Enterprise Buildings Integrator™

Honeywell

Honeywell Enterprise Buildings Integrator™ *An integrated facility management solution.*

PRODUCT FEATURES:
- Provides an "enterprise view" that goes beyond traditional building automation, fire, and security systems
- Fully UL listed to provide authorized operators with 2-way command/control of any subsystem from any linked station
- Powerful graphics capabilities and ease of use features that dramatically increase operator productivity, and optimize system and equipment efficiency
- Operator segregation allowing access only to data and information appropriate for the specific user
- Fully scalable from a single application and controller, to enterprise integration with multiple applications and servers distributed across the Ethernet LAN and Internet/Intranet/Extranet environments
- Supports Honeywell and third-party native BACnet workstations (WEB), Excel Building Supervisor Integrated (EBSI), SCADA Excel Plus, MicroSCADA, Excel Classic, FSW/FSW Plus, Delta 1000 and Delta 3000.

APPLICATIONS:
- Enterprise-integrated sequences of operation allow events in one subsystem to automatically and directly trigger events in another system. Example:
  - Tenant activates Fire Alarm pull station
  - Fire Alarm System sends alarm and supervisory point status reading up to the event
  - Doors are unlocked allowing safe egress while preventing free entry to intrusion facility security
  - HVAC initiates proper fan pressurization control for smoke control system operation
  - Lighting and CCTV cameras automatically turn on to provide proper illumination for egress risk and follow proper emergency procedures
- Emergency and routine situations handled with maximum efficiency by bringing the right information together at the correct decision point

Go to: ***www.honeywell.com/ebi*** *for additional information regarding our powerful software applications.*

Honeywell EBI is approved for use in the following categories:
- UL 864 – UULC Proprietary Protective Signaling System
  - DDID Control Unit Accessories
  - DMCP Control Panels
  - DTCI Digital Systems Units
- UL 1076 – Proprietary Burglar Alarm Equipment
- UL 1610 – AMCO Central Station Receiving Unit
- UL 294 – ADPI Access Control System Units
- UL 1981 – Central Station Automation Systems
- UL 2017 – GUID Process Management Equipment
- UL 60601 – MMSU Alternative Technology Equipment

- Applicable for use in ULC550, 560, 1033, and 1076 high-security applications
- Approved by the California State Fire Marshal, SFM/CSFM, for use in California
- Approved by the California State Fire Marshal, SFC/MSFA, and additional international agencies
- See individual product specification data sheets for specific approvals

EBI SmartWeb Client Stations
- Status and many actions involving
  - Alarms, Points, Schedules, Reports
- All comprehensive clients supported
  - Web Browser, Windows Terminal Server
- Multi-Monitor support on single client license
- Operator Activation alarm and event summaries
- Windows 2000 or Windows XP

EBI Server and Redundancy Option
- Microsoft Windows 2000, SQL (or MSDE) platform
- Redundancy Option (Hot Standby) for Server and PC (Compatibility Matrix for more information)

Excel PC Specifications (Standard Performance)
- 2nd, Pentium 4, 1.7 GHz, 1 GB RAM, 40 GB HD or
- 2nd, Pentium 4, 2.4 GHz, 1 GB RAM, 80 GB HD or PIII at other handheld device
- Alarm paper capability for all site notification including e-mail and SNMP support
- Diagnostic tools with remote access capabilities
- Quality assurance, ISO 9001, ISO Level 3

Network Router/Firewall-145077744 Series
- 7N-5987 Specification Data
- Ethernet and T1 interfaces
- 7N-5987 Specification Data

Redundant Router Optional

Open System Integration – *EBI supports multiple industry standard communication protocols to allow enterprise-wide monitoring and control from a single client workstation.*

PRODUCT FEATURES:
- Native BACnet Protocol Support
- Global and DPE discovery mechanisms to simplify engineering and configuration

APPLICATIONS:
- Integration of BACnet and third-party HVAC control plant and ordinary equipment, industrial controls, and other systems utilizing Open System
- Communication Protocol
- Monitoring third-party Life Safety systems
- Monitoring third-party security systems
- Metering, trending, and global scheduling of third-party open systems

BACnet, ASHRAE 135, SSPC 135-2001
- ClientServer Interface, Combines BACnet
- BACnet Ethernet & IP Support
- BACnet Router Support
- (See EBI PCN for more information)

LonWorks® Network
- i.MX/FEA Net 1781
- LNS® Network Services (LNS)
- LonWorks Interface for PCN, LCMN 5843/200
- EXCEL 5000 Open LON and Excel 5000 Open EBI for more information

OLE for Process Control (OPC)
- Read/write of analog and status points
- Data access up to 10 clients/sec

Modbus-IDA
- Modbus Gould, Modbus Plus, Universal Modbus
- Gould Modbus to Modbus RIO and 984 PLCs
- RS232 serial interfaces and Modbus TCP support

Advanced Dynamic Data Exchange (AdvDDE) and DDE
- Point exchange to host control

Excel Life Safety Systems – XLS3000
A High-Performance Life-Safety Solution

Excel Life Safety System – LCD80 Annunciator
- High-contrast lines and text
- Full-color, touch-screen displays in graphic annunciator enclosure
- Surface or semi-flush mounting with optional trim
- Field-installation option

Excel Life Safety System – Flexible Network Communications

Supports communication on:
- Twisted pair copper

Expertise Process Knowledge System™ (PKS)™ Integration – *Unlocks benefits via a unified, collaborative and open architecture that integrates seamlessly to deliver a single operator environment for plant control, life safety, HVAC, digital video and security.*

PRODUCT FEATURES:
- Honeywell's Experion PKS is the validated Distributed System Architecture (DSA). EBI lets you achieve this convenient and seamless single-operator interface without complex engineering, database management or sharing.
- Reduces training, maintenance and administration costs by employing the same tools for creating graphic displays (for building systems and process control), alarm management, and historical data collection.
- Supports implementation of exceptional health and safety practices.
- Enables integration of your systems investment

APPLICATIONS:
- Integrates and controls a plant's HVAC, lighting, hydraulics and energy usage
- Provides primary monitoring and control of plant's life safety systems with integrated response prompting and tracking capabilities, for example, evacuation procedures and personnel tracking
- Integrated access control and video systems offer maximum security capabilities to both employees and visitors
- Video surveillance and digital video management support permits control room observation of critical processes for informed operational and safety decisions

Experion Process Knowledge System (PKS)™

Enterprise Systems Integration
Share information with personnel, office and financial system databases.

PRODUCT FEATURES:
- Provides real-time access to EB Controller Management System (CMS) database for database synchronization periodically or on demand.
- Generic CardHolder Object Model (CHOM) database integration interface option
- Open Database Connectivity (ODBC) support allows read-only access to EB panel, history, and event data for third-party system analysis and reporting

APPLICATIONS:
- Integrates personnel information in the HR database are automatically sent to the EB CMS to update area and cardholder access privileges
- Events in the EB CMS awaits information in the HR system for time and attendance or after-hours billing reporting for energy and services

Global HRMS & PeopleTools support

Interface to SAP R/3 Human Resources Module

Distributed System Architecture (DSA)
Provides centralized monitoring for geographically distributed systems, and scalability for large enterprise systems.

PRODUCT FEATURES:
- Provides a single-seat solution for supporting a diffused EBI network. Using Life Safety Industrial Control
- SQA for points and DSA for controllers allows Operator Client Stations consistent access to both local and remote points and cardholder data
- Extends the capacity of a single server solution to support additional points, channels, and controllers
- Supports redundancy

APPLICATIONS:
- The HMU system and security system operate independently, and share data to optimize occupancy scheduling, lighting, and energy management strategies
- Global information is shared among HMUs
- Cardholder data may be managed from a single client on a single server in a "Standing Card" concept allowing cardholders to move between sites

Intranet and Internet Access
Connectivity options allow access from anywhere in the world via HMIWeb Client and Browser Stations, or Web page access via Web Toolkit and Web Point Control optional interfaces.

PRODUCT FEATURES:
- Web Server Option (Microsoft Internet Explorer 35) provides full client access while operating on Internet/Intranet and also segregates enforced
- EBI systems with TCP/IP network access and the network server option may also utilize Web Toolkit software to provide Web Point Control and Web Point Control Lite interfaces
- Web Point Control utilizes Java Applets to allow status point control and allow users to define schedules up to one week in advance

APPLICATIONS:
- Users away from the office may access their EBI system using WPL or through a thin client access over the Internet to check system status, issue commands, respond to alarms, or request reports

HMIWeb Client Browser Station

Internet Explorer Web Toolkit

EBI Web Point Control

Network Firewall

Wide Area Network/Internet (WAN)

Local Area Network (LAN)

Redundant LAN (optional)

Corporate Intranet, VPN, or WAN

Primary Ethernet Network

Redundant Ethernet Network (optional)

W7856 HL Listed EBI Server
Specification Data 74-2001
- Single or dual Intel Xeon processors at up to 3.2 Ghz clock speed
- 12 GB DDRM memory
- 2 GB video RAM (64 storage Lines)
- 10/100/1000 Gigabit on-board Ethernet
- 2 USB 2.0 ports and 1 serial port
- SD/SDHC/MS with Bad Interlap options

LCMN 5843/200 Router
- Provides network connectivity between Ethernet LAN and LONTALK® (TP/FT-10) bus
- NOTE: LCMN5 400 currently unavailable with Underwriters Laboratories (UL) listing. Use LCMN 5843/200 with Honeywell Sales representative for current shooting.

HC800
51-52-03-31 Specification Data
- Ethernet (Modbus TCP) connectivity to EB
- Individually business, hot swap I/O units
- Supports up to 250 I/O points, 125 per rack
- High resolution 13-bit universal analog inputs
- Embedded loop auto tuning

Excel 5000 Controller XCL5010C †
74-2026 Specification Data
I/O Point Capacity
Analog Input 8
UNIVERSAL Input Card
Module Type ..... Analog Input
No. of Inputs 8
Type of Inputs ..... 0 to 10 volts
4 to 20 mA or 0 to 20 mA
NTC
OPEN Input Card
Module Type ..... Analog Input
No. of Inputs 8
Type of Inputs ..... 0 to 10 volts
4 to 20 mA or 0 to 20 mA
NTC
PT100, 1000, 3000, Balco
Analog Output
No. of Outputs 4
SPDT Relay Card
Module Type ..... Analog output
No. of Outputs 8
Type of Outputs ..... 0 to 10 volts or mA each
Manual Override
Switches 8
Status LEDs ..... 8 relay outputs
DPDT Relay Card
Module Type ..... Analog output
No. of Outputs 8
Type of Outputs ..... 0 to 10 volts or mA each
Manual Override
Switches 8
Status LEDs ..... 8 relay outputs
Digital Input
Digital Input Card
Module Type ..... Digital Input
No. of Inputs 12
No. of LEDs 12
Inputs 1 and 2 analog outputs (W7760) ..... Digital input or fast totalizer
Inputs 3 to 8 ..... Digital input or slow totalizer
Digital Output
SPDT Form C Card
Module Type ..... Digital output
No. of Outputs 6
Type of Outputs ..... Change over contacts
Manual Override ..... 1 normally open contact
Switches 6
No. of LEDs 6
Triac Output Card
Module Type ..... Digital output
No. of Outputs 8
Type of Outputs ..... Triac
Manual Override
Switches 8
No. of LEDs 8
Three Position Output
Floating Control Card
Module Type ..... Three position output
No. of Outputs 4
Type of Outputs ..... Floating control
Manual Override
Switches ..... 3 pairs of 2
UPDAT Power Module
Module Type ..... Power supply
Input Voltage ..... 24Vac +10% -15%
Frequency ..... 50Hz or 60Hz
Switches 1
No. of LEDs 1

Smart Excel 500 Controller XCL5010
74-2025 Specification Data
Excel 5000 Expansion Analog Output Modules
74-2116 Specification Data
Analog Input
Module Type ..... Analog Input
No. of Inputs 8
Type of Inputs ..... 0 to 10 volts
4 to 20 mA or 0 to 20 mA
20k NTC
Accessories 8
Analog Output
Module Type ..... Analog output
No. of Outputs 8
Type of Outputs ..... 0 to 10 volts
4 to 20 mA
Switches 1 2 4 8
Digital Input
MV/LOW Module
Distributed Module Type ..... Digital Input
No. of Inputs 8
No. of LEDs 8
Digital Output
MV/LOW Module
Distributed Module Type ..... Digital output
No. of Outputs 8
No. of LEDs 8
Accessories ..... Universal changeover contacts
Switches 2 3 4 8

Distributed Input/Output Accessories
I/O Module
Module Type ..... Remote terminals for XFL521
Ground Override 8
Switches 8
I/O MODULE
Module Type ..... Manual override for XFL524
Switches 8
ENHANCED I/O MODULE
Module Type ..... Connector module for XFL521, XFL522, XFL525, XFL526
I/O MODULE
Module Type ..... Manual disconnect modules between terminals and I/O modules
I/O MODULE
Module Type ..... Terminal block for XFL521/XFL523
I/O MODULE
Module Type ..... Terminal block for XFL524

Smart I/O Module
74-2071 Specification Data
UNIVERSAL Input
Thermistors 4
Digital Inputs 4
Analog Inputs ..... 4 (20K NTC)
Analog Inputs ..... 2 (DRY)
SPECIFICATIONS
Thermistors ..... Thermistors
Digital Inputs 4
No. of LEDs 10
Digital Inputs 4
Analog Inputs 4
Analog Inputs ..... 4 (20K NTC)
Analog Inputs ..... 2 (DRY)

Excel 50 Controller XL5010M/MPC-LON
74-2029 Specification Data
I/O Point Capacity
Analog Inputs 8 ..... 0 to 10 Vdc
4 to 20 mA
Resistive ..... 0 to 2k ohms
Analog Outputs 4 ..... 0 to 10 Vdc
Digital Inputs 8 ..... Dry contact or pulse totalizer
Digital Outputs 8 ..... Triac 500 mA rms
(all 8 Triacs max 2.4A)

Same Power of the Excel 500
- Similar operator interface
- Same wiring
- Same bus configuration
- Fully programmable using Excel CARE

Model Type
- Excel 50 LPC – without operator interface; Excel 50 LMMPC with operator interface

I/O Point Capacity
- Up to 8 analog inputs
- Up to 8 digital outputs
- 4K network variables supported on the LonNetwork Network
- Supports LonTalk® (TP/FT-10) bus
- Engineering tool ..... LONMAKER®

Constant Volume ARU Controller W7750
74-2500 Specification Data
- Single-duct, constant volume control algorithm
- Integral or packaged economizer control
- Separate intelligent recovery rates for heating and cooling
- Night setback/night purge control with energy saving control
- LonMark profile 8500

W7750A Constant Volume ARU Controller
Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

W7750B/C Constant Volume ARU Controller
Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

VAV Box Controller W7751
74-2502 Specification Data
- Pressure-dependent VAV box control
- Pressure-independent or pressure-dependent VAV box control
- Single-duct/dual-duct VAV box control solutions
- Direct digital control of electric heat solutions (terminal box "first on" sequencing)
- Series/parallel fan
- Supply/return air tracking
- LonMark functional profile 8010

W7751B
Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output
- Integrated actuator

W7751G, H, I
- Expanded input/output capacity actuator not included
Inputs
- 1 T7770 wall module
- 1 resistive input
- 1 voltage input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

Unit Ventilator Controller W7753A
74-2502 Specification Data
- Single-duct unit ventilator control
- ON/OFF control, 1, 2, 3
- Proportional floating control
- Modulating temperature control
- LonMark functional profile 8020

Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 voltage/current inputs
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

Fan Coil Unit Controller W7752
74-2509 Specification Data
- Two-pipe fan coil unit control
- 2- to 5-speed fan control
- Valve or electrical electrical control
- Floating or PWM control
- LonMark functional profile 8030

Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 voltage/current inputs
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

Remote Input/Output Device W7761A
74-2600 Specification Data
- Generic I/O for lighting, exhaust fans, pumps, and more LonMark standard objects for sensors and actuators

Inputs
- 8 resistive inputs
- 7 voltage inputs
- 8 dry contact digital inputs
Outputs
- 8 relay outputs

Communicating Thermostat T7300F/G7300R
66-1301 Specification Data
- Use thermostat model for either heat pump or conventional HTG
- Use T7300F for Fahrenheit scale
- Works with T7047 Remote Temperature Sensor
- Proportional plus integral control eliminates temperature fluctuations
- Adaptive recovery algorithm for optimum start/stop control of the
- Discharge air sensing capability with C7400C Sensor
- Conforms to LonMark thermostat functional profile

Hydronic Controller W7782B/7782C
74-2604 Specification Data
- Two-pipe, four-pipe, valve, chilled ceilings and fan coil units with manual fan switching
- High-efficiency, low-cost heat/cool valve operation solution
- Wall-mounted temperature sensor included or not mounted
- LonMark functional profile 8040

Inputs
- 1 space temperature sensor (either built-in or via T7770 wall module)
- 2 dry contact digital input
Outputs
- 1 relay output
- 4 triac outputs

Network Router/Firewall-145077744 Series
- 7N-5987 Specification Data
- Ethernet and T1 interfaces
- 7N-5987 Specification Data

Network Router/Firewall-145077744 Series
- 7N-5987 Specification Data
- Ethernet to RS232 or RS485 Cimetrics SBUS connecting via DB25 serial
- T1/E1 TDM/FRS/ATM/IP certified encryption

High Security Manager
Model 4250
- Scalable and flexible architecture. The design of the High Security Manager (HSM) allows the field interface devices to be mounted within the controller enclosure or remotely in separate enclosures. The standard RS485 communications hardware allows connection of up to 32 devices per network segment, with a maximum network length of 4000 feet (1200 meters) with a suitable connection.
- Small form factor, may be installed in a variety of enclosures.
- High security locking and tamper detection inputs are available for high security installations.
- 12 VDC operation.
- Control and monitoring of a total of 1024 supervised sections, which may be any combination of the following end of line module types:
  - Up to 1024 Type 2 Class B supervised sections.
  - Up to 1024 Type 4 high-immunity supervised grade addressable end of line modules (EOLG/EOLGS).
  - Up to 16 commercial grade resistor end of line modules.
- Up to 1024 Type 2 Class B or Type 4 high-immunity supervised points (E/GTS).
- Supports up to 16 human machine interfaces (HMI). This may be any combination of HMI Consoles (DH72) or HMI Keypads (DH74).
- Supports up to 128 relay outputs.
- Up to 4 MB of battery backed-up USB Flash Drive (UFD).
- Parallel port supports a supervised, SCIP event logging printer if hard copy output is required. This may be used in conjunction with the GFD event log.
- Supports the following communication types:
  - 1 RS232 modem communications port.
  - 1 RS232/RS485/RS422 serial communication port.
  - 2 USB 1.1 ports.
  - 1 10Mb Ethernet port.
- Supports a single 5 amp, open or normally closed contact relay outputs with 30 VDC, 1.5 A contact rating.
- 6 onboard digital inputs for alarm monitoring.
- Onboard vibration detector.
- Front panel LED annunciator, or "heartbeat" indicator.
- Compact Flash (CF) card based solid state hard drive.
- Industry standard components including PC/104 compatible CPU module allowing easy expansion of the CPU module.
- Real time clock battery backed CPU with 128MB RAM.
- Linux operating system.
- Standard Ernie type diagnostic output and user command interface to monitor and troubleshoot system operation.
- Supports both input (DPIB) (E/TIS) and output (DPIB) (E/TOS). Output APMs allow relay output, or control points to be individually distributed throughout the field.
- Up to 16 APM interface devices may be installed per system, allowing a possible 128 ELMs to be connected per system.
- Switch selectable baud rate between 9600 and 38400 baud.
- Switch selectable biasing and termination resistors for RS485 connection.
- LED indication of InterBUSline polling, InterBUSline status, APM polling and APM channel tamper status.
- Supervised InterBUSline interface with DB25 receptacle.
- Field upgradeable firmware.

DTMF ELM Interface
DH84
- For high security, Type 1 installation.
- Used for retro-fitting existing DTMF Type 1 field enhancements.
- Up to 16 DTMF ELM interface devices may be installed per system.
- 12 VDC operation. The DTMF ELM2 also requires an additional +5 VDC power supply.
- Standard cover board to fit DIN rail mounting hardware. May also be fitted to DU09 backplane.
- Mounting holes for installation using standoffs.
- Connection via plug-in screw terminal blocks.
- Up to 16 DTMF ELM interface devices may be installed per system, allowing a possible 128 ELMs to be connected per system.
- Switch selectable biasing and termination resistors for RS485 connection.
- LED indication of InterBUSline polling and InterBUSline status.
- Supervised InterBUSline interface with DB25 receptacle.
- Field upgradeable firmware.

ELM Interface
DH85
- For high security, Type 1 installation.
- Used for retro-fitting existing ELM Type 1 field enhancements.
- Up to 16 ELM interface devices may be installed per system, allowing a possible 128 ELMs to be connected per system.
- 12 VDC operation. The ELM2 also requires an additional +5 VDC power supply.
- Standard cover board to fit DIN rail mounting hardware. May also be fitted to DU09 backplane.
- Mounting holes for installation using standoffs.
- Connection via plug-in screw terminal blocks.
- Up to 16 relay devices may be installed per system, allowing a possible 128 relay outputs per system.
- Switch selectable biasing and termination resistors for RS485 connection.
- LED indication of InterBUSline polling, InterBUSline status and relay state.
- Supervised InterBUSline interface with DB25 receptacle.
- Field upgradeable firmware.

Resistor EOLM Interface
DH75
- Provides for 8, four-state resistor network inputs per interface.
- Up to 16 interfaces.
- Supplied in two-piece plastic enclosure.
- Up to 11 interface devices may be installed per system, allowing for the connection of up to 88 resistor end of line modules per network segment.
- Switch selectable biasing and termination resistors for RS485 connection.
- Jumper selectable channel ID.

Serial Interface Module
- Provides for 1 RS232 or RS485 communications port.
- Supplied in two-piece plastic enclosure.
- Up to 16 interface devices may be installed per system, allowing for the connection of up to 16 resistor end of line modules per network segment.
- Switch selectable biasing and termination resistors for RS485 connection.
- Jumper selectable channel ID.

Excel 10 Controller XL5010MMPC-LON
74-2029 Specification Data
I/O Point Capacity
Analog Inputs 8 ..... 0 to 10 Vdc
4 to 20 mA
Resistive ..... 0 to 2k ohms
Analog Outputs 4 ..... 0 to 10 Vdc
Digital Inputs 8 ..... Dry contact or pulse totalizer
Digital Outputs 8 ..... Triac 500 mA rms
(all 8 Triacs max 2.4A)

Same Power of the Excel 500
- Similar operator interface
- Same wiring
- Same bus configuration
- Fully programmable using Excel CARE

Model Type
- Excel 50 LPC – without operator interface; Excel 50 LMMPC with operator interface

I/O Point Capacity
- Up to 8 analog inputs
- Up to 8 digital outputs
- 4K network variables supported on the LonNetwork Network
- Supports LonTalk® (TP/FT-10) bus
- Engineering tool ..... LONMAKER®

Constant Volume ARU Controller W7750
74-2500 Specification Data
- Single-duct, constant volume control algorithm
- Integral or packaged economizer control
- Separate intelligent recovery rates for heating and cooling
- Night setback/night purge control with energy saving control
- LonMark profile 8500

W7750A Constant Volume ARU Controller
Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

W7750B/C Constant Volume ARU Controller
Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

VAV Box Controller W7751
74-2502 Specification Data
- Pressure-dependent VAV box control
- Pressure-independent or pressure-dependent VAV box control
- Single-duct/dual-duct VAV box control solutions
- Direct digital control of electric heat solutions (terminal box "first on" sequencing)
- Series/parallel fan
- Supply/return air tracking
- LonMark functional profile 8010

W7751B
Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output
- Integrated actuator

W7751G, H, I
- Expanded input/output capacity actuator not included
Inputs
- 1 T7770 wall module
- 1 resistive input
- 1 voltage input
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

Unit Ventilator Controller W7753A
74-2502 Specification Data
- Single-duct unit ventilator control
- ON/OFF control, 1, 2, 3
- Proportional floating control
- Modulating temperature control
- LonMark functional profile 8020

Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 voltage/current inputs
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

Fan Coil Unit Controller W7752
74-2509 Specification Data
- Two-pipe fan coil unit control
- 2- to 5-speed fan control
- Valve or electrical electrical control
- Floating or PWM control
- LonMark functional profile 8030

Inputs
- 1 T7770 wall module
- 1 resistive input
- 2 voltage/current inputs
- 2 dry contact digital inputs
- 1 bypass button input
Outputs
- 4 relay outputs
- 1 LED output

Remote Input/Output Device W7761A
74-2600 Specification Data
- Generic I/O for lighting, exhaust fans, pumps, and more LonMark standard objects for sensors and actuators

Inputs
- 8 resistive inputs
- 7 voltage inputs
- 8 dry contact digital inputs
Outputs
- 8 relay outputs

Communicating Thermostat T7300F/G7300R
66-1301 Specification Data
- Use thermostat model for either heat pump or conventional HTG
- Use T7300F for Fahrenheit scale
- Works with T7047 Remote Temperature Sensor
- Proportional plus integral control eliminates temperature fluctuations
- Adaptive recovery algorithm for optimum start/stop control of the
- Discharge air sensing capability with C7400C Sensor
- Conforms to LonMark thermostat functional profile

Hydronic Controller W7782B/7782C
74-2604 Specification Data
- Two-pipe, four-pipe, valve, chilled ceilings and fan coil units with manual fan switching
- High-efficiency, low-cost heat/cool valve operation solution
- Wall-mounted temperature sensor included or not mounted
- LonMark functional profile 8040

Inputs
- 1 space temperature sensor (either built-in or via T7770 wall module)
- 2 dry contact digital input
Outputs
- 1 relay output
- 4 triac outputs

Network Router/Firewall-145077744 Series
- 7N-5987 Specification Data
- Ethernet and T1 interfaces
- 7N-5987 Specification Data

Network Router/Firewall-145077744 Series
- 7N-5987 Specification Data
- Ethernet to RS232 or RS485 Cimetrics SBUS connecting via DB25 serial
- T1/E1 TDM/FRS/ATM/IP certified encryption

High Security Manager
Model 4250
- Scalable and flexible architecture. The design of the High Security Manager (HSM) allows the field interface devices to be mounted within the controller enclosure or remotely in separate enclosures. The standard RS485 communications hardware allows connection of up to 32 devices per network segment, with a maximum network length of 4000 feet (1200 meters) with a suitable connection.
- Small form factor, may be installed in a variety of enclosures.
- High security locking and tamper detection inputs are available for high security installations.
- 12 VDC operation.
- Control and monitoring of a total of 1024 supervised sections, which may be any combination of the following end of line module types:
  - Up to 1024 Type 2 Class B supervised sections.
  - Up to 1024 Type 4 high-immunity supervised grade addressable end of line modules (EOLG/EOLGS).
  - Up to 16 commercial grade resistor end of line modules.
- Up to 1024 Type 2 Class B or Type 4 high-immunity supervised points (E/GTS).
- Supports up to 16 human machine interfaces (HMI). This may be any combination of HMI Consoles (DH72) or HMI Keypads (DH74).
- Supports up to 128 relay outputs.
- Up to 4 MB of battery backed-up USB Flash Drive (UFD).
- Parallel port supports a supervised, SCIP event logging printer if hard copy output is required. This may be used in conjunction with the GFD event log.
- Supports the following communication types:
  - 1 RS232 modem communications port.
  - 1 RS232/RS485/RS422 serial communication port.
  - 2 USB 1.1 ports.
  - 1 10Mb Ethernet port.
- Supports a single 5 amp, open or normally closed contact relay outputs with 30 VDC, 1.5 A contact rating.
- 6 onboard digital inputs for alarm monitoring.
- Onboard vibration detector.
- Front panel LED annunciator, or "heartbeat" indicator.
- Compact Flash (CF) card based solid state hard drive.
- Industry standard components including PC/104 compatible CPU module allowing easy expansion of the CPU module.
- Real time clock battery backed CPU with 128MB RAM.
- Linux operating system.
- Standard Ernie type diagnostic output and user command interface to monitor and troubleshoot system operation.
- Supports both input (DPIB) (E/TIS) and output (DPIB) (E/TOS). Output APMs allow relay output, or control points to be individually distributed throughout the field.
- Up to 16 APM interface devices may be installed per system, allowing a possible 128 ELMs to be connected per system.
- Switch selectable biasing and termination resistors for RS485 connection.
- LED indication of InterBUSline polling, InterBUSline status, APM polling and APM channel tamper status.
- Supervised InterBUSline interface with DB25 receptacle.
- Field upgradeable firmware.

APM Interface
DH83
- Standard 5 DB25 interfaces for up to 128 supervised high-commercial grade addressable point modules (APM).
- 12 VDC operation.
- Standard cover board to fit DIN rail mounting hardware. May also be fitted to DU09 backplane.
- Mounting holes for installation using standoffs.
- Connection via plug-in screw terminal blocks.
- Supports both input (DPIB) (E/TIS) and output (DPIB) (E/TOS). Output APMs allow relay output, or control points to be individually distributed throughout the field.
- Up to 16 APM interface devices may be installed per system, allowing a possible 1024 APMs to be connected per system.
- Switch selectable biasing and termination resistors for RS485 connection.
- Switch selectable channel ID.
- LED indication of InterBUSline polling, InterBUSline status, APM polling and APM channel tamper status.
- Supervised InterBUSline interface with DB25 receptacle.
- Field upgradeable firmware.

DTMF ELM Interface
DH84
- For high security, Type 1 installation.
- Used for retro-fitting existing DTMF Type 1 field enhancements.
- Up to 16 DTMF ELM interface devices may be installed per system, allowing a possible 128 ELMs to be connected per system.
- 12 VDC operation. The DTMF ELM2 also requires an additional +5 VDC power supply.
- Standard cover board to fit DIN rail mounting hardware. May also be fitted to DU09 backplane.
- Mounting holes for installation using standoffs.
- Connection via plug-in screw terminal blocks.
- Up to 16 relay devices may be installed per system, allowing a possible 128 relay outputs per system.
- Switch selectable biasing and termination resistors for RS485 connection.
- LED indication of InterBUSline polling, InterBUSline status and relay state.
- Supervised InterBUSline interface with DB25 receptacle.
- Field upgradeable firmware.

Resistor EOLM Interface
DH75
- Provides for 8, four-state resistor network inputs per interface.
- Up to 16 interfaces.
- Supplied in two-piece plastic enclosure.
- Up to 11 interface devices may be installed per system, allowing for the connection of up to 88 resistor end of line modules per network segment.
- Switch selectable biasing and termination resistors for RS485 connection.
- Jumper selectable channel ID.

Serial Interface Module
- Provides for 1 RS232 or RS485 communications port.
- Supplied in two-piece plastic enclosure.
- Up to 16 interface devices may be installed per system, allowing for the connection of up to 16 resistor end of line modules per network segment.
- Switch selectable biasing and termination resistors for RS485 connection.
- Jumper selectable channel ID.

PCSC Controllers *Access Control and Security System*

PCSC Access & Security Controller
- ICD101 Base 2-door Controller
- ICD201 2-door Controller
- ICD301 2-door Controller
- ICD401 4-door Controller
- ICD501 8-door Controller
- ICD1202 12-door Controller
- Ultimate Controller
- Base 2 door & 4 door units can be upgraded to 6, 8, 10 & 12 door units
- Memory
  - 1 7 model units
  - 3 models (2 x 4mg, 4 x 4mg)
  - 4 models (8 x 4mg, 4 x 4mg, 4 x 8mg)
- Expandable to 12 door controller
  - 12 reader inputs
  - 12 door status inputs (4 mag, 16 x 4 relays)
  - 24 door status inputs (12 configurable, 2 free)
- Add On modules available
  - 16 relay output
  - 16 control input + 16 control input + 16 relay output
- 12 VDC Power
- 1.5 A power supply capacity
- Ethernet, RS232, RS485 & Dial Up host communications
- Up to 32 Ethernet communications
- LAN/WAN Connectivity
- Dial Up Connectivity

HID® Series
- Full Duplex Wiegand Reader Access Control
- 2 & 4 Door models
- Dial Up, Ad Hoc Control

DSC
- 32 Supervised 3 state alarm inputs
- 4 Relay outputs
- Ethernet, RS232 & Dial Up host communications
- Can be integrated with IQ series door controllers

Photo ID Station

Evolis Dualys Series
- Up to 140 cards per hour

Evolis Pebble Series
- Up to 140 cards per hour

Fargo® DTC500 Series
- Up to110 cards per hour

Fargo® Pro-L2
- Up to35 cards per hour

LogiTech® QuickCam Pro 4000
- Dual-use P/N 48128-0403

3Com® Watchport V USB Camera
- Dual-use P/N 3837360

PhotoID MiniTower
- Add Premium Software 1400dual7
- Integrated Ethernet adapter, online HD storage configurable to meet customer requirements

FlashPoint 32x Life Video Capture Card
- Integrated Ethernet adapter
- Allows use of any analog camera
- Available in PCI or ISA*

FlashBox MV Life Video Capture Card
Integral Technologies® P/N 3047
- Allows use of any analog camera
- Only available in PCI

*Please contact your Honeywell sales representative for information on the Temu product line.

TemaLine *A Comprehensive Solution for Security*

PRODUCT FEATURES:
TemaLine is redefining the concept of integrated security solution subsystems for:
- Access control
- Integrated CCTV system reliability and availability using the "Shared Load" concept
- Open client/server architecture and modularity reducing the management load on the maintenance staff
- Multi-application/multi-technician controller provides access control, time and attendance, and alarm monitoring functions
- Optional redundant TemaServer and "Shared Load TemaServer"
- Single standalone application for a fully integrated EBI solution

"Sensa Server – Proximity Terminal
P/N TL 760, 765
- OPERATES/30 in processor including a 68000 (32 bit architecture) and 1MB of battery backed RAM
- Bi-directional reader with manual reading for proximity cards
- Multi-language management of the user interface
- Time and attendance management and Time and Attendance functionality
- Up to 65,535 transactions stored on a removable cartridge with Flash EPROM
- Local battery backup, with full functionality for 4 hours in case of network failure
- Tamper protection of the unit to prevent opening

"Sensa Server – Magnetic Terminal
P/N TL 763
- OPERATES/30 in processor including a 68000 (32 bit architecture) and 1MB of battery backed RAM
- Bi-directional reader with manual reading for magnetic stripe cards
- Multi-language management of the user interface
- Time and attendance management and Time and Attendance functionality
- Up to 65,535 transactions stored on a removable cartridge with Flash EPROM
- Local battery backup, with full functionality for 4 hours in case of network failure
- Tamper protection of the unit to prevent opening

"Sensa Server – Control Unit
P/N TL 2620
- OPERATES/30 in processor including a 68000 (32 bit architecture) and onboard Ethernet controller
- Door support with LAN or as a backup to LAN
- Fault tolerant battery backup
- Fault tolerant power supplies and power supplies
- Management of up to 8 doors with TemaApps on board
- Management of up to 64 I/O
- 1 MB FLASH EPROM to download application firmware to the unit
- Up to 65,000 cardholder capacity
- Up to 40,000 transactions buffer for fast front-end communication and reduced dependency on host
- Onboard clock/calendar chip with battery backup
- Local battery backup, with full functionality for 4 hours
- Time and Attendance functionality

"Sensa Key – Proximity & MD Reader
P/N TK 150, TK 250 MD CompanyKey
- Proximity reader with keypad and 32 Kbyte EPROM for Operational application firmware
- LonWorks™ (Echelon) connection to the TL 4231 and TL 4241 Door Control Units
- Multi-color graphic liquid crystal display (LCD), back-lit, with two lines of 16 characters
- Proximity technology: HID® ProxCard II, ISO, Ultralight EM4100 125KHz, up to 5cm reading distance
- Numeric function keyboard with 16 keys
- Alphanumeric keyboard