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M.H-1702



# WISeNET Access

## Access Control Systems

[hanwha-security.eu](http://hanwha-security.eu)



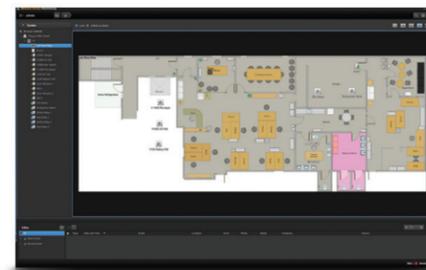
# Wisenet Access Management Software

Standard / Professional / Enterprise



## Key features

- Video Integration with Hanwha Techwin VMS(SSM) TS(Transaction Server)
- Unlimited Access Groups, Time Schedules
- Real time access events & alarm monitoring
- Graphic Maps
- Remote Door Management (Open/ Close)
- Mustering Report
- Event Filter in Monitoring
- Card Design and Printing
- Advanced Reporting
- Manual & Scheduled database backup
- Auditing & User Activity Logs
- Highly scalable and robust software architecture



Monitoring

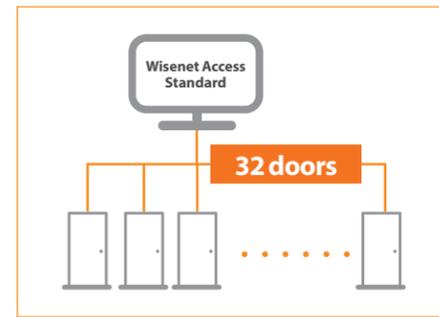


Configuration

# Wisenet Access Management Software

Suitable for various projects

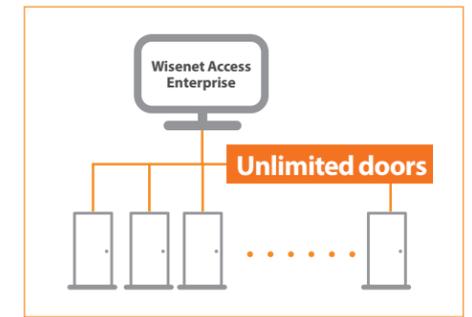
Wisenet Access is provided in Standard, Professional and Enterprise according to the number of doors.



Wisenet Access Standard : Up to 32 doors



Wisenet Access Professional : Up to 256 doors

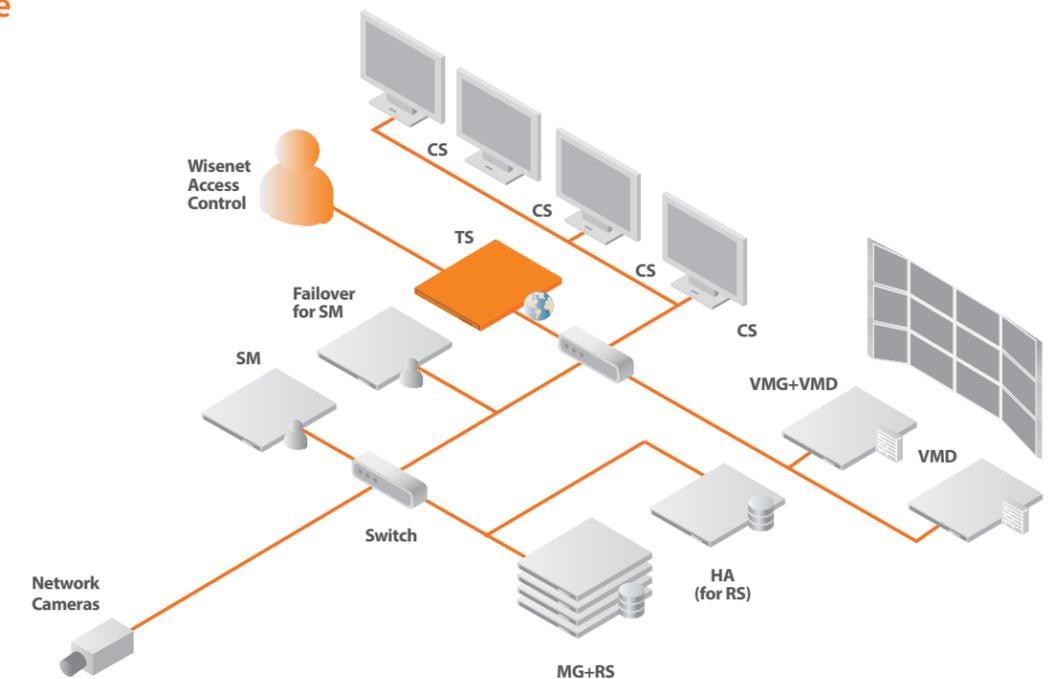


Wisenet Access Enterprise : Unlimited doors

## Seamless integration with video surveillance system

Wisenet Access fully integrates seamlessly with Hanwha Techwin's VMS, SSM Enterprise, allowing real-time monitoring of entry control and alarm events. Independent systems previously monitored individually are now monitored by a single VMS allowing convenient system operation.

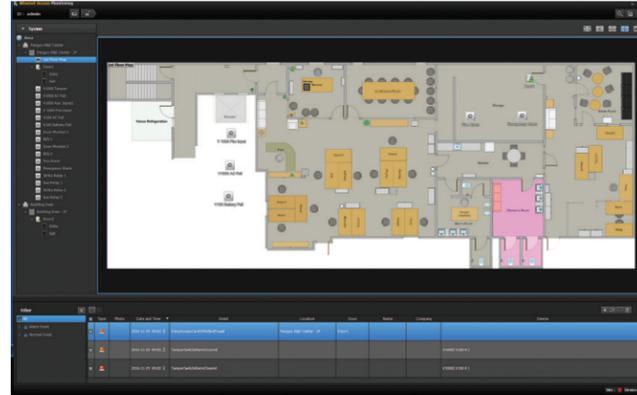
## SSM Enterprise



# Wisenet Access Management Software

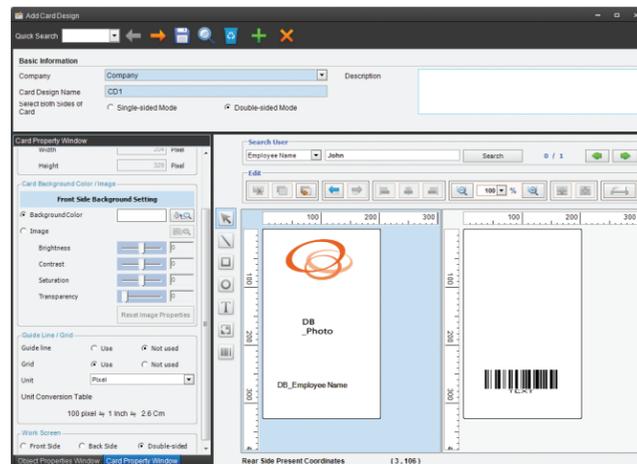
## Graphic Map Monitoring

Door and lock icons positioned on drawings and birds-eye-view of buildings and locations allow real-time monitoring and door/lock control.



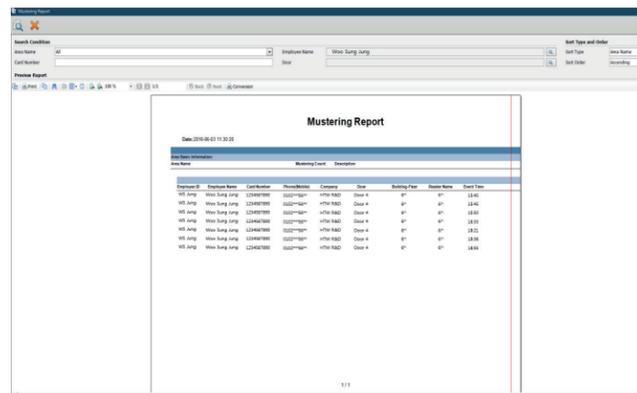
## Card Badge and printing

Employee entry cards can be designed and manufactured using Wisenet Access Management Software allowing administrator convenience as well as reducing maintenance costs.



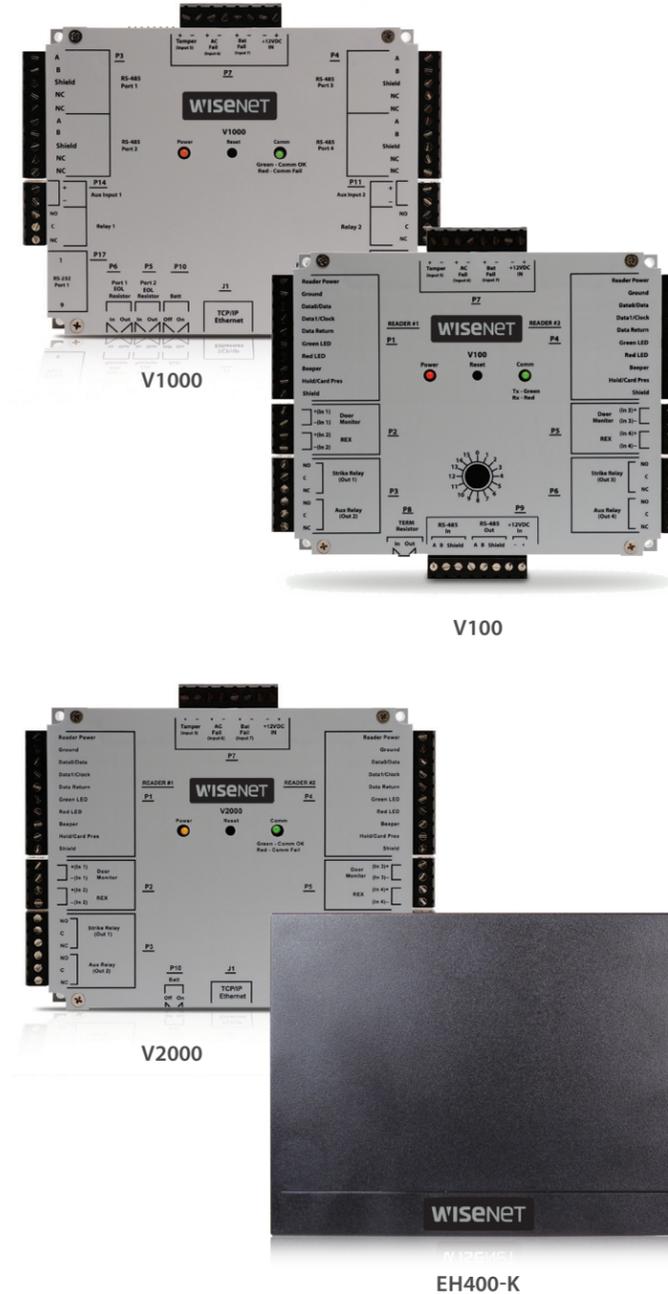
## Mustering report

In case of emergencies, such as fire in the building, Wisenet Access provides real-time report of the number of employees and guests in the building contributing in safe evacuation activities.



# Wisenet Access Controllers

Wisenet Access Controllers are available in centralized and distributed types. Depending on the system scale and installation condition, the two controller types can be employed individually or simultaneously.



## Centralized Controller V1000, V100

- Up to 32 doors (64 readers = 32 x V100 reader module) system
- Up to 250,000 card holders/ 99,999 event buffers
- Fully functional off-line operation during N/W communication is lost
- RS-485 communication with expansion board
- Up to 32 x expansion board (V100/V200/V300)
- 13.56MHz frequency
- Elevator control
- Linux 2.6
- Up to 128bit Wiegand compatible

## Distributed Controller V2000, EH400-K

- Up to 2 readers (V2000), 1 reader (EH400-K) interface
- UP to 250,000 users (V2000), 125,000 users (EH400-K) / 99,999 event buffers
- 4ea input/output port
- Fully functional off-line operation during N/W communication is loss
- Wiegand communication with readers
- 13.56MHz frequency
- Linux 2.6
- Up to 128bit Wiegand compatible
- PoE power (IEEE 802.3af) \*EH-400K only

# Wisenet Access Readers



## Card/Key pad readers R10, R40, RK40

- 13.56MHz Frequency
- Wiegand, Clock & Data
- Various cards Compatibility - HID iCLASS SE/Elite (HTW format) / DESFire EV I CSN MIFARE (Classic) CSN / Felica CSN
- NFC/ Bluetooth Smart feature (Mob Access)
- IP55
- Lifetime warranty



BioEntry W2

## Fingerprint reader BioEntry W2

- New advanced LFD (Live Finger Detection) technology
- Max template 1,000,000(1:1), 200,000(1:N)
- Max user 500,000(1:1), 100,000(1:N)
- HID reader module embedded (one card solution available) - iCLASS SE Card / MIFARE (CLASSIC) CSN / DESFire EVI CSN/Felica CSN
- IP67
- IK08
- PoE (IEEE 802.3af)
- TCP/IP, RS-485, Wiegand

# Wisenet Access Readers

## Mobile Access (Tap or Twist and Go)

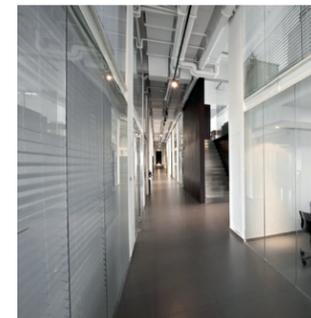
Wisenet mobile access can open doors in a whole new way. It merges security with the convenience of mobile phones for opening doors. This function enables Android or iOS phones to communicate with readers using a close-range "Tap" mode, or from a distance "Twist and Go" mode.



### Tap (close range)



Tap-in



Meeting zones

### Twist & Go (longer range)



Garages



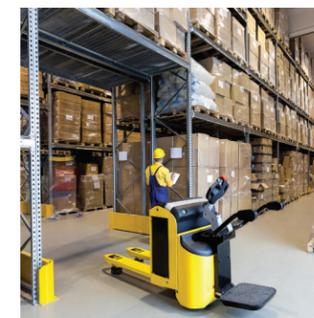
Entry gates



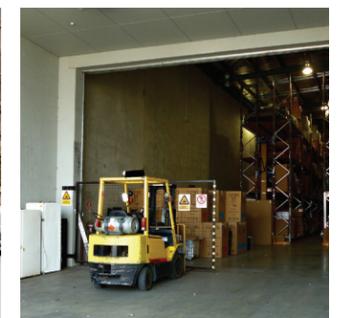
Turn Style Door



Speed Gates

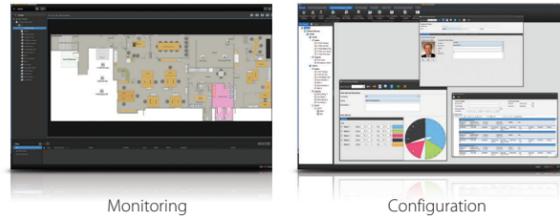


Warehouses



Loading bays

## Wisenet Access Management Software Standard/Professional/Enterprise



Monitoring

Configuration

### Key Features

- Three types of licenses based on door count: Standard (up to 32 doors), Professional (up to 256 doors), Enterprise (unlimited doors)
- Unlimited Access Group and Time Schedule
- Real time access events & alarm monitoring
- Graphic Maps
- Remote Door Management( Close / Open)
- Mustering Report
- Event Filtering for Monitoring
- Card Design and Printing
- Advanced Reporting
- Video Integration with SSM Enterprise
- Manual & Scheduled database backup
- Auditing & User Activity Logs
- Highly scalable and robust software architecture

### Supported Hardware



V1000

V2000

EH400-K

V100

V200

V300

R10/R40/RK40

Bio Entry W2

Wisenet Access Standard/Professional/Enterprise (SSA-M3000/M4000/M5000)	
ACCESS CONTROL	Device Auto Discovery
	Cardholder Management
	Batch Uploads
	Card(s) pre-registration
	Device Maintenance
	Unlimited Access Groups, Time Schedules
MONITORING	Area/Zone Management
	Biometric Readers(FP)
	Real time access events & alarm monitoring
	Graphic Maps
	Remote Door Management ( Close / Open)
	I/O Monitoring
CARD DESIGN AND PRINTING	Mustering
	Event Filtering for Monitoring
	Control Door Monitoring/Management permissions per User Group
	Create multiple design templates
	Auto-fill card holder data from system database
	Print Cards
FIRE GROUPS	Create firegroups for each fire sensor input
ADVANCED REPORTING	Extensive reporting options
VIDEO INTEGRATION WITH SSM	Export to multiple formats (excel, pdf, word etc.)
	Full Integration with Hanwha Techwin's VMS, SSM
	Review video of the access events & alarms
MAINTENANCE	Real-time event & alarm notification to SSM
	User Group & User Privileges
	Manual & Scheduled database backup
	Database Restore
	Data Export & Import
	Custom Fields
SYSTEM	Auditing & User Activity Logs
	up to 32doors(Standard), 256doors(Professional), unlimited doors(Enterprise)
	Very simple and intuitive user interface
	Highly Scalable

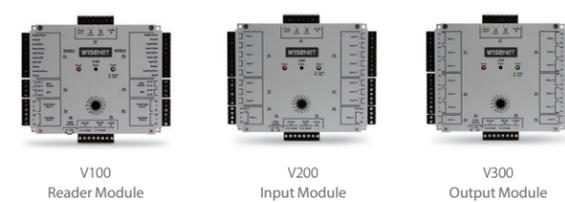
## V1000 Centralized Controller



### Key Features

- Up to 32 reader Interfaces (up to 64 doors) and 250,000 cardholders
- TCP/IP to connect to the host
- Reports all activity to the host
- Reports supervised inputs/alarms with 255 priorities
- Fully functional offline operation when not actively communicating with the host : access decision, event logging
- Max. 32 expansion modules
- All connections and indicators are fully identified by silk-screened nomenclature on the cover

### Expansion Module



V100 Reader Module

V200 Input Module

V300 Output Module

V1000	
Mounting	Mount to any wall surface, using four screws. For UL compliance, one or more gateways can be mounted inside a locking customer supplied NEMA-4 rated enclosure
Dimensions (WxHxD)	5.8" x 4.825" x 1.275"(147.32mm x 122.55mm x 32.38mm)
Weight	12.4 oz (.35Kg)
Housing Material	UL94 polycarbonate
Audio / Visual Indicators	Power LED and RS-485 communications LED
Operating Temperature	32°F to 122°F (0°C to 50°C)
Operating Humidity	5% to 95% relative, non-condensing
Communication Ports	Ethernet (10/100), RS485 (Half duplex)
Certifications	UL294 (US) listed component, CSA 205 (Canada), FCC Class A (US), ICES-003 class A (Canada), CE mark EN 301 489-3 EN 55022 EN 50130-4 (EU), C-Tick AS/NZS CISPR 22 (Australia, New Zealand) & Korea (KCC)
INPUT POWER	
Operating Current (MAX)@12-24V DC	1000mA
Operating Current (AVG)@12V DC	210mA
Supervised Inputs Power (MAX)	0.025W (5mA sink, 5V nominal) 0 to +5VDC Ref
RELAY RATING	
Relay Contact Rating (Dry Output)	2A@30V DC (Max. Amperage that is UL Certified) 5A@30V DC

\* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)  
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# V100

Expansion Reader Module



## Key Features

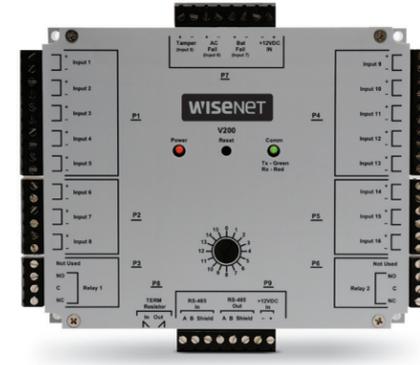
- Reports supervised inputs
- Connects to the V1000 via RS-485
- Receives and processes real-time commands from the V1000
- Reports all activity to the V1000
- Attractive polycarbonate enclosure protects components from damage
- All connections and indicators are fully identified by silk-screened nomenclature on the cover
- Processes off-line access control decisions based on facility code

V100	
<b>Dimensions (WxHxD)</b>	5.8" x 4.825" x 1.275"(147.32mm x 122.55mm x 32.38mm)
<b>Weight</b>	12.4 oz (.35Kg)
<b>Enclosure Material</b>	UL94 polycarbonate
<b>Power Supply Requirements</b>	60mA@9 - 18V DC (with no readers connected). Recommended : Supervised linear power supply with battery backup, input surge protection, and AC fail and battery low contact outputs. When VertX™ is supplying power to readers, the requirements are 600mA@9 - 18V DC. The V100 can supply 500mA to two readers. Separate supervised DC supplies with battery backup recommended for door locking or relay-activated devices, or for HID MaxiProx® readers.
<b>Operating Environment</b>	Indoors, or customer-supplied NEMA-4 rated enclosure
<b>Operating Temperature</b>	32°F to 122°F (0°C to 50°C)
<b>Operating Humidity</b>	5% to 95% relative, non-condensing
<b>Communication Ports</b>	RS-485 - two wire. Two SIA standard wiegand/clock-and-data ports
<b>Certifications</b>	UL® 294 and UL® 1076 recognized component for the US, CSA 205 for Canada, FCC class A verification, EMC for Canada, EU (CE mark), Australia (C-Tick mark), New Zealand, Japan, EN 50130-4 access control systems immunity for the EU (CE mark)
<b>Cable Distance</b>	RS-485 - 4000feet (1220m) to host using Belden 3105A, 22 AWG twisted pair, Shielded 100Ω cable : Wiegand -500feet (150m) to reader using Alpha 1299C 22 AWG, 9-conductor, Stranded, Overall shield (Fewer conductors needed if all control lines are not used) : Input circuits - 500feet (150m), 2-conductor, Shielded, Using Alpha 1292C (22 AWG) or Alpha 2421C (18 AWG) : Output circuits - 500feet (150m), 2-conductor, Using Alpha 1172C (22 AWG) or Alpha 1897C (18 AWG) : Minimum wire gauge depends on cable length and current requirements.

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# V200

Expansion Input Module



## Key Features

- Reports supervised or unsupervised alarm circuits
- Off-normal condition programmable for each input point (NO or NC alarm devices may be used)
- Connects to the V1000 via RS-485
- Receives and processes real-time commands from the V1000
- Reports all activity to the V1000
- Enables complex input/output linking when used with the V1000 and V300 output control interface
- Attractive polycarbonate enclosure protects components from damage
- All connections and indicators are fully identified by silk-screened nomenclature on the cover

V200	
<b>Dimensions (WxHxD)</b>	5.8" x 4.825" x 1.275"(147.32mm x 122.55mm x 32.38mm)
<b>Weight</b>	12.4 oz (.35Kg)
<b>Enclosure Material</b>	UL94 polycarbonate
<b>Power Supply Requirements</b>	50mA@9 - 18V DC Recommended : Supervised linear power supply with battery backup, input surge protection, and AC fail and battery low contact outputs. Separate supervised DC supply with battery backup recommended for relay-activated devices.
<b>Operating Environment</b>	Indoors, or customer-supplied NEMA-4 rated enclosure
<b>Operating Temperature</b>	32°F to 122°F (0°C to 50°C)
<b>Operating Humidity</b>	5% to 95% relative, non-condensing
<b>Communication Ports</b>	RS-485 - two wire
<b>Certifications</b>	UL® 294 and UL® 1076 recognized component for the US, CSA 205 for Canada, FCC class A verification, EMC for Canada, EU (CE mark), Australia (C-Tick mark), New Zealand, Japan, EN 50130-4 access control systems immunity for the EU (CE mark)
<b>Cable Distance</b>	RS-485 - 4000feet (1220m) to host, using Belden 3105A, 22 AWG twisted pair, shielded 100Ω cable. Input circuits - 500feet (150m), Two-conductor, Shielded, Using Alpha 1292C (22 AWG) or Alpha 2421C (18 AWG) : Output circuits - 500feet (150m), 2-conductor, using Alpha 1172C (22 AWG) or Alpha 1897C (18 AWG). Minimum wire gauge depends on cable length and current requirements.

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# V300

Expansion Output Module



V300	
<b>Dimensions (WxHxD)</b>	5.8" x 4.825" x 1.275"(147.32mm x 122.55mm x 32.38mm)
<b>Weight</b>	12.4 oz (.35Kg)
<b>Enclosure Material</b>	UL94 polycarbonate
<b>Power Supply Requirements</b>	60mA@9 - 18 VDC Recommended : Supervised linear power supply with battery backup, input surge protection, and AC fail and battery low contact outputs. Separate supervised DC supply with battery backup recommended for relay-activated devices.
<b>Relay Rating</b>	2A@30V DC maximum load
<b>Operating Environment</b>	Indoors, or customer-supplied NEMA-4 rated enclosure
<b>Operating Temperature</b>	32°F to 122°F (0°C to 50°C)
<b>Operating Humidity</b>	5% to 95% relative, non-condensing
<b>Communication Ports</b>	RS-485 - two wire
<b>Certifications</b>	UL® 294 and UL® 1076 recognized component for the US, CSA 205 for Canada, FCC class A verification, EMC for Canada, EU (CE mark), Australia (C-Tick mark), New Zealand, Japan, EN 50130-4 access control systems Immunity for the EU (CE mark)
<b>Cable Distance</b>	RS-485 - 4000feet (1220m) to host, using Belden 3105A, 22 AWG twisted pair, shielded 100Ω cable. Input circuits - Output circuits - 500feet (150m), 2-conductor, Using Alpha 1172C (22 AWG) or Alpha 1897C (18 AWG). Minimum wire gauge depends on cable length and current requirements.

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## Key Features

- Off-normal status programmable for each input point (NO or NC alarm devices may be used)
- 12 latching form-C relays, contacts rated at 2A@30VDC
- Connects to the V1000 via RS-485
- Receives and processes real-time commands from the V1000
- Reports all activity to the V1000
- Enables complex input/output linking when used with the V1000 and V200
- Attractive polycarbonate enclosure protects components from damage
- All connections and indicators are fully identified by silk-screened nomenclature on the cover

# V2000

Distributed Controller



V2000	
<b>Mounting</b>	Mount to any wall surface, using four screws. For UL compliance, one or more gateways can be mounted inside a locking customer supplied NEMA-4 rated enclosure
<b>Dimensions (WxHxD)</b>	5.8" x 4.825" x 1.275"(147.32mm x 122.55mm x 32.38mm)
<b>Weight</b>	12.4 oz (.35Kg)
<b>Housing Material</b>	UL94 polycarbonate
<b>Audio / Visual Indicators</b>	Power LED and RS-485 communications LED
<b>Operating Temperature</b>	32°F to 122°F (0°C to 50°C)
<b>Operating Humidity</b>	5% to 85% relative, non-condensing
<b>Communication Ports</b>	Ethernet (10/100)
<b>Certifications</b>	UL294 (US) listed component, CSA 205 (Canada), FCC Class A (US), ICES-003 class A (Canada), CE mark EN 301 489-3 EN 55022 EN 50130-4 (EU), C-Tick AS/NZS CISPR 22 (Australia, New Zealand) & Korea (KCC)
<b>INPUT POWER</b>	
<b>Operating Current (MAX)@12-24V DC</b>	1000mA
<b>Operating Current (AVG)@12V DC</b>	625mA (with 2 iCLASS readers)
<b>Supervised Inputs Power (MAX)</b>	0.025W (5mA sink, 5V nominal) 0 to +5VDC Ref
<b>OUTPUT POWER (MAX) FOR INDIVIDUAL FIELD DEVICES</b>	
<b>Wiegand / C&amp;D Reader</b>	12V DC, 250mA each
<b>Relay Outputs</b>	30V DC, 2Amp, resistive

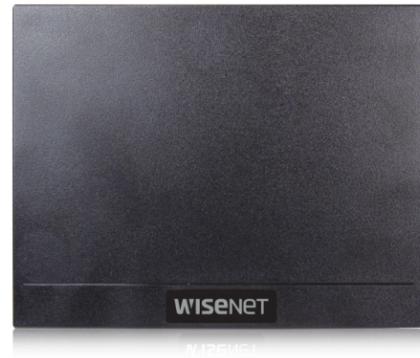
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## Key Features

- Up to 2 reader Interfaces (up to 2 doors) and 250,000 cardholders
- TCP/IP to connect to the host
- Reports all activity to the host
- Reports supervised inputs/alarms with 255 priorities
- Fully functional offline operation when not actively communicating with the host : access decision, event logging
- Inputs for 2 door monitoring
- All connections and indicators are fully identified by silk-screened nomenclature on the cover

# EH400-K

PoE Controller



EH400-K	
Mounting Holes	US double-gang, US single-gang and EU / APAC 60mm
Dimensions (WxHxD)	6.1" x 4.8" x 1.5" (154.9mm x 122.5mm x 37.1mm)
Weight	11.3oz (320g)
Housing Material	UL94 polycarbonate
Audio / Visual Indicators	Two LEDs on RJ-45 port for network : beeper for boot and tamper
Operating Temperature	32°F to 122°F (0°C to 50°C)
Operating Humidity	5% to 95% relative, non-condensing
Communication Ports	Ethernet (10/100), Hi-O CANbus, Wiegand or clock-and-data
Certifications*	UL294 (US) listed component, CSA 205 (Canada), FCC Class A (US), ICES-003 class A (Canada), CE mark EN 301 489-3 EN 55022 EN 50130-4 (EU), C-Tick AS/NZS CISPR 22 (Australia, New Zealand) & Korea (KCC)
INPUT POWER	
DC Input (MAX)@PoE	14.4W (300mA@48V DC)
DC Input (MAX)@AUX+12V DC	18W (1500mA@12V DC)
DC Input (MAX)@AUX+24V DC	36W (1500mA@24V DC)
Supervised Inputs Power (MAX)	0.025W (5mA sink, 5V nominal) 0 to +5V CD Ref
OUTPUT POWER (MAX) FOR TOTAL SYSTEM (ALL FIELD DEVICES)	
DC Input@PoE	9.6W
DC Input@AUX+12V DC	14.4W
DC Input@AUX+24V DC	28.8W
Hi-O CANbus Output Voltage, DC Input = PoE	24V DC
Hi-O CANbus Output Voltage, DC Input = AUX	AUX + VDC
OUTPUT POWER (MAX) FOR INDIVIDUAL FIELD DEVICES, DC INPUT = POE	
Hi-O Device on CANbus	9.6W (400mA@24V DC)
Wiegand / C&D Reader	7.1W (580mA@12.25V DC)
Wet Output (@12V DC)	6.9W (580mA@12V DC)
Wet Output (@24V DC)	8.6W (360mA@24V DC)
OUTPUT POWER (MAX) FOR INDIVIDUAL FIELD DEVICES, DC INPUT = 12V DC	
Hi-O Device on CANbus	14.4W (1200mA@12V DC)
Wiegand / C&D Reader	3.9W (320mA@12.25V DC)
Wet Output (@12V DC)	8.4W (700mA@12V DC)
OUTPUT POWER (MAX) FOR INDIVIDUAL FIELD DEVICES, DC INPUT = 24V DC	
Hi-O Device on CANbus	28.8W (1200mA@24V DC)
Wiegand / C&D Reader	7.3W (600mA@12.25V DC)
Wet Output (@12V DC)	8.4W (700mA@12V DC)
Wet Output (@24V DC)	16.8W (700mA@24V DC)
RELAY RATING	
Relay Contact Rating (Dry Output)	2A@30V DC

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## Key Features

- For one door with one reader and 125,000 cardholders
- TCP/IP to connect to the host
- PoE (802.af) support
- Reports all activity to the host
- Fully functional offline operation when not actively communicating with the host : Access decision, event logging
- Interface with one wiegand or clock-and-data reader

# Mobile Access

Mobile ID / Admin Card



MOBILE ACCESS®	
Mobile Device Support	Android 4.3+ using Bluetooth® smart Android 4.4+, iOS 7.0+ using Bluetooth smart
Mobile Access® App	Multiple mobile IDs managed in one application No need to start application when opening a door Consistent user experience
Opening Modes	Tap (Like a contactless card) Twist and go gesture (From a distance of up to 2m or 6ft)
Contactless Technologies	Powered by Seos utilizing Bluetooth smart or NFC communications standards
Secure Identity Services™ Portal	Issue and revoke mobile IDs Simple upload and management of users Fully automated process
Security	<ul style="list-style-type: none"> <li>• Mobile IDs can be protected by device lock screen</li> <li>• Over-the-air communication with session based keys secured by AES 256 / SHA-256</li> <li>• Mobile IDs are signed and encrypted using CMAC 96 / AES 256</li> <li>• Mobile IDs are stored in mobile device operating system or in secure element, where available</li> </ul>

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## Key Features

- Consistent user experience across different devices and operating systems including iOS and Android
- Phone and reader interaction is intuitive, easy to use and enables new ways to open doors
- Offers a comprehensive, best-in-class management portal to issue and revoke Mobile IDs

# R10/R40/RK40

Card / Keypad Reader



## Key Features

- 13.56MHz card compatibility
- Wiegand, Clock and data
- Multi-format is available
  - Hanwha Techwin format
  - iCLASS SE
  - DESFire EVI CSN
  - MIFARE CSN
  - Felica CSN
- NFC/Bluetooth smart feature
- UL294 / FCC / IC / CE / RCM / SRRC / KCC
- NCC / IDA / RoHS / FIPS201/ MIC
- Life time warranty

	R10	R40	RK40
<b>Typical Read Range* (Inches)</b>	13.56MHz single technology ID-1 credentials (Cards) – SIO data model iCLASS® SE™: 2.8" (7.1cm) SE for DESFire® EV1 : 1.6 (4.1cm) SE for MIFARE® classic : 2.6" (6.6cm)	iCLASS SE: 3.5" (8.9cm) SE for DESFire EV1 : 1.8" (4.6cm) SE for MIFARE classic : 2.8" (7.1cm)	iCLASS SE: 3.4" (8.6cm) SE for DESFire EV1 : 1.6 (4.1cm) SE for MIFARE classic : 2.9" (7.4cm)
<b>Mounting</b>	13.56MHz single technology tags/fobs – SIO data model iCLASS SE: 1.5" (3.8cm) SE for MIFARE classic : 1.2" (3.0cm)	iCLASS SE: 1.8" (4.6cm) SE for MIFARE classic : 1.4" (3.6cm)	iCLASS SE: 1.4" (3.6cm) SE for MIFARE classic : 0.5" (1.3cm)
<b>Color</b>	Black		
<b>Keypad</b>	No		Yes (4 x 3)
<b>Dimensions</b>	1.9" x 4.1" x 0.9" (4.8cm x 10.3cm x 2.3cm)	3.3" x 4.8" x 1.0" (8.4cm x 12.2cm x 2.4cm)	3.3" x 4.8" x 1.1" (8.5cm x 12.2cm x 2.8cm)
<b>Product Weight (Pigtail)</b>	3.9 oz (113g)	7.7 oz (220g)	9.0 oz (256g)
<b>Product Weight (Terminal Strip)</b>	2.9 oz (84g)	7.5 oz (215g)	8.0oz (226g)
<b>Operating Voltage Range</b>	5-16V DC, Linear supply recommended		
<b>Current Draw - Standard Power Mode*** (mA)</b>	45	65	100
<b>Current Draw - Intelligent Power Management (IPM) Mode*** (mA)</b>	25	25	65
<b>Peak Current Draw - Standard Power or IPM Mode*** (mA)</b>	75	105	130
<b>NSC** Power Consumption - Standard Power Mode (W@16V DC)</b>	0.7	1	1.6
<b>NSC** Power Consumption - w/ IPM (W@16V DC)</b>	0.4	0.4	1
<b>Operating Temperature</b>	-31° to 150° F (-35° to 65° C)		
<b>Storage Temperature</b>	-67° to 185° F (-55° to 85° C)		
<b>Operating Humidity</b>	5% to 95% relative humidity non-condensing		
<b>Environmental Rating</b>	IP55		
<b>Transmit Frequency</b>	13.56MHz		
<b>13.56MHz Card Compatibility</b>	Secure identity object™ (SIO) on iCLASS SE/SR, SE for MIFARE DESFire EV1 and SE for MIFARE classic (On by default) Non-default programmable options include : additionally support - Standard iCLASS access control application (Order with standard interpreter) - ISO14443A (MIFARE) CSN, ISO14443B CSN, ISO15693 CSN - ISO14443A/B (FIPS-201 transparent FASC - N read) (Order - F model with FIPS interpreter)		
<b>Communications</b>	Wiegand/Clock and data interface 500ft (150m) (22AWG) - Use shielded cable for best results		
<b>Panel Connection</b>	Pigtail or terminal strip		
<b>Certifications</b>	UL294/cUL**** (US), FCC certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRC (China), MIC (Korea), NCC (Taiwan), iDA (Singapore), RoHS, FIPS-201 transparent FASC-N reader		
<b>Crypto Processor Hardware Common Criteria Rating</b>	EAL5+		
<b>Patents / Housing Material</b>	US7124943, US6058481, US6337619 / UL94 polycarbonate		
<b>Manufactured with % of Recycled Content (Pigtail)</b>	10.5%	10.5%	10.9%
<b>Manufactured with % of Recycled Content (Terminal Strip)</b>	11.0%	11.0%	12.4%
<b>UL Ref Number</b>	R10D	R40D	RK40D
<b>Warranty</b>	Limited lifetime		

\* Typical read range achieved in air. Different types of metal will cause some degradation (typically up to 20%). Use spacers to space product off metal and improve read range if required.  
\*\* NSC = Normal Standby Current \*\*\* Measured in accordance with UL294 standards \*\*\*\* UL294 functionally certified for Wiegand output only

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# BioEntry W2

In/Outdoor Fingerprint / Card Reader



## Key Features

- 1.2GHz quad-core CPU
- New advanced Live Finger Detection (LFD) technique
- Improved OP5 optical sensor and algorithm
- Max. 500k users / 1 million text logs
- 2GB Flash + 256MB RAM
- PoE (802.3af) support
- IK08/IP67 support
- Wiegand, RS485, TTL I/O. relay
- 13.56MHz card compatibility

BioEntry W2	
<b>Biometric</b>	Fingerprint
<b>Template</b>	SUPREMA / ISO 19794-2 / ANSI 378
<b>Extractor / Matcher</b>	MINEX certied and compliant
<b>LFD</b>	Supported
<b>13.56MHz Card Compatibility</b>	iCLASS SE MIFARE/ DESFire EVI/ Felica CSN
<b>CPU</b>	1.2GHz Quad Core
<b>Memory</b>	2GB Flash + 256MB RAM
<b>Max. User</b>	500,000 (1 : 1), 100,000 (1 : N)
<b>Max. Template</b>	1,000,000 (1 : 1), 200,000 (1 : N)
<b>Max. Logs</b>	1,000,000 (Text)
<b>LED</b>	Multi-color
<b>Sound</b>	Multi-tone buzzer
<b>Ethernet</b>	10/100Mbps, Auto MDI/MDI-X
<b>RS-485</b>	1CH host or slave (Selectable)
<b>Wiegand</b>	1CH input or output (Selectable)
<b>TTL</b>	2CH input
<b>Relay</b>	1
<b>PoE</b>	Supported (IEEE 802.3af compliant)
<b>Ingress Protection</b>	IP67
<b>Impact Protection</b>	IK08
<b>Tamper</b>	Supported
<b>Power</b>	12VDC
<b>Operating Temperature</b>	-20°C ~ 50°C
<b>Operating Humidity</b>	0% ~ 80%, Non-condensing
<b>Dimensions (WxHxD)</b>	50.0mm x 172.0mm x 43.5mm
<b>Weight</b>	251g (294g incl. bracket, washers, bolts)
<b>Certificates</b>	CE, FCC, KC, RoHS, REACH, WEEE, IP67, IK08

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# 5427CK

Card Scanner



5427CK	
Dimensions (WxHxD)	2.79" x 3.66" x 0.63" (71mm x 93mm x 16mm)
Weight	Approx. 3.53 oz (100g)
Power Supply	Bus powered
Operating Environment	Indoors, or customer-supplied NEMA-4 rated enclosure
Operating Temperature	32°F to 158°F (0°C to 70°C)
Operating Humidity	10% to 90% relative humidity
Storage Temperature	-4°F to 176°F (-20°C to 80°C)
International Protection Rating	IP54 (Dust / Splashing water) (in preparation)
HOST INTERFACE	
Host Interface	USB 2.0 (Also compliant with USB 1.1)
Transmission Speed	12Mbps (USB 2.0 full speed)
CONTACTLESS SMART CARD INTERFACE	
	KEYBOARD WEDGE
Cards / Protocols High Frequency	MIFARE™ classic 1K/4K, Ultra light, Ultra light C, Plus (Security Lvl 1), MIFARE™, DESFIRE™ 0.6, MIFARE™, DESFIRE™ EV1 (MAC/DES/3DES/3K3DES/AES), iCLASS®, iCLASS® SE/SR, MIFARE SE, DESFire EV1 SE
Supported APIs	Human interface device
PC / SC Driver Support	Compliant with native human interface drivers Drivers available for Windows® XP / Vista / 7 (32 bit / 64 bit), 2003 Server, 2008 R2 Server
Status Indicator	Dual color LED (White = ready, Blue = busy) Buzzer (Programmable)
Color	Cover : Black / Body : Light grey
Accessories (Included)	Removable card holder for card-present operation
Optional Accessories (In Preparation)	Mounting jacket & adhesive tape Vertical standing base (in preparation)
Connector Cable / Length	USB type A connector / 78.7" (200cm)
Customization Options	Customer-specific logo / housing color (Available upon request)
Composition	PC
Meantime Between Failure (MTBF)	500,000 hours
Compliance / Certification	Microsoft® WHQ2
Approvals / Environmental	Compliant RoHS (REACH), WEEE, UL, CE, FCC, ICES (Canada)
Warranty	Two-year manufacturer's warranty (For drivers, see complete lifetime support policy)

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## Key Features

- CCID support  
Native CCID implementation supporting WINDOWS®, LINUX® and MAC® operating systems
- Keyboard wedge  
Fully configurable and programmable keyboard wedge functionality featuring an integrated management console. Flexible configuration of data structures and output modes.
- Enhanced lifecycle management  
Easy firmware updates and configuration setting utilizing a Web interface, SNMP messages and configuration cards.

# BioMini

Fingerprint Scanner



BioMini	
Fingerprint Sensor	Optical (Scratch free sensor surface)
Resolution	500 DPI / 256 gray
Sensing Area	16.0x18.0mm
Image Size	288 x 320pixels
Interface	USB 2.0 high speed / Full speed, Plug & play
O/S	Microsoft Windows, Linux
Operating Temperature	-10°C ~ 50°C
Certification	CE, FCC, KCC, WHQL
Dimensions (WxHxD)	66.0mm x 90.0mm x 58.0mm

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## Key Features

- World's best performing fingerprint algorithm :  
Top results in NIST MINEX tests and FVC
- FIPS 201 certified template extractor and matcher
- NIST certified interoperable template format standards (ANSI-378/ISO19794-2)
- Image compression standard (WSQ)
- Fast matching speed : 100,000 match within a second\*  
Multi-threaded code design fully utilizing multi-core CPU power
- Plug and play USB 2.0 high speed interface
- Supports multiple device handling
- 500 dpi optical fingerprint sensor
- Scratch free sensor surface
- Supports MS Windows and Linux

SDK	
Template Size	384 Bytes (Configurable)
Enrollment Time*	< 0.1 second
Verification Time*	< 0.1 second
Identification Time*	100,000 matches per second
Database	Microsoft Access
Encryption	AES 256
Supported Platforms	Windows 7 / Vista / XP / 2000 / ME / 98, Linux

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# SSA-X300

POWER PACKAGE FOR CONTROL PANEL



## Key Features

- Power package for control panel
- Low battery check
- AC power failure check
- Battery recharge circuit
- Tamper alarm for opening door

SSA-X300	
<b>SMPS</b>	
Input Power	100~240VAC(50Hz/60Hz)/2.0A
Power Consumption	13.5V±5%, 4.7A (Strobe, Horn DC 12.5V±5%)
Charging Current	700mA
Dimension (mm)	120 x 250 x 49
Battery	12V, 18Ah, Rechargeable
SMPS Status Transmission	AC Loss, Battery Fail (Non Battery)
Terminal Interface	AC FAIL(+,-) 1Port, NON_BATT(+,-) 1Port, CONTROLLER/INTERFACE(+,-) 2Port, LOCK(+,-) 2Port, STROBE/HORN(+,-) 2Port, CHARGE(+,-) 1Port
Power On/Off	By Switch
AC Input Protection	Yes, by Fuse in input port
Battery Backup	Yes
Battery Overcharge Protection	Yes, protect battery to supply less than 10.8V
Power Restart by Battery	Yes
Protection from Battery	Yes, CHARGE(+,-) Battery(+,-) connection should be correct
Overcurrent protection	Yes, Controller / Expansion board (3.2A), Strobe / Horn(0.8A), Charge(0.7A)
Power Down Protection	Yes, Protected from Strobe / Horn Short
Operation Temperature	0°C ~ 45°C
Certificate	CE, KC
<b>ENCLOSURE</b>	
Dimension(mm)	410 x 410 x 97
Battery Fixture	Black tiebelt to fix battery inside enclosure
Case Lock	Lock on front door with keys
Case Open Status Transmission	Alarm occurs when tamper switch of enclosure door is activated
Controller/ Interface On board	Max 2EA Boards in enclosure

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