intrusion detection, Line crossing detection, Region entrance detection, Region exiting detection, face capture, multi-target-type detection

- Regional People Counting: Supports up to 8 detection regions, and independent arming schedule and linkage method

Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection

Supports parameter settings: alarm times per exception, alarm interval, first alarm delay

Supports searching real-time number of people

People density detection: supports scheduled uploading, number of people change uploading, congestion level uploading

Number of people exception detection: supports 6 alarm trigger conditions, including greater than threshold A, less than threshold A, equal to threshold A, not equal to threshold A, greater than threshold A and less than threshold B, less than threshold A or greater than threshold B (threshold A should be less than threshold B)

Waiting time exception detection: supports 3 alarm trigger conditions, including greater than threshold A, less than threshold A, greater than threshold A and less than

threshold B (threshold A should be less than threshold B)

- On/Off Duty Detection: Supports up to 8 detection regions, and independent arming schedule and linkage method

Supports 2 detection modes: absence detection, on/off duty detection

Supports parameter settings: person on duty, absence duration

General

- Power: 12 VDC± 20%, 1.02 A, max. 12.4 W, two-core terminal block
24 VAC± 20%, 0.49 A, max. 11.8 W, two-core terminal block

PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.22 A to 0.29 A, max. 12.5 W

- Dimension: Ø140.5 × 122.6 mm (Ø5.5" × 4.8")

- Package Dimension: 244 × 174 × 173 mm (9.6" × 6.9" × 6.8")

- Weight: Approx. 875 g (1.93 lb.)

- With Package Weight: Approx. 1415 g (3.11 lb.)

- Startup And Operating Conditions: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)

- Language: 33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian

- Storage Conditions: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (noncondensing)

- General Function: Heartbeat, mirror, Password protection, watermark, Privacy Mask, IP address filter, one-key reset, five streams

Approval

- EMC: FCC (47 CFR Part 15, Subpart B);

CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN 50130-4: 2011 +A1: 2014);

RCM (AS/NZS CISPR 32: 2015);

IC (ICES-003: Issue 7);

KC (KN 32: 2015, KN 35: 2015)

- Safety: UL (UL 62368-1);

CB (IEC 62368-1:2014+A11);

CE-LVD (EN 62368-1:2014/A11:2017);

BIS (IS 13252(Part 1):2010/IEC 60950-1 : 2005);

LOA (IEC/EN 60950-1)

- Environment: CE-RoHS (2011/65/EU);

WEEE (2012/19/EU);

Reach (Regulation (EC) No 1907/2006)

- Protection: IK10 (IEC 2004:62264)

- Other: PVC FREE

License Software

- Remote Share Tool Base Package - Including connect and manage classroom video devices, share the video remotely to students' PC and mobile phone client through the tripartite video conferencing software (such as Zoom and WebEx) through the digital-to-analogue conversion of the local camera video stream access via USB.
 - Supported: Provides functions as devices Management, share the Video remotely and etc.
 - Supports adding classroom, editing classroom, deleting classroom, importing classroom, exporting classroom, filtering classroom by the Classroom No. and Device IP Address, and parameter configuration.
 - Supports connecting one classroom at a time by checking activation code, and disconnecting one classroom. If you do not activate the remote sharing tool through an activation code, it will be automatically disconnecting which is more than 20 minutes.
 - Supports activating this tool by an activation code and deactivating it.
 - Supports Audio sharing.

MICROPHONE

**OVERHEAD HANGING:
MODEL: DS-UAC-M1P(O-STD)**

- **Microphone**
 - Amount: 32
 - Direction: Omnidirectional
 - Pickup Distance: In the radius up to 10 m
 - Sensitivity: -36 dB±1 dBFS
 - SNR: 90 dB
 - Frequency Response: 20 Hz~16 kHz
 - Dynamic Range: 105 dB
 - Max. Sound Pressure Level: 120 dB SPL
 - Output Amplitude: 2.5 Vpp MAX
 - Audio Transmission Distance: ≥3000 m
 - Output Impedance: 600 Ω, balanced output
 - Distortion Degree: ≤3%

Functions

- Echo Suppression: Yes
- Noise Reduction Adjustment: digital noise reduction
- Volume Adjustment: ≥100 level volume adjustment
- Device Management: Power-off detection, program exception detection
- Anti-Reverberation: Yes

Audio

- Audio Sampling Rate: 16 kHz, 32 kHz

Interface

Indicator

- Solid white: normally working
- Solid red: abnormal
- No light: no power supply
- Device Interface: Line out, Line in, DC power input, RJ45 network cable

General

- Power: 9 VDC~30 VDC, PoE, 2.4 W Max
- Material: Plastic
- Dimension: Ø250 mm × 34.5 mm (Ø9.84" × 1.36")
- Weight: Approx. 740 g (1.63 lb.)
- Operating Condition: -10 °C~50 °C (14°F~122°F, Indoor)

Approval

- Protection: lightning protection, power polarity reversal protection, and electrostatic discharge protection

- Materials: - Comply with Philippine Electrical Code
- SOLECO Standards: - Black (hot lines); colored wire (ground)

B. WORKMANSHIP

- B.01 Site Clearing** - All surface objects other protruding obstructions not designated to remain shall be cleared and removed.
- B.02 Housekeeping** - Cleanliness and orderliness within the worksite is a must to enhance overall safety for the whole project.
- B.03 Others** - Contractor's workers must always abide by Project's and School's safety and security rules and regulations. Violating workers will not be allowed to work and will be blacklisted. Details of these rules and regulations will be discussed during the kick-off meeting. List of workers and equipment must be submitted (w/ serial number) during the kick-off meeting.

Prepared by:

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Architect I

Reviewed by:

RYAN A. MACUTO
Engineer II

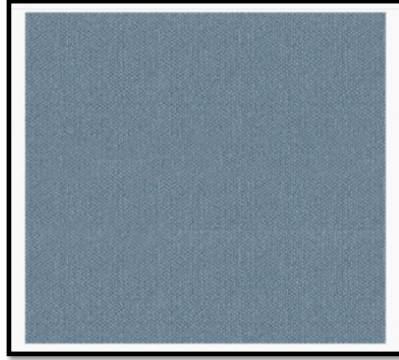
Recommending Approval:

DEWOOWOGEN P. BACLAYON, PhD
Vice President for Admin and Finance

Approved by:

JUDE A. DUARTE, DPA
University President

0.50m x 0.50m Light Blue Carpet Tiles



3 gang No neutral White Smart Switch



Switch Socket Concealed Bottom Box



24 ports POE Switch w/SFP Plus, Layer 3-Switch



Wireless Dual Band Ceiling Mount Access Point



Network Cabinet, 530x400x300mm



3-Gang Floor Mounted Convenience Outlet



Door Access Solution Package (SC700 TCP/IP Access Control Time Clock Attendance Door Entrance System)



Model Number : SC700
Product Name :RFID Card Door Access Control Time Clock Attendance System
Material : Plastic
Card Capacity : 30,000
Transaction Capacity : 50,000
Communication : TCP/IP,USB host
RF Card : IN ID(standard),MF IC(optional)
Access Control Interface for 3rd party electric lock, door sensor, exit button, alarm, Door Bell
Wiegand Signal : Output and Input
Software : ZKACCESS3.5

Door Access Solution Package (csNI600 Electric Frameless Glass Door Lock)



Shear strength : 2000lbs/1000kg
Lock Status instructions :LED Display
Door Status Sensors : Dry contact NO,NC,COM
Relock Delay Timer : 0/ 2.5 /5 seconds available to set
Optional Functions : Lock Status Sensors ,Buzzer
Rated Operating Voltage DC 12V or 24V (Customization Available)
Start Current : 900mA, Standby Current :250mA
Face place material : High Aluminum
Suitable for Fully Frameless Glass Door(12~15mm thickness)
Face Plate Dimensions 170Lx49WX43H(mm)
Strike Plate Dimensions 170Lx48Wx40H(mm)
Weight in kg 0.9kg

Door Access Solution Package (Door Access Centralized Power Supply)



Open Frame Linear Power Supply, 220V ac Input,
12V dc Output, 5A Output

Door Access Solution Package (Emergency Exit Button)



Touchless Infrared Induction Door Release EXIT Button
with 2 Channels Remote Control for Access Control Gate
Openers

Aluminum Pop Up Floor Socket 2 Port Lan Outlet



2-Gang Lan Outlet (White)



60mm x 30mm x 1m Aluminum Cable Tray



18x10mm PVC Self-Adhesive Wiring Duct Protector Cable Concealer (50cm-White)

