

Date Country BUILDINGS TECHNOLOGIES ASEAN Product portfolio





# Honeywell at a Hone FORTUNE TO THE TOTAL T



More than 131,000 if if it is employees





headquarters
Morris Plains
NewJersey, USA



#### Honeywell | Overview

# **Aerospace**

**\$14.8**B Sales

Mechanical, Cockpit, and Software Offerings From Nose to Tail

Apps, Services, Maintenance, Subscriptions

End-to-End Connectivity Solutions From Hardware to Airtime

Turbochargers for Fuel Efficiency

# Performance Materials and Technologies

\$10.3B Sales

Refining and Petrochemical Catalysts

Gas Processing Modular Offerings

Solstice® LGWP Materials

**SmartLine Transmitters** 

Asset Optimization Software



# Safety and Productivity Solutions

**\$5.6**B Sales

# **Building Technologies**

**\$9.8**B Sales

Security

Fire Protection

Home Comfort

**Energy Efficiency** 

Open Software Connecting IoT in Buildings

Wireless, Voice, Mobility, Data Analytic Solutions for Workers

Warehouse Automation

Worker Safety





# What are customer needs?



# **Driven by 'Connected Trends'**

# Continuous Evolution Of Technology, Accelerating In Pace





#### Analog

Siloed



Purposeful operations



## Digital

Converged



Operational efficiencies & cost advantages

## **Cloud Analytics**

Integrated



Cross domain connectivity creating new opportunities

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# **Vision**

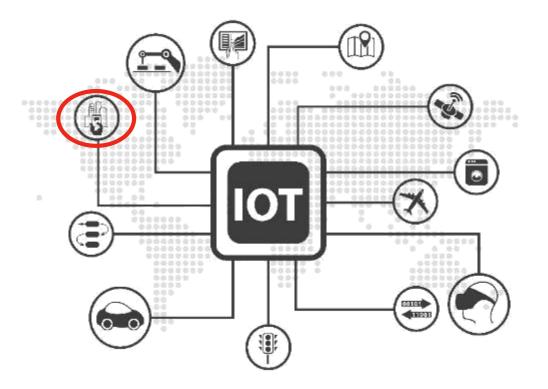
FROM Industrial Automation



TO Software Industrial

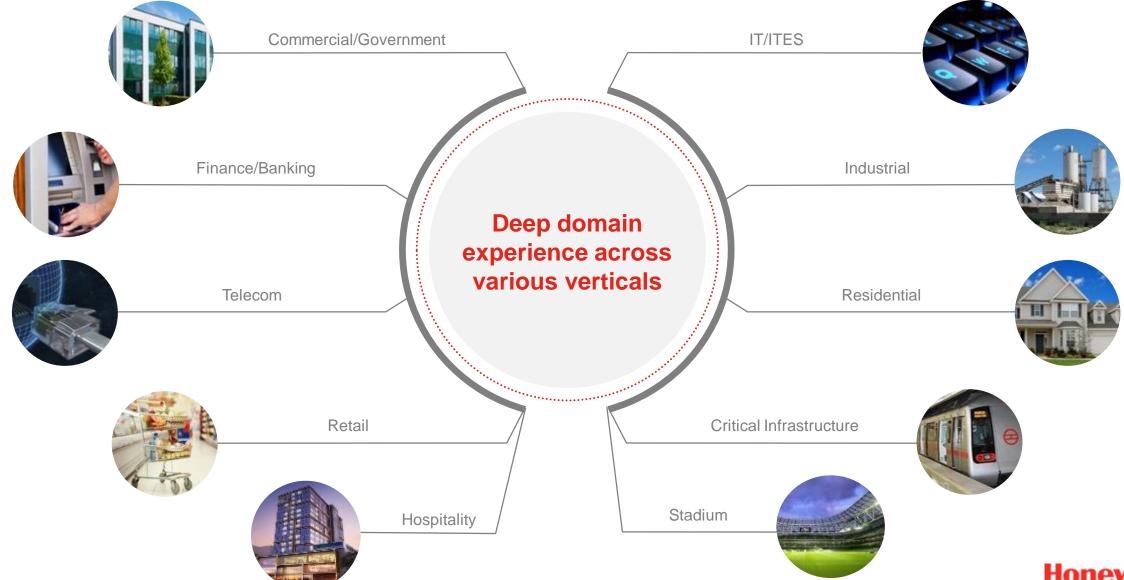
- Connected Services
- Smart Buildings
- Smart Cities





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# Honeywell solutions deployed across various industries



# Honeywell Building Technologies ASEAN



- 700+ employees
- ASEAN headquarters in K.L.
- In-region Distribution Centre and Call Centre for better customer support



A broader and efficient portfolio of best-in-class products and end-to-end connected solutions



Dedicated Sales Teams aligned to segments i.e. Small Medium Businesses/ Enterprise/ Industrial/ Electrical Products/ Connected Living to provide the right value proposition



Strong presence and deep customer focus across all markets and geographies with dedicated Sales, Marketing, Technical expertise and distribution channels



Strong NPI funnel with ongoing investments in technology and R&D



# **Buildings – Expectations Have Evolved**



Integrated building management system

Smart lighting & controller strategies

Integrated access control, time & attendance management & intruder detection

Open System Protocols for best-of-breed devices, interoperability & scalability

Smart apps to engage tenants and enhance experience

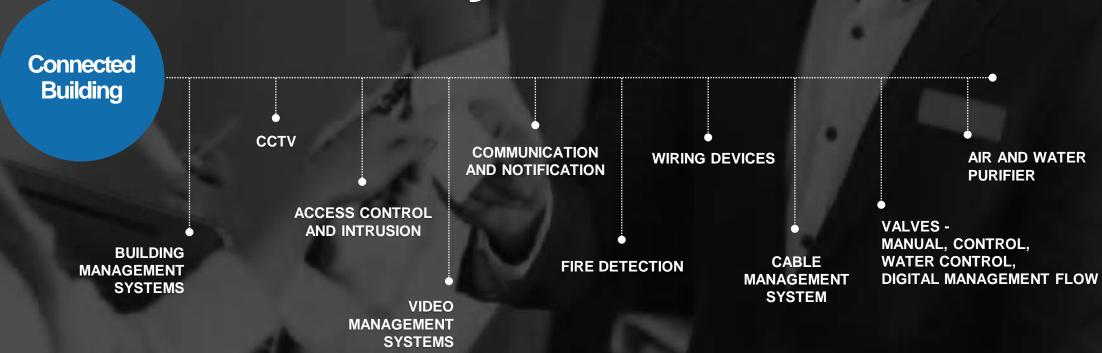
Intelligent automation simplifying facility management

Integrated security – PAVA, CCTV and access control for preventative approach

Ongoing service for optimisation of systems

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# Making your buildings work for you



# Security

Whether you are a small business or the largest commercial enterprise, Honeywell has the right security solution for you

# There's a Perfect Solution for you

- Integrated video security for any size business or enterprise
- Superior video resolution and equipment performance
- Built-in security features
- Operational savings and increased productivity





# **Honeywell CCTV**

**Supported Features** 













High Resolution Cameras

Better picture quality to capture details of scene EDGE Analytics

With reduced false alarms, improves the efficiency of system Cybersecurity

Improved cyber protection measures for peace of mind

Special Application Cameras

Certified models for meeting regulatory compliance HUE based Design

Improved User Experience



# **Security - Benefits/ Solutions:**

#### Minimized inventory shrinkage

 High-resolution 4K & multi-imager cameras for superior image quality and seamless recording, even in low-light conditions

# Reduced operation costs while protecting customers, staff, and property

- Integrated with Honeywell Active alert, customer to enjoy the advantage of reduced false alarms. Provide reliable inputs on People count, person entering restricted area etc
- Easy-to-use click & drag PTZ control
- N+1 Redundancy to ensure no loss of data
- HUS + Access Control + HUS-SDK as an integrated security system with 24/7 video surveillance and integration with third party systems

# Reduced hardware investment and maintenance costs

- H.265 codec for reduced video storage space and network bandwidth needs
- Re-use existing brackets of equIP camera

# Improved overall surveillance with efficiency

- High resolution models for better coverage
- Advanced video analytics on edge for reduced false alarms











# **Honeywell CCTV System**

# IP – 2 MP, 4 MP, 4K resolution models. Fisheye models for 360degree view



4/8/16/32/64 Channel NVR

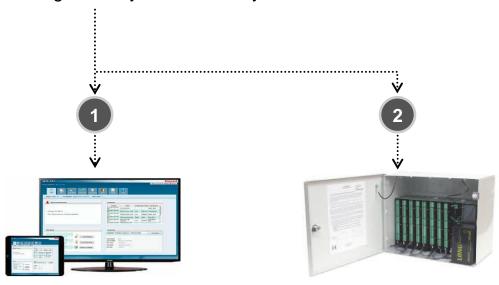


- OPEN STANDARD compatible with all AHD OEMs
- Tribid DVR support standard analog + AHD + IP Camera
- CCTV support AHD + CVBS + CVI + TVI
- Longest transmission using coaxial cable
- Low Cost system



# **WINPAK Portfolio**

Honeywell's WIN-PAK® is an on premise connected security suite for mid commercial customers. It helps you meet your access control requirements for your business, and reduces your total cost of ownership by increasing operator productivity while providing flexibility and scalability.



#### WIN-PAK 4.5 XE/SE/PE

Software solution for a cost-effective way to integrate and manage access control, video surveillance, intrusion detection through a single interface

#### **Intelligent Controller**

PRO3000 and PRO3200 are advanced access control panels for medium to large applications.





# **WIN-PAK 4.5**

### Supported Features

# One Platform Integration

- Eliminates disparate systems and interfaces
- Integrated access, video, intrusion, and fire systems through one interface
- Coordinate intrusion, access, or fire\* events with video actions to maximize awareness

#### **Scalable System**

- Scales as your business grows
- Unrestricted number of cardholders and system users
- Unrestricted number of sites and access points

#### **Browser Management**

- Minimizes onboarding and training costs
- Intuitive web interface for access management, with embedded Help tool

# Capability to integrate with 3<sup>rd</sup> party system

 API is automatically installed with the web browser allowing technical support to validate the API is installed and ready for 3rd party integrations without any extra charge





# **WINPAK** for Hospitals/Clinics



# Improve (Wider) Employee Productivity via integrations

- Seamless integration with third-party solutions such as biometric readers, mobile credentials and in-house systems to drive productivity gains
- Mobile credential management reduces operator workload by up to 40%.
- Mobile system access improves operator efficiency, manage from anywhere
- Scheduled reports can be emailed ready when you need them.



# Reduce cost of facilities operation and management

- Buy what you need modular platform allows you to grow
- Add additional doors, video and intrusion support as your business needs expand without replacing existing panels
- Access data can be used to monitor area/room usage to more efficiently manage space utilization
- Web client enhances scalability and reduces deployment and upgrade costs saving hours per year per workstation



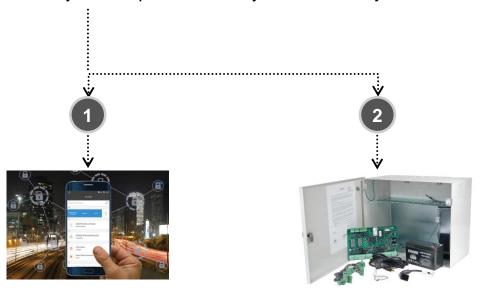
# More Efficient/Effective Safety & Security

- Electronic Key management
- Tracking and Audit reports help meet compliances
- Manual / Emergency override control
- Door status viewer See propped or unsecured doors.
- Doors locking schedules ensures doors are locked when they should be.



## **ProWatch Portfolio**

Honeywell's Pro-Watch® is a connected building platform for enterprise and critical infrastructure customers. It helps you meet the most stringent compliance requirements for your industry, and it reduces your total cost of ownership by increasing operator productivity with superior flexibility and scalability.



#### ProWatch 4.3.5 PE/CE/EE

Provides a solid and proven platform for an intelligent business management solution with integration capability with HON access control, video, fire, and 3rd party systems.

#### **PW-Series Modular Control System**

An advanced access control hardware architecture capable of providing solutions for large enterprise applications.





# ProWatch 4.3.5

#### Supported Features

#### Web Based Clients -Certification **Identity Management** Mobile Application **OSDP Support** Compliance Report Vendor Portal Badging & Reporting Management Portal Improve productivity Eases deployment Easily access Encrypted Vendors can Controls access to Reduces liability information and controller-to-reader proactively manage sensitive areas and with web based costs by providing Reduces liability communications employees badging workflows of access info required to controls remotely, ensures regulatory costs by providing improving operator applications for TSA compliance monitor regulatory enhances security requests to area the info required to productivity compliance clearance owners ensure and monitor Custom messaging **Improves** regulatory · Real time view of productivity by Automated Reduces manpower on supported compliance display readers badge status automating access processing of costs by efficiently providing forensic improves management to access request Reduces manpower Reporting and sensitive areas data with minimal operational eliminates entry costs, efficiently tracking reduces operator effort efficiency errors to ensure provides forensic fees for companies compliance data with minimal Future functionality by eliminating waste operator effort expansion to reduce with badges expiring total cost of before being picked ownership over the up or paying to life of the system extend viable applicants clearance deadlines Honeywell Confidential - © 2018 by Honeywell International Inc. All rights reserved.

# **ProWatch for Banking/ Finance**



#### Reduce cost of regulatory compliance

- Certification management to ensure compliance
- Extensive reporting to monitor compliance
- OSDP support delivers end-to-end encrypted security
- Complies with Sarbanes-Oxley



# Reduce cost of facilities operation and management

- Web clients reduce deployment costs by removing the need to update individual workstations
- Support of CASI and iSTAR replacement controllers provides a cost effective means of consolidating existing infrastructure



# Ensure safety & security more efficiently and effectively

- Pro-Watch mobile application improves operator efficiency
- Improvements in Web client reduce badging and reporting effort
- Direct support for issuing mobile credentials avoids double entry into separate systems
- Direct enrollment of Morpho Wave biometrics decreases operator workload
- ID Management portal reduces manpower required to manage access changes



# **ProWatch for Industrial**



#### Reduce cost of regulatory compliance

- Certification management to ensure compliance
- · Extensive reporting to monitor compliance
- OSDP support delivers end-to-end encrypted security
- Complies with NERC CIP



#### **Avoid any interruptions in business**

- Web clients reduce deployment costs by removing the need to update individual workstations
- Support of CASI and iSTAR replacement controllers provides a cost effective means of consolidating existing infrastructure



# Minimize operational and management costs while protecting staff and property

- Pro-Watch mobile application improves operator efficiency
- Improvements in Web client reduce badging and reporting effort
- Direct support for issuing mobile credentials avoids double entry into separate systems
- ID Management portal reduces manpower required to manage access changes





# **VISTA Intrusion Portfolio**

Honeywell VISTA intrusion solutions provide you with all of the power and versatility you need to satisfy virtually any commercial installation requirement – all from a single platform. It provides excellent protection and advanced communications to help ensure that alarm signals get through to central.

It's the best way to stay protected and connected.



#### **Alarm Panel**

The platform includes models listed for commercial fire, burglary and combination fire/burglary. The panels support up to 8 partitions and 250 zones using multiple technologies.

#### **Keypad**

Easy to use, reduce training time and put security at your employees' fingertips.

#### Sensor

Protecting your assets with variants of sensors from motion sensor, fire/smoke detector, and glass break detector

#### **Magnetic Contact**

**Hold Up Devices** 



# **VISTA Intrusion**

#### Supported Features

#### **Single-Button Operation**

- Arm the system, turn lights on and off, send a page, or
- Display time with the press of one button at the keypad.



#### **Scalable System**

- VISTA is a powerful, scalable security system that is ideal for businesses of any scope or size, can be tailored to meet your exact requirements and grow with the changing needs of your company.
- You can have intrusion, fire, access control, remote monitoring and more on one flexible, upgradable system.

#### **Event Log**

- Review up to 100 system events identified with a time/
- date stamp, right at the keypad.

#### **False Alarm Reduction**

 Incorporates the latest false alarm reduction features, including Exit Delay Restart, Auto Stay, Cross Zoning and Cancel Verification.



# Fire Safety

We offer a variety of fire protection solutions by market-leading brands. From small buildings to complex applications

# **Audible/ Visual Devices**

#### **Audible Devices**

- Sirens: Extremely loud devices generally limited in use to outdoor or heavy industrial areas.
- Speakers: Audible devices used in conjunction with voice evacuation messages.
- Horns: Loud and distinctive output. Often used in high noise environments.
- Sounders: Electronic or mechanical audible devices, which may have various outputs selected for their operation.
- Chimes: Soft-toned appliances used where loud noises could be disruptive to other operations.
   Generally used where qualified personnel are continuously in attendance.
- Bells: Only used if they are only for fire, or have a distinctive sound from other bell signaling devices.
   Often used as an external gong for Waterflow operation.





#### **Visual Devices**

- Visual signaling devices are used in high noise environments, areas of occupancy by hearing impaired individuals, or other areas where additional signaling is desired.
- The device design and the signaling characteristics will attract people to the signal for proper notification.
- Light Pulse Characteristics
- Flash rate not less than 1 flash every 3 seconds (1/3 Hz), not more than 3 flashes per second (3 Hz).
- Maximum pulse duration cycle 0.2 seconds, with a duty cycle of 40%.
- Light source shall be clear or nominal white, and shall not exceed 1000 candela (cd).
- Description









# Honeywell Morley-IAS Product Range

#### **PANEL**



714/001/115 DXc1 One Loop Fire Alarm Control Panel



714/001/225 DXc2 Two Loop Fire Alarm Control Panel

#### 714/001/245 DXc4 Four Loop Fire Alarm Control Panel

#### REPEATER

709-601-001 Active Repeater. Silence, Mute, Reset, Accept, Evacuate and Test Controls.





#### MANUAL CALL POINT



Box. Red

Passive

MI/MCP/FLEX Red Add Call Point, Flush Mounting, Flexi Element HM/MCP/GLASS Red Add Call Point, Flush Mounting, Glass

W5A-RP05SG-K013-01 WCP Red Addressable EN54 Markings, Glass Element **PS230** Pack of ten resettable elements. **MUS041W** Surface Mounting

#### **DETECTOR**



HM/PSE/S2 Smoke detector

**HM/PTSE** Photo Thermal detector **HM/RHSE** ROR heat detector **HM/FHSE** Fixed heat detector MI-HTSE-S2-IV 780C Thermal Sensor MI-PTIR-S2-IV Smoke/Thermal/IR Sensor HM/PSE/S2/I Smoke detector with Isolator HM/PTSE/I Photo Thermal detector with Isolator HM/RHSE/I ROR heat detector with Isolator HM/FHSE/I Fixed heat detector with Isolator

MI-HTSE-S2I-IV 780C

MI/B501AP/IV Sensor

MI-PTIR-S2I-I

Mounting base.

with Isolator

Thermal Sensor with Isolator

Smoke/Thermal/IR Sensor

#### **MODULES**

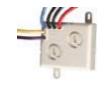


MI-DISO Loop isolation

module

MI-DMMI Single Input Monitor Module MI-DMM2I Dual Input Monitor Module MI-DCMO Output control module MI-D2ICMO Dual input and single control output combination module. MI-D240CMO Output Control Module, 240Vac relay contact rating complete with surface enclosure. MI-DCZRM Conventional Zone Interface Module

#### **MODULES**



MI-MM3E-S2 "Micro" monitor module with status LED output



M200E-SMB Surface Mounting Box



M200E-DIN DIN rail mounting clip

#### 795-122 DXc RS232 Card allows the connection of a serial device to the panel such as TG Software

#### **AUDIO VISUAL**









WSO-PR-N05 Intelligent Wall Mounted Sounder, Red with Pure White skirt

WSO-PR-I05 Intelligent Wall Mounted Sounder, Red with Isolation

WSS-PR-N05 Intelligent Wall Mounted Sounder Strobe, Pure White skirt. Red lens

WSS-PR-I05 Intelligent Wall Mounted Sounder Strobe, Red with Isolation

WST-PR-N05 Intelligent Wall Mounted Strobe with red lens.

WST-PR-I05 Intelligent Wall Mounted Strobe with red lens and built in isolator.

**BSO-DD-N05** Intelligent Integrated Detector Base Sounder.

**Detector White** 

**BSO-DD-I05** Intelligent Integrated Detector Base Sounder, Detector White with Isolation

**BSS-DR-N05** Intelligent Integrated Detector Base Sounder Strobe -Detector White

**BSS-DR-I05** Intelligent Integrated Detector Base Sounder Strobe, **Detector White with Isolation** 



# FAAST – Fire Alarm Aspiration Sensing Technology

FAAST series features, with advanced high and ultra-high sensitivity smoke detection and nuisance rejection technology that make it the best choice for Early Warning and Very Early Warning fire detection in the industry



#### **XS 7100X**

- Conventional FAAST Single Inlet with Modbus/TCP protocol with a coverage area up to 5.000 sq. ft. (464 sq. m.).
- Intuitive user interface with alarm level, airflow readout, general fault indication, and LCD for detailed information.



#### XM 8100

- 8100 Conventional FAAST Single Inlet with Modbus/TCP protocol with a coverage area up to 8.000 sq. ft. (743 sq. m.)
- With its 5 configurable sensitivity levels and the Acclimate<sup>™</sup> mode, programmable delays, FAAST XM can be tailored to the most demanding firerisk management scenarios.



#### XM 9400X

- Conventional FAAST XT 4-Pipe Inlet with Modbus/TCP protocol with a coverage area up to 28,800 sq. ft. (2,676 sq. m.)
- The device is fully configurable, with 5
  programmable sensitivity levels, 3
  selectable fan speeds, and offers an LCD
  and USB for ease of programming and
  device interaction.



# **Fire-Lite Fire Alarm Panel**

#### **MS-9050UDE**

- Single SLC loop supports up to 50 addressable points of any type.
- Integrated DACT for off-premises
- NACs: Two Class A/B with built in synchronization.
- ANN-BUS supports ANN-80 LCD Annunciator, ANN-S/PG Serial/Parallel Printer Interface and ANN-LED.
- Autoprogramming feature for quickly configuring detectors, modules and annunciators.



#### **MS-9600LSE**

- Up to 636 addressable points with optional second SLC loop (318 devices per loop).
- FAST LiteSpeed SLC communications protocol polls 10 devices at a time and operates on standard unshielded wire.
- Autoprogrammable
- 7 amp switching power supply
- Programmable via on-board keypad, PC keyboard, or local laptop.





# **System Sensor Conventional Modules & Devices**























Beam Smoke Detection



Linear Heat Detector



Smoke Detection



Fire Sprinkler
Systems Monitoring



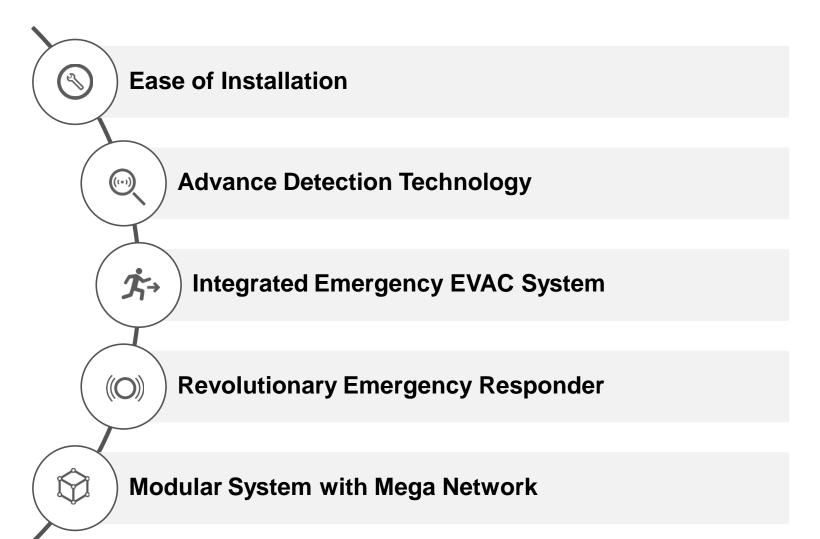
HVAC Duct Smoke Detection and Monitoring



# Why Choose NOTIFIER?



All aspect bundled with Code Compliance

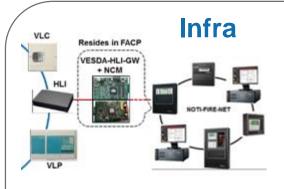




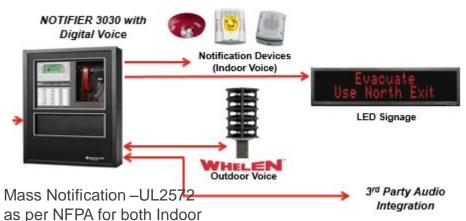
# Notifier: differentiator across verticals







Network Integration with XTRALIS - reduce H/W Cost of Integration



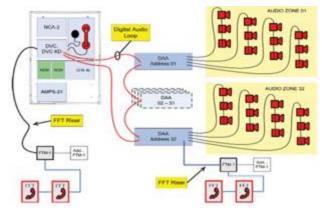


First Responder –must as per NFPA for Critical spaces having high public footfall

#### **Hotels**



One device integrating Smoke + CO and Sounder – Large saving on Hardware and operation cost



and Outdoor

Built in VA an important aspect of NFPA and a critical requirement in HOTEL as per UL norms → reduced cabling



Low FREQ Sounder – for early Warning



**EXIT** Sounder for

**ZERO** Visibility



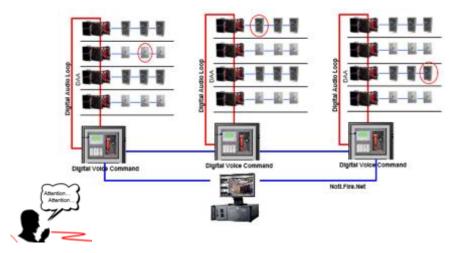


# Notifier: differentiator across verticals



Large Network on High Speed for 200 Panels + Voice over IP → ideal for Township Application

# **Township**



## **High rise Residences**

- Maximum Device Capacity on single Loop reduces Home Run
- Unshielded cabling makes Notifier more attractive in the overall cost of Bidding



- QWETRY Keypad and Large display enable easy viewing & programming of the system on site
- Hard Addressing Offers easy installation of the complete system w/o any dependency on software or Laptop







# Public Address Voice Alarm

Looking for a highly flexible, enjoyable and creditable integrated public address and voice alarm solution for your building? Honeywell has a comprehensive range that integrates with other systems to provide the best protection for your property, assets and human lives in all situations

## What is Public Address + Voice Alarm?

- Public Address system (PA system) is a system of microphones, amplifiers and loudspeakers used to amplify speech or background music (BGM) in a larger building or at an outdoor gathering. PA systems are used in any public venue that requires that an announcer, performer, etc. be sufficiently audible at a distance or over a large area.
- Voice Alarm system (VA system) (sometimes referred to as a voice evacuation system) is installed with the safety of staff and general public in mind. It is a system that assists in the effective evacuation of an area or building during a fire, bomb alert or other emergency situations.



# X618 Product Range



### X-DCS2000/EN

Digital Integrated System Manager, 8 Zones, Multi-Functional Integration, without PTT microphone

### X-DCS3000

Digital Integrated System Manager, 8 Zones, Multi-Functional Integration



**HN-PTT** Optional Push-to-talk Microphone

X-NPMI Configurable
Network Paging Console,
4.3" Color Touch Screen,
Suitable for Desktop
Flush Mount





X-NPMS Advanced 7" TFT Touch screen Paging Station with Programmable Hard button keys



**X-DA2250EN** High Efficiency Class D Power Amplifier, 2x250W, 100V/70 Output, with 100 - 240 VAC input and 24 VDC backup power Supply

**X-DA1500EN** High Efficiency Class D Power Amplifier, 1x500W, 100V/70 Output, with 100 - 240 VAC input and 24 VDC backup power Supply

**X-DA4125EN** High Efficiency Class D Power Amplifier, 4x125W, 100V/70 Output, with 100 - 240 VAC input and 24 VDC backup power Supply

**X-DA2250** High Efficiency Class D Power Amplifier, 2x250W, 100V/70 Output, with 220 VAC UPS input

**X-DA1500** High Efficiency Class D Power Amplifier, 1x500W, 100V/70 Output, with 220 VAC UPS input

X-DA4125 High Efficiency Class D Power Amplifier, 4x125W, 100V/70 Output, with 220 VAC UPS input

**X-DA4060** High Efficiency Class D Power Amplifier, 4x60W, 100V/70 Output, with 220 VAC UPS input



X-MAP04 All-in-1 Audio Source Unit (Include pre-amplifier), CD/MP3/FM/DAB, with RS485 Protocol Interface



**X-NRI/EN** Network Resource Interface, 4 channels network audio source, 32 dry contacts in and 8 try contacts out



X-SPT900 X-SMART Med to Small Project System Management Software Package (Include 1 server and 1 client interface) X-SP2000 X-SMART System Resource Platform (Server) X-ST2000 X-SMART Client Interface



**HN-D32N** Noise detector, Transmission Distance up to 200 Meters



**HN-VC06** 6W Volume controller, 3/4 wire, ABS Material, with 24V Override Function

**HN-VC30** 30W Volume controller, 3/4 wire, ABS Material, with 24V Override Function

**HN-VC60** 60W Volume controller, 3/4 wire, ABS Material, with 24V Override Function

**HN-VC120** 120W Volume controller, 3/4 wire, ABS Material, with 24V Override Function



**HN-RTR** IP/Analog Interface Convertor



# Variodyn D1 Product Range



### Digital Output Module DOM4-8 Digital Output Module DOM4-24

DOM is a central control element of Variodyn D1. It has interfaces to all input/output assemblies, administers and monitors of loudspeaker circuit.

DOM4-8 has 4 independent channels for operate 8 loudspeaker circuits. DOM4-24 has 4 independent channels for operate 24 loudspeaker circuits. 16 audio slots total 1 hour memory. All functions alarm and evacuation system. Networkable into large system via Ethernet connection.



### **Universal Interface Modele UIM**

UIM serve as the interface module for connecting two analog audio inputs/outputs, as well as 48 control contacts freely programmable as inputs and outputs. Digital Audio Link(DAL) to DOM.



Comprio 4-8
(Stand alone without Ethernet)
Comprio 4-24

(Stand alone without Ethernet)

The central control panel of a Variodyn D1 system for small and medium sized projects. 4 channel parametric equalizer, compressor/limiter and delay. All functions alarm and evacuation system. Automatic and dynamic switching of backup amplifier. Automatic volume control (AVC) even during announcements.

### Comprio 4-8 net (with Ethernet) Comprio 4-24 net (with Ethernet)

The central control panel of a Variodyn D1 system for small and medium sized projects. 4 channel parametric equalizer, compressor/limiter and delay. All functions alarm and evacuation system. Automatic and dynamic switching of backup amplifier. Automatic volume control (AVC) even during announcements.



### **System Communication Unit SCU**

The SCU serves as a digital audio memory for the Variodyn D1 system. It is possible to record and playback multiple audio data streams simultaneously and networkable via Ethernet.



**2XD250** High efficiency Class D power amplifier, 2 channels x125W, 100V/70V output, with 100-240 VAC input and 24 VDC for backup mains power.

**2XD400** High efficiency Class D power amplifier, 2 channels x400W, 100V/70V output, with 100-240 VAC input and 24 VDC for backup mains power.

**4XD125B** High efficiency Class D power amplifier, 4 channels x125W, 100V/70V output, with 100-240 VAC input and 24 VDC for backup mains power.

**4XD250B** High efficiency Class D power amplifier, 4 channels x250W, 100V/70V output, with 100-240 VAC input and 24 VDC for backup mains power.

**4XD300** High efficiency Class D power amplifier, 4 channels x300W, 100V/70V output, with 100-240 VAC input and 24 VDC for backup mains power.

**4XD500** High efficiency Class D power amplifier, 4 channels x500W, 100V/70V output, with 100-240 VAC input and 24 VDC for backup mains power.





### **Fiber Optic Converter**

Multimode fiber and single mode module. Ring structure with rebuilding feature.



### **Loop Isolator Module LIM**

Higher security A/B cabling and no speaker loss in case of cable break.





Digital Call Station DCS
1 and 12 buttons with one audio in-/output.
DKM18 with 18 buttons.

**DIGIM1 and DIGIM4** simple call station.



# **Public Address Series Speaker**

### Ceiling Loudspeaker



**L-PCM06E** 6.5" ceiling loudspeaker, 6/3/1.5W, white, Metal **LM2-MMB** Metal dome for L-PCM06E **L-PCM06A** 5" ceiling loudspeaker, 6/3/1.5W, white, metal

**L-PCM06B** 6.5" Ceiling loudspeaker, 6/3W, white, Metal, Metal dome

**L-PCP06A** 3" ceiling loudspeaker, 6/3W, white, ABS

**LM2-PCP06A** 5" ceiling loudspeaker 6/3/1.5W,white, ABS

**LM2-PCP06B** 5" ceiling loudspeaker, 6/3/1.5W,white, ABS, ABS dome

LM2-PCP06C 5" ceiling

loudspeaker,6/3/1.5W,white,ABS, moisture-proof IP54

**LM2-PM** lame-proof ABS back dome, work with LM2-PCP06A/LM2-PCP06C

**LM2-MHA** Bracket,work with LM2-PCP06x series, metal, white, for suspended installation

**L-PCP06B** 6.5" ceiling loudspeaker, 6/3W, white, ABS

**L-PCP06C** 6.5" ceiling loudspeaker, 6/3W, white, ABS, moisture proof IP54 **L-PCP20A** 6" ceiling loudspeaker, 20W, white, ABS

# Wall-mount Loudspeaker



L-PWP03A Wall mount loudspeaker, 3/1.5W, white, ABS
L-PWP06A Wall mount loudspeaker, 6/3W, white, ABS
L-PWP06B Wall mount loudspeaker, 6/3W, white, ABS
L-PWP10A Wall mount loudspeaker, 10/5W, white, ABS

### Cabinet Loudspeaker



**L-PWP40A** Wall mount cabinet loudspeaker, 40/20/10W, white, ABS

**L-PWP40B** Wall mount cabinet loudspeaker, 40/20/10W, black, ABS

**L-PWP60A** Wall mount cabinet loudspeaker, 60/30/15W, white, ABS

**L-PWP60B** Wall mount cabinet loudspeaker, 60/30/15W, black, ABS

**L-PWP80A** Wall mount cabinet loudspeaker, 80/40/20W, white, ABS

**L-PWP80B** Wall mount cabinet loudspeaker, 80/40/20W, black, ABS

### Horn Loudspeaker



L-PHP15A Horn loudspeaker, 15/7.5W, white, ABS L-PHP30A Horn loudspeaker, 30/15W, white, ABS L-PHP50A Horn loudspeaker, 50W, French grey, ABS

### Projection Loudspeaker



**L-PJP20A** Projection loudspeaker, 20/10W, white, ABS

**L-PBM20A** Bidirectional projection loudspeaker, 20/10/5/2.5W, White, Aluminum

**L-PJM10A** Unidirectional projection loudspeaker, 10/5/2.5/1.25W, White, Aluminum

**L-PJM20A** Unidirectional projection loudspeaker, 20/10/5/2.5W, White, Aluminum

### Pendant Loudspeaker

L-PPP20A 8"Pendant speakers,20/10/5 W,white,ABS





L-POM20A Outdoor Column loudspeaker, 20/10/5/2.5W, White, Aluminum L-POM40A Outdoor Column loudspeaker, 40/20/10/5W, White, Aluminum L-POM80A Outdoor Column loudspeaker, 80/40/20/10W, White, Aluminum



# **Voice Alarm Series Speaker**

### **Ceiling Loudspeaker**



**L-VCM6A/EN** 6.5" Fire proof metal ceiling loudspeaker, 6/3/1.5/0.75W, red fire dome, EN54-24

**L-VCM6B/EN** 5" Fire proof metal ceiling loudspeaker, 6/3/1.5/0.75W, red fire dome, EN54-24

**L-VCM24A/EN** 6.5" Fire proof metal coaxial ceiling loudspeaker, 24/12/6/3W, 4ohm, red fire dome, EN54-24

### **Cabinet Loudspeaker**



**L-VWM06A/EN** 4" Fire proof metal wall mount loudspeaker, 6/3/1.5/0.75W, white metal enclosure, EN54-24

### **Horn Loudspeaker**



**L-VHP15A/EN** Fire proof outdoor horn, 15/10/5W, 8ohm, Grey, ABS, EN54-24, with capacitor

### **Projection Loudspeaker**



**L-VJM10A/EN** Fire proof unidirectional loudspeaker, 10/5/2.5/1.25W, White, Aluminum, EN54-24

**L-VJM20A/EN** Fire proof unidirectional projection loudspeaker, 20/10/5/2.5W, White, Aluminum, EN54-24

**L-VBM20A/EN** Fire proof bidirectional speaker, 20/10/5/2.5W,White, Aluminum, EN54-24

### **Column Loudspeaker**



**L-VOM20A/EN** Fire proof outdoor column speaker, 20/10/5/2.5W, White, Aluminum, EN54-24

**L-VOM40A/EN** Fire proof outdoor column speaker, 40/20/10/5W, White, Aluminum, EN54-24



# INTEVIO Public Address & Voice Alarm System

- Expandable up to 128 zones
- Built-in scheduler and timer for automating tasks
- USB Port for streaming audio files
- Record and playback function
- Pre-configured default setting



- Dynamic Amplifier backup: One stand by amplifier can be used for the entire system.
- Power Save Mode: When amplifier is idle, it will enter the power save mode.
- Controller with built in 500W amplifier can work as a stand alone 8 zone PA system.
- Step-by-step guide on the LCD screen for better operation efficiency.
- Direct paging: User can make an all call even if the CPU is dead.
- Application : Office building, hotel, school, house of worship, retail shops.

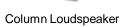


# **Compact PA Product Range**



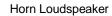
- 5 zone compact mixer and paging system with integrated CD/MP3/WMA audio player, FM/MW(AM) tuner as optional.
- Class-D amplifier with 3 models HN-5120R(120W), HN-5240R(240W) & HN-5300R(300W).
- 3-level priority with mute function and 7-band graphic equalizer.
- Application: Small office, restaurant, budget hotel, retail shops.













Ceiling Loudspeaker



Projection Loudspeaker



Cabinet Loudspeaker



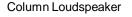
# **Compact PA Product Range**



**EVACLITE**: 8 Zone Voice Alarm controller with built-in USB, MP3, AM/FM player and 8 zone paging station

- 8 zone paging system with voice alarm controller for voice evacuation (prerecorded messages).
- Simple integration with fire alarm panels to activate EVAC/Alert pre-recorded messages.
- Built-in MP3 (USB) and AM/FM tuner functions.
- 8 broadcast zone output function, the peak of each zone is 400W and total power for all 8 zone is 1000W
- Application: Small office, restaurant, budget hotel, workshop, retail shops.









Horn Loudspeaker



Ceiling Loudspeaker



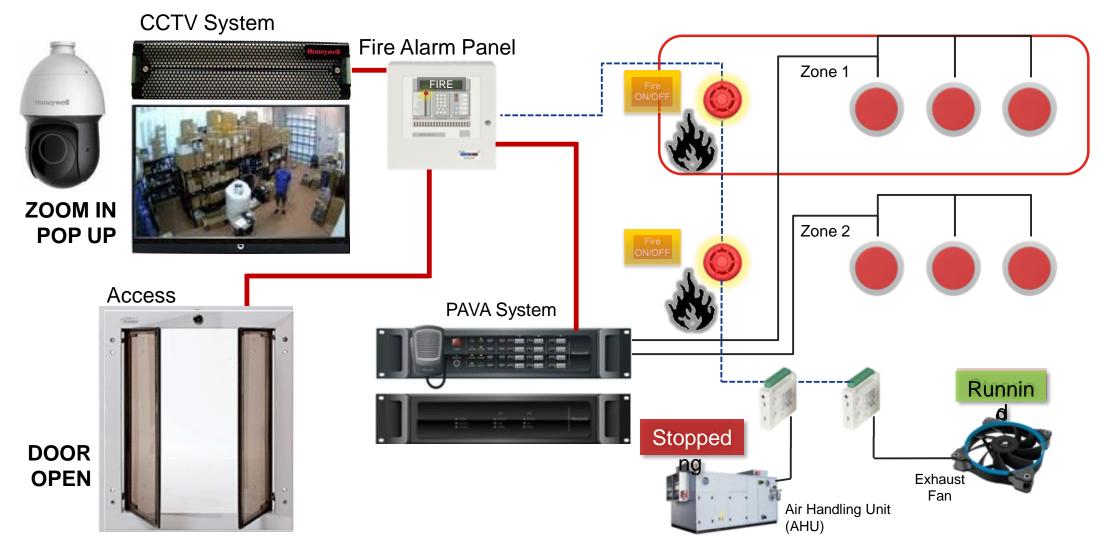
Projection Loudspeaker



Cabinet Loudspeaker



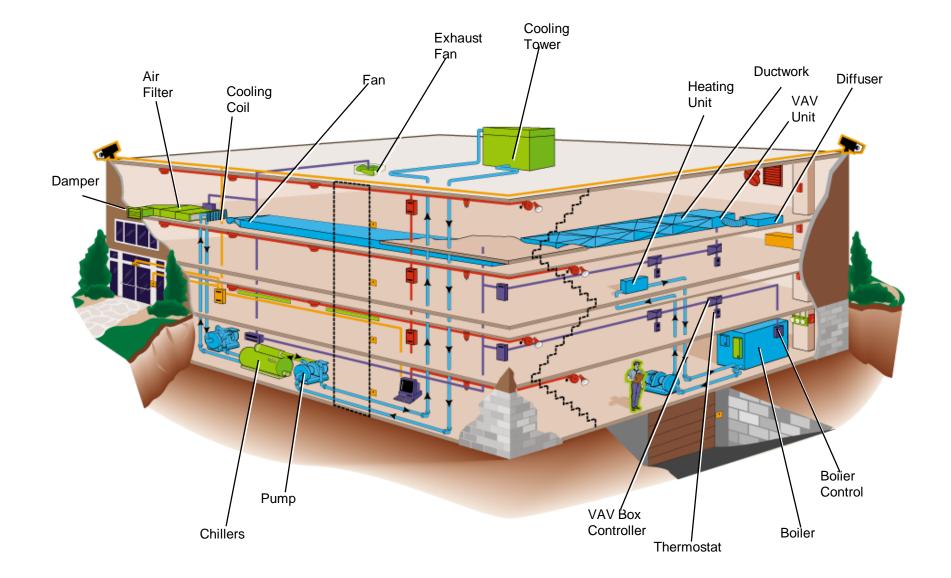
# Honeywell Integrated Security Fire Scenario Example



# Global Field Devices

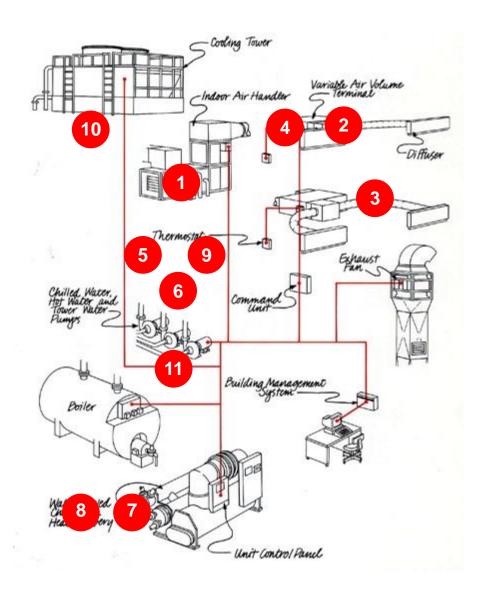
A comprehensive range of Honeywell branded, compatible and quality guaranteed HVAC field devices, suitable for all control brands

# Typical HVAC system in a building





# Field device offerings in a building



### Field Device Applications\*

- AHU Unitary Controller
- DCA
- Temperature/Humidity Duct Sensor
- Different Pressure Sensor
- HVAC Linear Actuator
- Globe Valve
- Balancing Valve
- Motorized Butterfly Valve
- Motorized Ball Valve
- Manual Valve
- VFD



<sup>\*</sup>The label shows on graphic is just for example

# **Field Devices**

**Damper Solutions** 













**Hydronic Balancing** 















**HVAC Controls** 















**Plumbing** 















Sensors

















**BTU** 











### **Field Devices**



### **OFFERING DESCRIPTION:**

A comprehensive range of Honeywell branded, compatible and guaranteed HVAC field devices, suitable for all control brands.

### **KEY FEATURES:**

One stop shop for all HVAC control requirements.

### **INSTALLER / CHANNEL SEGMENTS**

### **RELEVANT SEGMENTS:**

- Partner Channels
- OEM
- Direct HBS

# SEGMENT'S MOST DIFFERENTIATING NEED:

- "One Stop Shop"
- Single source of supply
- Honeywell brand

### **TYPICAL OFFERINGS USED BY SEGMENT:**

- Multiple manufacturing suppliers
- Multiple sources of supply (distribution / trade / wholesale)

### **HONEYWELL Vs NBA:**

- Honeywell Economic Advantage over individual manufacturers
- Feature "One stop shop" catalogue of guaranteed compatible devices from single manufacturer
- Benefit Quick easy product identification from a single supplier
- Economic value Single account to negotiate and manage

### **COMMON PITFALLS TO AVOID**

- Range limited breadth/depth core items per range only
- Known BTS guarantee from Honeywell, fully compatible
- Delivery discussions consolidation reduces shipments and administration

### OTHER HON PRODUCTS THEY MAY NEED / DESIRE

- Honeywell control brands
- Honeywell Life safety product ranges
- Honeywell Security product ranges
- Honeywell Hospitality offerings



### **END USER SEGMENTS**

### **RELEVANT SEGMENTS:**

- Specifiers
- Main Contractors
- M&E Contractors

### SEGMENT'S MOST DIFFERENTIATING NEED:

- Reduced number of suppliers
- Single point of contact
- Recognised single manufacturer

### **TYPICAL OFFERINGS USED BY SEGMENT:**

- Multiple manufacturing suppliers
- Multiple sources of supply (distribution / trade / wholesale)

### **HONEYWELL Vs NBA:**

- Honeywell Economic Advantage over multiple suppliers
- Feature Single large recognised supplier
- Benefit reduced risk
- Economic value increased bargaining power

### **COMMON PITFALLS TO AVOID**

- Range breadth/depth core items per range only
- Known BTS guarantee from Honeywell, fully compatible
- Delivery discussions consolidation reduces shipments and administration

### OTHER HON PRODUCTS THEY MAY NEED / DESIRE

- Honeywell Life safety product ranges
- Honeywell Security product ranges
- Honeywell Hospitality offerings
- Honey direct (HBS)





# Building Management Systems

For all your needs of Control solutions, across verticals, there is a precise brand, that you can customize

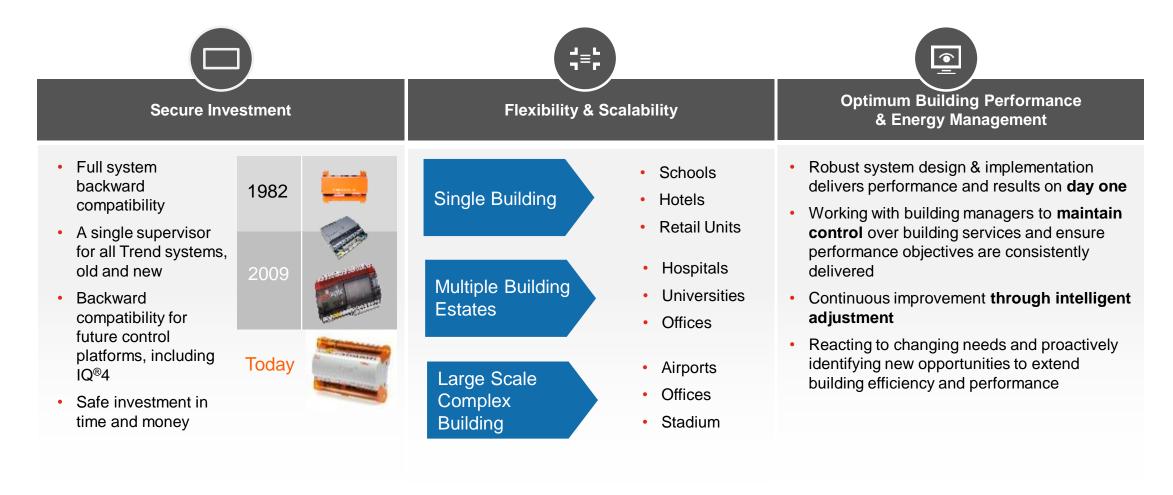
# Building Management Systems

- Proven track record, across geographies
- "Just in time" efficient manufacturing
- Experienced System Integrator network, very close to customers
- Honeywell support across lifecycle
- Customization & Integration support for Green Buildings, complex projects





# Trend BMS for Commercial Office Spaces & Hotels





# **Trend IQVision, IQ4 System System Features**

# Forward & Backward Compatibility

- Protects value of investment
- Hassle free project expansion
- Assured warranty support

### Integration

- Ease of Integration with diverse MEP systems
- Customized Dashboards& Reports
- Leverages the powerful Niagara Platform

# Stable & Reliable System

- Rugged Industrial Processor, with RTC, True Peer to Peer communication
- BACNet over IP
- BTL & UL Listed

# Flexible I/O Configuration

 With the ability to upgrade between its available 16, 32, 64, 96, 128, 160 and 192-point variants, applications of all sizes can have a better matched control solution, thus reducing unused I/O and creating significant cost savings

### **Easy Engineering**

 With new strategy modules and soft addressing, IQ®4E reduces the amount of time spent on each project. Not only does this reduce cost, it makes better use of a valuable time and engineering resource, particularly when combined with SET 7.0 Voice Commissioning.

# Longer Bus & Distributed I/O

 The IQ®4E has improved I/O bus capabilities, with an available length of up to 300m and the potential for 30 I/O modules to be configured. Perfect for when I/O is required in other areas of the plant room.

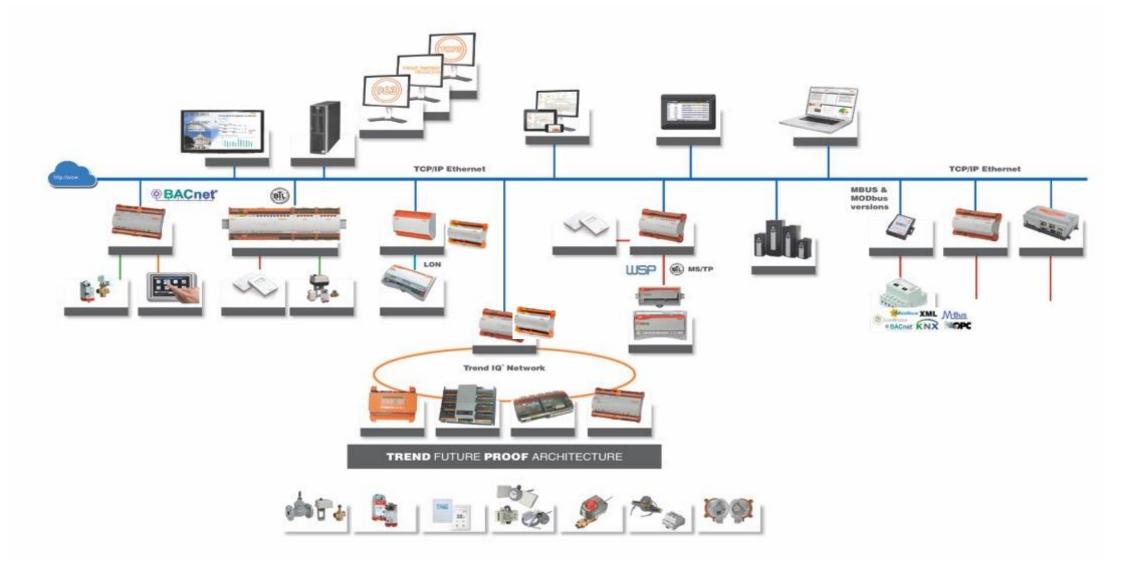
### **Reduced Panel Size**

 With its small footprint IQ®4E can be placed in smaller control panels, lending itself to confined space applications





# **Trend System Architecture**





# **Trend System Components**

IQ4 Controller

IQ4NC Node Controller

Supervisor Protocol

TONN

IQ4XNC Controller











- Protocol options
- BACnet, XML, MODBus, Mbus
- MSTP/Ethernet
- BACnet devices
- Trend Native BACnet IQ®eco or 3rd party devices

- Trend BACnet via TONN:
- BACnet, KNX, LON,
- MODBus, MBus,
- oBIX, SNMP
- SQL Database
- CSV files

- Open Protocols
- Trend, BACnet, KNX, LON, MODBus, MBus, oBIX, SNMP
- Interfacing Flexible interfacing with 3rd party systems
- Enhanced Custom Language (TCL)
- Standard IQ configuration modules



# **Trend IQVision**





# Electrical Products

Complete range of wiring devices to meet the requirements of buildings for different applications

# Electric Product Wiring Devices

- Wide global and regional WD ranges
- E2R & local manufacturing footprints
- Strong brand with market presence
- Multi-channel strategy within country
- Focus on residential and commercial segments
- Align to end segments growth drivers and verticals





# **Electrical Product Wiring Devices Range**



### **Elements**

- 16 beautiful colors, materials, finishes in the premium range
- Electronic touch high tech feel Edimmers & switches
- Extensive range for high-end hospitality, residential or commercial requirements
- Design customization available



### **PRANA**

- Unique big switch with 3-dots LED indicators and European style symmetric profile
- Easy side-by-side and 5 unit-panel multi-ganging installation
- Comprehensive range for diverse requirements
- 3 contemporary colors: White, Golden Amber, Silver Titanium



### R-series

- Curved profiles with soft modern look and 7mm thickness
- Easy side-by- side installation allows for clean aesthetics
- Rotatable orientation for all switches
- Comprehensive range for residential, hospitality or commercial
- Choice of White or 3 modern attractive colors
- Availability up to 4 unit-panel gang



### **Slimline Plus**

- Stylish profile with surround clip on
- Complete range to fulfil residential or hospitality specifications
- Choice of white plastic and color options
- Availability of multi-panel gang surrounds

### ECORE SR

- Simple surround clip on aesthetic design
- Manufactured from quality PC materials
- Fully compliant with MS/ BS/ IEC standards as a basic choice for residential and replacement



### Metalclad Plus

- Made from heavy gauge steel, tough and impact resistant.
- Complete range where heavy wear performance is needed
- Front plates with smoothly chamfered edges providing a neat finish when fitted with the backbox



- IP66 waterproof and dustproof
- Durable material and robust construction
- Made of high quality PC which prevents discoloration, cracking or fading in UV light
- Temperature tolerant, reliable in operation under outdoor installations



# **Electrical Product Wiring Devices: Benefits**



# Superior aesthetics: design, colors, materials and finishes

- Elements Premium design with 16 CMF
- PRANA European design with LEDs
- R series curved design with 3 colors
- SL+ chamfer design with colors options
- ECORE SR simple design with WHITE plastic



# Ease of installation and range of applications

- 16AX for more light spots
- Comprehensive and breath of SKU availability:
   Switches, Sockets, Data, TV, etc...
- · Easy side by side installation
- Rotatable switches
- Multi-panel ganging plate



### **High Quality Product**

- Test and compliance to MS/SS/IEC standards
- Obtain certification of local authority
- Made from high quality PC material
- High quality assurance in manufacturing process





# Air& Water

Comprehensive range of solutions for better quality of air, water, security for businesses and families

# Residential Building: Quality Lifestyle Concept



Purifying air pollutants such as PM<sub>10</sub> PM<sub>2.5</sub>, formaldehyde and TVOC that build up from daily activities or chemical gases emitted from products used indoors

- Honeywell Air Touch range Air Purifiers are completely 'Ozone Free', does not emit any harmful gases as a byproduct of the filtration technology
- The filtration system is made with a U.S.
   patented formula, HiSiv™ filter that removes
   >99% formaldehyde, toxic gases, odours &
   TVOC; while HEPA filter delivers >99.9%
   PM2.5 removal efficiency.
- Easy to use, easy to install, and easy to maintain



Safe drinking water especially for individuals with sensitive stomach/ gastroenteritis. Clean water that has undergone proper filtration for health and longevity

- Honeywell RO Filtration system removes heavy metals and bacteria in the water and filters down to 0.0001 micron contaminants to ensure pure and safe drinking water for daily consumption
- A simple and elegant design for easy cartridge replacement, no need for professional service visits.



For home/ building owners that need to interact with the guard house for visitor management, intercom neighborhood community, for enhanced security and protection

- Intelligent LCD screen with fingerprint/ password/ mechanical key unlocking modes for simple and easy operation.
- A digital intercom system equipped with multiple functions including visitor management, protection of property, communication, information announcement and elevator control



# **Connected Living Solution**

# **Supported Features**

PM2.5 Digital Display	Tool-free DIY Filter replacement	Smooth Touch Control Panel	Filter Replacement Indicator	Award winning design	Temperature control	FAR ≤0.001%
Monitor pollution in your home, that is invisible to the naked eye	Clean and easy filter replacement, no need for professional service visits	Intuitive touch control for easy operation	Accurately notifies which filter needs to be changed by the number that lights on	The sleek design enhances your décor while ensuring product quality for better health and safety	Plug & play with 3- stage RO filtration system available at 4 instant water temperatures for multiple users	Low false acceptance rate for 3x enhanced safety
III)						



# **Connected Living Portfolio**

### Air

### **Consumer**

In-car



Move Pure

Low-Mid





A5 (250CADR) i8 (300CADR)

Mid-High





New

AT (300CADR) AT (300CADR)

Premium (Add-on)





### **Commercial**

**EAC** 



F52 Mounted



F58 Inside Duck/ AHU



F57A Mounted



F90A Mounted/

### Water

**UF** (~0.04micron)

HU-20

Under-sink

Table Top

Pitcher

Portable

HU-30

### Point-of-use

**RO** (0.0001micron)



AT-RO-75 Under-sink



HRO-400 Under-sink



HRO-50 Under-sink



Water Station Table Top Instant Heating

# Connected Living

### **Smart Lock**



DDL-1000 (finger print, password, key, card)

### **Video Door Phone**

