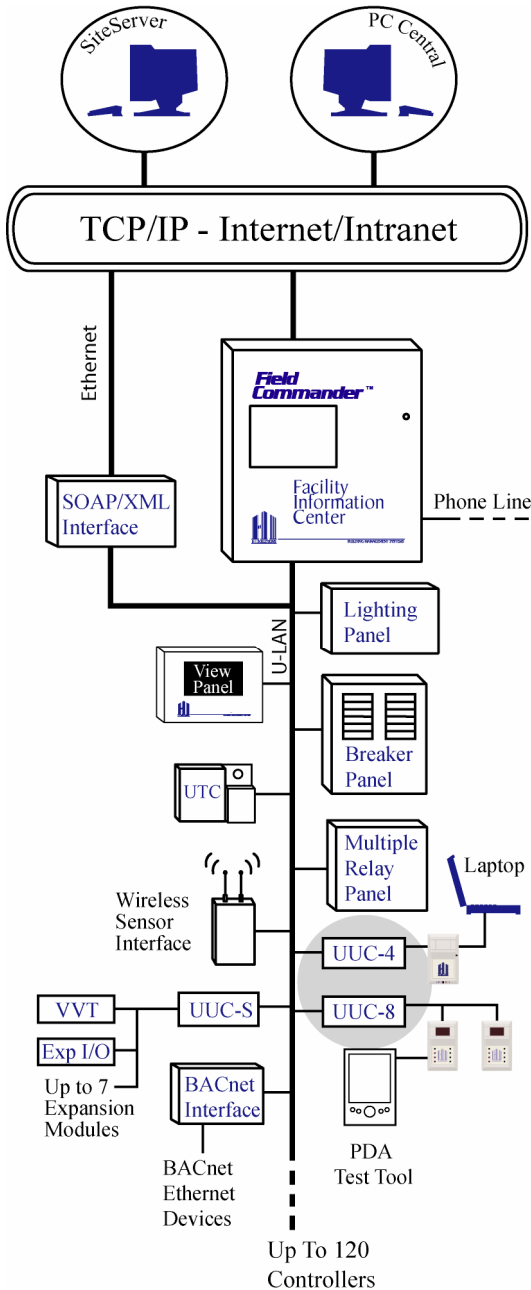


Field Commander™

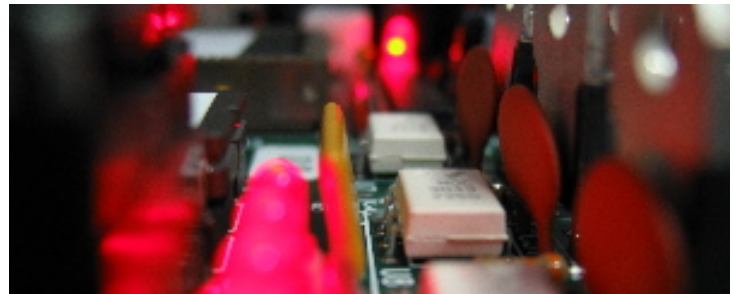
Universal Unitary Controller



Overview

The Universal Unitary Controller is a complete, self-contained control subsystem including microprocessor, control program, database definitions, and specific application software for use in the Field Commander Multi-level LAN Building Management System. The Universal Unitary Controller (UUC) provides distributed Direct Digital Control (DDC) of all types of systems from air handlers to central chiller plants. User-friendly software allows the same hardware module to be configured for the specific application without dip switches. As a result, only one type of spare is required for the entire facility.

Each UUC board contains a single-chip microprocessor computer system, EPROM for program storage, battery-backed real-time clock and calendar, battery-backed RAM for operational data and control parameters, and an asynchronous LAN communication interface. The UUC power supply operates from a 24 VAC/DC input source. Input signal conditioning, output drivers, and indicator LED's are provided. A remote thermostat provides sensor, timed override, and LAN connection. The UUC supports two thermostats with programmable overrides, digital displays, and temperature adjustments for dual system control.



Application





The UUC can operate independently to control its equipment. When connected to the Field Commander U-LAN, up to 120 UUC's can be connected to each FC. The versatile LAN network allows the UUC to operate independently, to implement commands from Field Commanders and other UUC's, and to function as an integrated control network for versatile building management. When connected to the FC, any UUC points not being used in the UUC application can be monitored and controlled directly by the FC or another unitary device. A PC or PDA can be connected to the LAN allowing direct access to any point in any unitary controller on the network.



Features and Benefits

Universal applications configured by software
 Field programmable by portable PC at unit, thermostat, or Field Commander
 Program and database stored in 10 year battery-backed RAM
 English language device names and database programming
 Scheduling by time and day-of-week (plus holidays and dates with FC) with onboard clock and calendar
 Back-up scheduling automatically activated if LAN disconnected
 Alarm reporting with user-defined English messages
 Interactive realtime monitors with multiple actions
 Optimized start-up and shut-down
 Extensive math and Boolean functions for special algorithms including enthalpy
 75 internal event timers

75 named points with 64 software points (flags), computed points, and globals for user defined algorithms
 Analog inputs and outputs with 10-bit conversion and linearization
 DDC PID analog control with 4-20 MA or 0-10 VDC
 Relay or Triac digital outputs in groups of 4
 Opto-isolated digital inputs with overvoltage protection
 RS-485 LAN connection with up to 120 other UUC's and to Field Commander
 Room thermostat with sensor, override, setpoint, LED indicator display, and LAN Interface
 Online self-diagnostics
 Trend and run-time logging
 Demand control when used with the FC
 Switching power supply using 24VAC or DC input

Universal Unitary Controllers	UUC-0	UUC-4	UUC-8	UUC-8S
				
Digital Outputs	0	4	8	8
Digital Inputs	4	0	12	8
Universal Inputs	8	8	8	8
Analog Outputs	3	3	3	3
Additional I/O	MROB/CB devices			SLAN devices
Dimensions:	3.25" x 6.4"	3.25" x 6.4"	3.25" x 8.7"	3.25" x 9.8"
Power Requirements:	24VAC/24VDC	24VAC/24VDC	24VAC/24VDC	24VAC/24VDC
Communications:	RS-485 Unitary LAN Line 2, twisted pair	RS-485 Unitary LAN Line 2, twisted pair	RS-485 Unitary LAN Line 2, twisted pair	RS-485 Unitary LAN Line 2, twisted pair
Mounting:	Track-mount or stand-alone enclosure	Track-mount or stand-alone enclosure	Track-mount or stand-alone enclosure	Track-mount
Part Number	016-4060	016-4047	016-4038	016-4098

About H I Solutions

Since 1974 H I Solutions has provided innovative and cost-effective solutions for building management needs with computer-based automation systems for industrial, commercial, office, retail, educational, and healthcare facilities. Our distribution channels include a network of Independent Distributors, OEM, and National Accounts. Headquartered outside Atlanta, Georgia, H I Solutions is committed to offering quality engineering and performance, low overall cost, and unparalleled customer service.

