XLS140-2(E)

Fire Alarm Control Panel

XLS140-2.jpg

General

In stand-alone or network configurations, Honeywell's XLS140-2 meets virtually every application requirement.

Designed with modularity and for ease of system planning, the XLS140-2 can be configured with just a few devices for small building applications, or for a large campus or high-rise application. Simply add additional peripheral equipment to suit the application.

The FireWatch Series internet monitoring modules IPDACT-2 and IPDACT-2UD permit monitoring of alarm signals over the Internet, saving the monthly cost of two dedicated business telephone lines. Although not required, the secondary telephone line may be retained providing backup communication over the public switched telephone line.

NOTE: *Unless called out with a version-specific "E" at the end of the part number, "XLS140-2" refers to models XLS140-2 and XLS140-2E; similarly, "XLS140-CPU2" refers to models XLS140-CPU2 and XLS140-CPU2E.*

Features

- **Listed to UL Standard 864, 9th edition.**
- One, expandable to two, isolated intelligent Signaling Line Circuit (SLC) Style 4, 6 or 7.
- Up to 159 detectors (any mix of ion, photo, thermal, or multi-sensor) and 159 modules (Addressable pull stations, normally open contact devices, two-wire smoke, notification, or relay) per SLC. 318 devices per loop/636 per FACP or network node.
- Standard 80-character display, 640-character large display, or display-less (a node on a network).
- Network options:
  - High-speed network for up to 200 nodes (XLS3000, XLS140-2, XLS140, XLS-NCA/-NCA2 Network Annunciator, or XLS-DVC).
  - Standard network for up to 103 nodes (XLS140, XLS140-2, XLS3000, XLS-NCA/-NCA2 Network Annunciator, or XLS-DVC, and Honeywell Enterprise Buildings Integrator™ [EBI]). Up to 54 nodes when DVC is used in network paging.
- 6.0 amp switch mode power supply with four Class A/B built-in Notification Appliance Circuits (NAC). Selectable System Sensor, Wheelock, or Gentex strobe synchronization.
- Built-in Alarm, Trouble, Security, and Supervisory relays.
- VeriFire® Tools online or offline programming utility. Upload/Download, save, store, check, compare, and simulate panel databases. Upgrade panel firmware.
- Autoprogramming and Walk Test reports.
- Optional universal 636-point DACT.
- 80-character remote annunciators (up to 32).
- EIA-485 annunciators, including custom graphics.
- Printer interface (80-column and 40-column printers).
- History file with 800-event capacity in nonvolatile memory, plus separate 200-event alarm-only file.
- Alarm Verification selection per point, with tally.
- Autoprogramming and Walk Test reports.
- Presignal/Positive Alarm Sequence (PAS).
- Silence inhibit and Auto Silence timer options.
- March time/temporal/California two-stage coding/strobe synchronization.
- Field-programmable on panel or on PC, with VeriFire Tools program check, compare, simulate.
- Full QWERTY keypad.
- Battery charger supports 18 – 200 amp hour batteries.
- Non-alarm points for lower priority functions.
- Remote ACK/Signal Silence/System Reset/Drill via monitor modules.
- Automatic time control functions, with holiday exceptions.
- Surface Mount Technology (SMT) electronics.
- Extensive, built-in transient protection.
- Powerful Boolean logic equations.
- Support for SCS Series smoke control system in HVAC mode.

XLS-NCA2 AS PRIMARY DISPLAY

- Backlit, 640-character display.
- Supports SCS Series smoke control system in FSCS mode when SCS is connected to the ***XLS-NCA2*** used as primary display.
- Printer and CRT EIA-232 ports.
- EIA-485 annunciator and terminal mode ports.
- Alarm, Trouble, Supervisory, and Security relays.

FLASHSCAN® INTELLIGENT FEATURES

- Poll up to 318 devices in less than two seconds.
- Activate up to 159 outputs in less than five seconds.
- Multicolor LEDs blink device address during Walk Test.
- Fully digital, high-precision protocol (U.S. Patent 5,539,389).
- Manual sensitivity adjustment — nine levels.
- Pre-alarm intelligent sensing — nine levels.
- Day/Night automatic sensitivity adjustment.
- Sensitivity windows:
  - **Ion –** 0.5 to 2.5%/foot obscuration.
  - **Photo –** 0.5 to 2.35%/foot obscuration.
  - **Laser (Pinnacle™) –** 0.02 to 2.0%/foot obscuration.
  - **Acclimate –** 0.5 to 4.0%/foot obscuration.
  - **COPTIR™** – 1.0 to 4.0%/foot obscuration.
- Drift compensation (U.S. Patent 5,764,142).
- Degraded mode — in the unlikely event that the XLS140-CPU2 microprocessor fails, FlashScan detectors revert to degraded operation and can activate the XLS140-CPU2 NAC circuits and alarm relay. Each of the four built-in panel circuits includes a Disable/Enable switch for this feature.

- Multi-detector algorithm involves nearby detectors in alarm decision (U.S. Patent 5,627,515).
- Automatic detector sensitivity testing (NFPA-72 compliant).
- Maintenance alert (two levels).
- Self-optimizing pre-alarm.

TC840C1000 COPTIR ADVANCED MULTI-CRITERIA DETECTOR

- Detects all four major elements of a fire (smoke, heat, CO, and flame).
- Automatic drift compensation of smoke sensor and CO cell.
- High nuisance-alarm immunity.
- Six sensitivity levels.

TC846A1013 PINNACLE™ LASER SMOKE DETECTION TECHNOLOGY

- Revolutionary spot laser design.
- Advanced intelligent sensing algorithms differentiate between smoke and non-smoke signals (U.S. Patent 5,831,524).
- Addressable operation pinpoints the fire location.
- No moving parts to fail or filters to change.
- Early warning performance comparable to the best aspiration systems at a fraction of the lifetime cost.

TC840M1021 ACCLIMATE LOW-PROFILE INTELLIGENT MULTI-SENSOR

- Detector automatically adjusts sensitivity levels without operator intervention or programming. Sensitivity increases with heat.
- Microprocessor-based technology; combination photo and thermal technology.
- FlashScan or CLIP (standard polling of each intelligent device) mode compatible.
- Low-temperature warning signal at 40°F ± 5°F (4.44°C ± 2.77°C).

RELEASING FEATURES

- Ten independent hazards.
- Sophisticated cross-zone (three options).
- Delay timer and Discharge timers (adjustable).
- Abort (four options).
- Low-pressure CO_2 listed.

VOICE AND TELEPHONE FEATURES

- Up to eight channels of digital audio.
- 50 and 75 watt digital amplifiers (DAA2 series).
- Solid-state digital message generation.
- Firefighter telephone option.
- 30- to 120-watt high-efficiency amplifiers (AA Series).
- Backup tone generator and amplifier option.

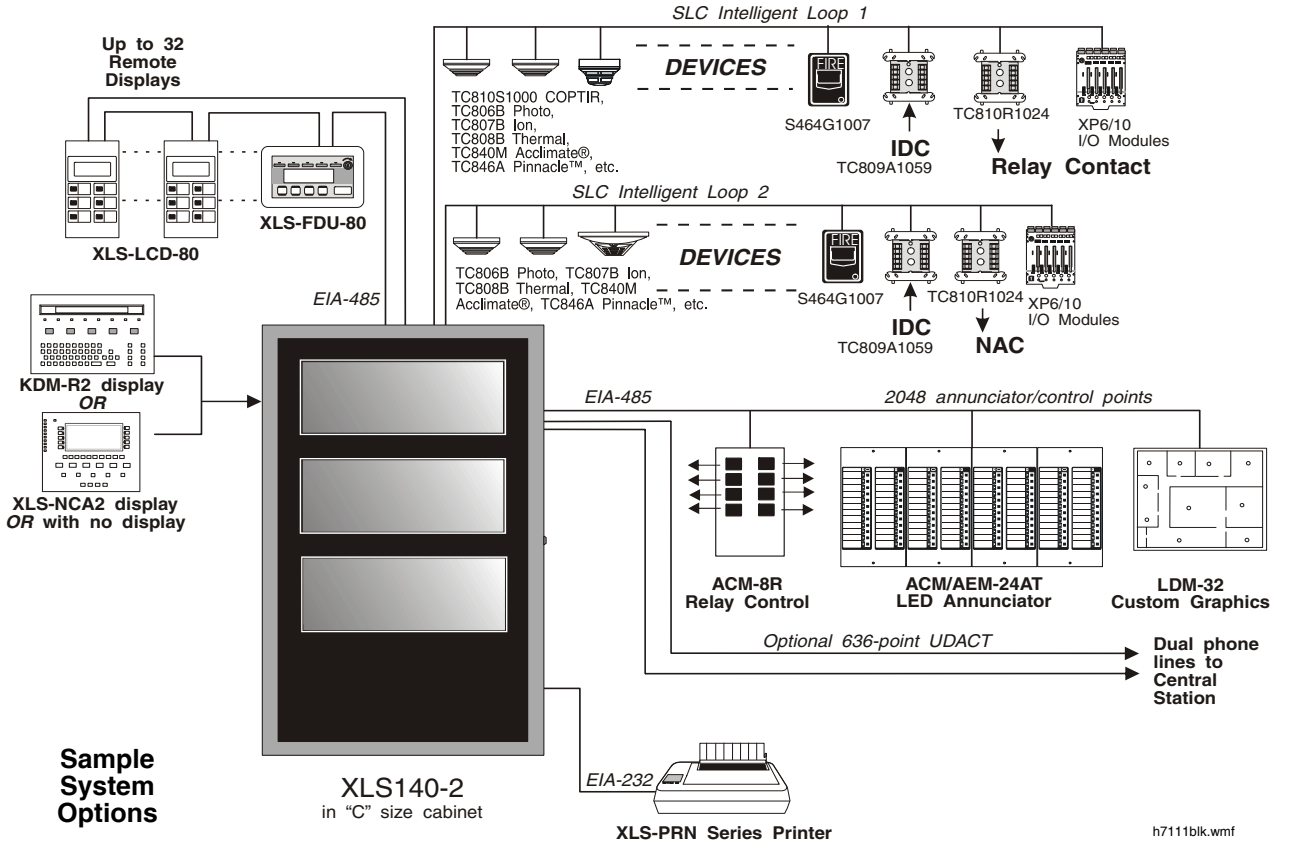
HIGH-EFFICIENCY OFFLINE SWITCHING 3.0 AMP POWER SUPPLY (6.0 A IN ALARM)

- 120 VAC (XLS140-2); 240 VAC (XLS140-2E).
- Displays battery current/voltage on panel (with display).

FlashScan, Exclusive World-Leading Detector Protocol

At the heart of the XLS140-2 is a set of detection devices and device protocol — FlashScan (U.S. Patent 5,539,389). FlashScan is an all-digital protocol that gives superior precision and high noise immunity.

In addition to providing quick identification of an active input device, this new protocol can also activate many output devices in a fraction of the time required by competitive protocols. This high speed also allows the XLS140-2 to have the



largest device per loop capacity in the industry — 318 points — yet every input and output device is sampled in less than two seconds. The microprocessor-based FlashScan detectors have bicolor LEDs that can be coded to provide diagnostic information, such as device address during Walk Test.

Intelligent Sensing

Intelligent sensing is a set of software algorithms that provides the XLS140-2 with industry-leading smoke detection capability. These complex algorithms require many calculations on each reading of each detector, and are made possible by the high-speed microcomputer used by the XLS140-2.

Drift Compensation and Smoothing: Drift compensation allows the detector to retain its original ability to detect actual smoke, and resist false alarms, even as dirt accumulates. It reduces maintenance requirements by allowing the system to automatically perform the periodic sensitivity measurements required by NFPA 72. Smoothing filters are also provided by software to remove transient noise signals, such as those caused by electrical interference.

Maintenance Warnings: When the drift compensation performed for a detector reaches a certain level, the performance of the detector may be compromised, and special warnings are given. There are three warning levels: (1) Low Chamber value; (2) Maintenance Alert, indicative of dust accumulation that is near but below the allowed limit; (3) Maintenance Urgent, indicative of dust accumulation above the allowed limit.

Sensitivity Adjust: Nine sensitivity levels are provided for alarm detection. These levels can be set manually, or can change automatically between day and night. Nine levels of pre-alarm sensitivity can also be selected, based on predetermined levels of alarm. Pre-alarm operation can be latching or self-restoring, and can be used to activate special control functions.

Self-Optimizing Pre-Alarm: Each detector may be set for "Self-Optimizing" pre-alarm. In this special mode, the detector "learns" its normal environment, measuring the peak analog readings over a long period of time, and setting the pre-alarm level just above these normal peaks.

Cooperating Multi-Detector Sensing: A patented feature of intelligent sensing is the ability of a smoke sensor to consider readings from nearby sensors in making alarm or pre-alarm decisions. Without statistical sacrifice in the ability to resist false alarms, it allows a sensor to increase its sensitivity to actual smoke by a factor of almost two to one.

Field Programming Options

Autoprogram. This timesaving feature is a special software routine. The FACP "learns" what devices are physically connected and automatically loads them in the program with default values for all parameters. Requiring less than one minute to run, this routine allows the user to have almost immediate fire protection in a new installation, even if only a portion of the detectors are installed.

Keypad Program Edit (with KDM-R2) The XLS140-2 has the exclusive feature of the product line of program creation and editing capability from the front panel keypad, ***while continuing to provide fire protection***. The architecture of the XLS140-2 software is such that each point entry carries its own program, including control-by-event links to other points. This allows the program to be entered with independent per-point segments, while the XLS140-2 simultaneously monitors other (already installed) points for alarm conditions.

VeriFire Tools is an offline programming and test utility that can greatly reduce installation programming time, and increase confidence in the site-specific software. It is Windows®-based and provides technologically advanced capabilities to aid the installer. The installer may create the entire program for the XLS140-2 in the comfort of the office, test it, store a backup file, then bring it to the site and download from a laptop into the panel.

Placement of Equipment in Chassis and Cabinet

The following guidelines outline the XLS140-2's flexible system design.

Rows: The first row of equipment in the cabinet mounts in the chassis shipped with the CPU. Mount the second, third, or fourth rows of equipment in a CHS4 series chassis or, for Digital Voice Command products, in **CA-1** or **CA-2**. (For XLS-DVC and DAA2 components see XLS-DVC Manual; for DVC-AO applications, see *AA Series Installation Manual*).

Wiring: When designing the cabinet layout, consider separation of power-limited and non-power-limited wiring as discussed in the *XLS140-2 Installation Manual*.

Positions: A chassis offers four basic side-by-side positions for components; the number of modules that can be mounted in each position depends on the chassis model and the size of the individual module. There are a variety of standoffs and hardware items available for different combinations and configurations of components.

It is critical that all mounting holes of the XLS140-2 are secured with a screw or standoff to ensure continuity of Earth Ground.

Layers: The CPU's chassis accepts four layers of equipment, including the control panel. The **XLS140-CPU2** fills three positions (left to right) in the first-installed layer (the back of the chassis); its integral power supply occupies the center two positions in the next two layers; the optional display occupies (the left) two positions at the front, flush with the door. Some equipment, such as the **XLS-NCA2**, may be mounted in the dress panel directly in front of the control panel. The XLS-NCA2 can be used as a primary display for the XLS140-2 (use NCA/640-2-KIT) by directly connecting their network ports (required in Canadian stand-alone applications); see XLS-NCA2 data sheet for mounting options *(74-4045)*.

Expansion: Installing an **LEM-320** Loop Expander Module adds a second SLC loop to the control panel. The LEM-320 is mounted onto the XLS140-CPU2, occupying the middle-right, second (back) slot on the chassis.

Networking: If networking two or more control panels, each unit requires a Network Control Moduleor High-Speed Network Control Module(see "Network Options" on page 6). These modules can be installed in any option board position (see manual), and additional option boards can be mounted in front of the network control modules.

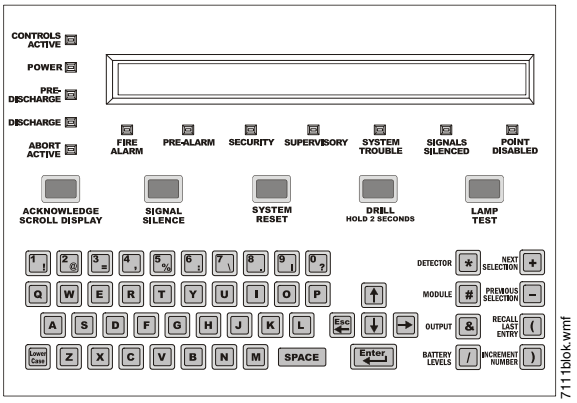
KDM-R2 Controls and Indicators

Program Keypad: QWERTY type *(keyboard layout, see figure)*.

12 LED indicators: Power; Fire Alarm; Pre-Alarm; Security; Supervisory; System Trouble; Signals Silenced; Points Disabled; Control Active; Abort; Pre-Discharge; Discharge.

Keypad Switch Controls: Acknowledge/Scroll Display; Signal Silence; Drill; System Reset; Lamp Test.

LCD Display: 80 characters (2 x 40) with long-life LED backlight.



Configuration Guidelines

Stand-alone and network systems require a main display. On single-CPU systems (one XLS140-CPU2/-CPU2E), display options are the KDM-R2 or the XLS-NCA2. On network systems (two or more networked fire panel nodes), at least one XLS-NCA2 *is required. Other options listed as follows:*

KDM-R2: 80-character backlit LCD display with QWERTY programming and control keypad. Order two BMP-1 blank modules and DP-DISP2 mounting plate separately. *Requires top row of a cabinet. Required for each stand-alone 80-character display system. The KDM-R2 may mount in network nodes to display "local" node information as long as at least one XLS-NCA2 is on the system to display network information.*

XLS-NCA2: Network Control Annunciator, 640 characters. On single *XLS140-CPU2/-CPU2E* systems, the optional XLS-NCA2 can be used as the Primary Display for the panel and connects directly to the *XLS140-CPU2/-CPU2E*. On network systems (two or more networked fire panel nodes), one network display (XLS-NCA2) is required for every system. On network systems, the XLS-NCA2 connects to (and requires) a standard Network Control Module or High-Speed Network Control Module. Mounts in a row of FACP node or in two annunciator positions. Mounting options include the DP-DISP2, ADP-4B, or in an annunciator box, such as the XLS-ABS-2D. In CAB-4 top-row applications, a DP-DISP2 and two BMP-1 blank modules are required for mounting. Required for XLS140-2 applications employing the XLS-DVC-EM with DAL devices. *See 74-4045.*

XLS140-CPU2: Central processing unit with integral 3.0 amp (6.0 A in alarm) power supply for an XLS140-2 system. Includes CPU factory-mounted on a chassis; one Signaling Line Circuit expandable to two; installation, programming and operating manuals. *Order one per system or as necessary (up to 103 network nodes) on a network system.*

XLS140-CPU2E: Same as XLS140-CPU2 but requires 240 VAC, 1.5 amp, (3.0 A in alarm).

NCA/640-2-KIT: Bracket installation kit required to mount XLS-NCA2 to the XLS140-CPU2/-640CPU2E's standard chassis.

DP-DISP2: Dress panel for top row in cabinet with XLS140-CPU2/CPU2E installed.

ADP2-640: Dress panel for middle rows with XLS140-CPU2/CPU2E.

BMP-1: Blank module for unused module positions.

XLS-BP2-4: Battery plate, required.

AUDIO OPTIONS

XLS-DVC-EM: Digital Voice Command, digital audio processor with message storage for up to 32 minutes of standard quality (4 minutes at high quality) digital audio. Capable of playing up to eight simultaneous messages when used with DAL devices. *See 74-4033.*

DVC-KD: Keypad for local annunciation and controls; status LEDs and 24 user-programmable buttons.*See 74-4033.*

DVC-AO: DVC Analog Output board provides four analog output circuits for use with AA Series amplifiers. Four-channel operation supported.*See 74-4033.*

DAA2-5025: 50W, 25 Vrms Digital Audio Amplifier assembly with power supply; includes chassis. *See* 74-5137.

DAA2-5070: 50W, 70.7 Vrms Digital Audio Amplifier assembly with power supply; includes chassis. *See* 74-5137.

DAA2-7525: 75W, 25 Vrms digital audio amplifier assembly with power supply; includes chassis. *See* 74-5137.

DAX-3525: 35W, 25 Vrms Digital Audio Amplifier assembly with power supply, includes chassis. *See* 74-5138.

DAX-3570: 35W, 70.7 Vrms Digital Audio Amplifier assembly with power supply, includes chassis. *See* 74-5138.

DAX-5025: 50W, 25 Vrms Digital Audio Amplifier assembly with power supply, includes chassis. *See* 74-5138.

DAX-5070: 50W, 70.7 Vrms Digital Audio Amplifier assembly with power supply, includes chassis. *See* 74-5138.

CHS-BH1: Battery chassis; holds two 12.0 AH batteries. Mounts one the left side of DAA2 chassis. See 74-4032.

CA-1: Chassis, occupies one tier of a XLS-CAB-4 Series enclosure. The left side accommodates one XLS-DVC and a DVC-KD (optional); and the right side houses a CMIC-1 microphone and its well (optional). *See 74-4033.*

CA-2: Chassis assembly, occupies two tiers of a XLS-CAB-4 Series enclosure. The left side accommodates one XLS-DVC mounted on a half-chassis and one XLS-NCA2 or BP-CA2 mounted on a half-chassis. The right side houses a microphone/handset well. The CA-2 assembly includes CMIC-1 microphone. XLS-ADDR Series doors with two-tier visibility are available for use with the CA-2 configuration: XLS-ADDR-B4, XLS-ADDR-C4, XLS-ADDR-D4 (below).

CFFT-1: Chassis to mount firefighters telephone and one ACS annunciator in a CAB-4 row. Includes TELH-1 firefighters handset for the XLS-DVC, chassis, phone well and mounting hardware. Order DP-CFFT dress panel separately.

DP-CFFT: CFFT-1 dress panel. Requires BMP-1 if no ACS annunciator is installed.

TELH-1: Firefighter's Telephone Handset for use with the XLS-DVC when mounted in the CA-2 chassis. *See 74-4033.*

XLS-ADDR-B4: Two-tier-sized door designed for use with the CA-2 chassis configuration. XLS-ADDR Series doors are similar to XLS-CAB-4 Series "DR" doors, but a clear window space exposes the top two tiers of the XLS-CAB-4 enclosure. Use an SBB-B4 backbox with the XLS-ADDR-B4. *See 74-4033, 85-3002.*

XLS-ADDR-C4: Three-tier-sized door, designed for use with the CA-2 chassis configuration. XLS-ADDR Series doors are similar to XLS-CAB-4 Series "DR" doors, but a clear window space exposes the top two tiers of the XLS-CAB-4 enclosure. Use an SBB-C4 backbox with the XLS-ADDR-C4. *See 74-4033, 85-3002.*

XLS-ADDR-D4: Four-tier-sized door designed for use with the CA-2 chassis configuration. XLS-ADDR Series doors are similar to XLS-CAB-4 Series "DR" doors, but a clear window space exposes the top two tiers of the XLS-CAB-4 enclosure. Use an

SBB-D4 backbox with the XLS-ADDR-D4. *See 74-4033, 85-3002.*

***NOTE:** Use XLS-ADDR-B4/C4/D4 when CA-2 chassis is installed in top two rows with XLS-NCA2 or BP-CA2. Use standard door when CA-2 is not installed in top two rows.*

DPA-1: Dress panel, used with the CA-1 chassis when configured with a XLS-DVC, DVC-KD, and CMIC-1. *See 74-4033.*

DPA-2B: Dress panel used with CA-2 chassis assembly.

VP-2B: Dress panel, required when CA-2 chassis is installed in the top two cabinet rows.

DPA-1A4: Dress panel, used with the CA-1 chassis when the CMIC-1 is not used. Provides mounting options on right two bays for two ACS annunciators, or for blank plates. *See 74-4033.*

BP-CA2: Blank plate for CA-2 chassis.

CMIC-1: Optional microphone and microphone well assembly used with the CA-1 chassis.

RM-1/RM-1SA: Remote microphone assemblies, mount on ADP-4 (RM-1) dress panel or CAB-RM/-RMR (RM-1SA) stand-alone cabinets. *See 85-3053.*

TC810T1000: Firephone Control Module connects a remote firefighter telephone to a centralized telephone console. Reports status to panel. Wiring to jacks and handsets is supervised.

AA-30: Audio Amplifier, 30 watts. Switch-mode power. Includes amplifier and audio input supervision, backup input, and automatic switchover, power supply, cables. *See 85-3044.*

AA-120/AA-100: Audio Amplifier provides up to 120 watts of 25 VRMS audio power for the XLS140-2. The amplifier contains an integral chassis for mounting to a CAB-B4, -C4, or -D4 backbox (consumes one row). Switch-mode power. Includes audio input and amplified output supervision, backup input, and automatic switchover to backup tone. Order the AA-100 for 70.7 VRMS systems and 100 watts of power. *See 85-3044.*

POWER SUPPLIES, STANDARD CABINETS

ACPS-610: 6.0 or 10 Amp addressable charging power supply. See 85-3109.

APS2-6R: Auxiliary power supply. Provides two 24 VDC circuits, each rated for 3.0 Amps in alarm and 2.0 Amps continuous. Commonly used for the operation of peripheral audio/visual devices or any other application requiring 24VDC. *See 85-3050.*

HPF24S6/8: Remote six-amp and eight-amp power supplies with battery charger. *See DH-1061*

CHS-4: Chassis for mounting up to four APS-6Rs.

CHS-4L: Low-profile four-position Chassis. Mounts two AA-30 amplifiers or one AMG-E and one AA-30.

DP-1B: Blank dress panel. Provides dead-front panel for unused tiers; covers DAA2-series or AA-series amplifier.

XLS-CAB-4 Series Enclosure: XLS140-2(E) mounts in a standard CAB-4 Series enclosure. Backbox and door ordered seperately; requires XLS-BP2-4 battery plate. A trim ring option is available for semi-flush mounting. *See 85-3002.*

EQ Series Cabinets: EQ series cabinets will house amplifiers, power supplies, battery chargers and control modules. EQ cabinets are available in three sizes, “B” through “D”. *See 85-3110.*

COMPATIBLE DEVICES, EIA-232 PORTS

XLS-PRN-6: 80-column printer. *See 85-3073.*

VS4095/5: Printer, 40-column, 24V. Mounted in external backbox.

COMPATIBLE DEVICES, EIA-485 PORTS

ACS: Annunciator Control Modules ACM/AEM-24AT and ACM/AEM-48A; remote serial annunciator/control systems. *See 85-3004.*

ACM-24AT: ACS annunciator – up to 96 points of annunciation with Alarm or Active LED, Trouble LED, and switch per circuit. Active/Alarm LEDs can be programmed (by powered-up switch selection) by point to be red, green, or yellow; the Trouble LED is always yellow. *See 85-3004.*

AEM-24AT: Same LED and switch capabilities as ACM-24AT, expands the ACM-24AT to 48, 72, or 96 points. *See 85-3004.*

ACM-48A: ACS annunciator – up to 96 points of annunciation with Alarm or Active LED per circuit. Active/Alarm LEDs can be programmed (by powered-up switch selection) in groups of 24 to be red, green, or yellow. Expandable to 96 points with one AEM-48A. *See 85-3004.*

AEM-48A: Same LED capabilities as ACM-48A, expands the ACM-48A to 96 points. *See 85-3004.*

XLS-LCD-80/XLS-FDU-80: 80-character, backlit LCD display. Mounts up to 6,000 ft. (1828.8 m) from panel. Up to 32 per FACP. *See XLS-FDU-80 (85-3066).*

LDM: Lamp Driver Modules LDM-32, LDM-E32, and LDM-R32; remote custom graphic driver modules. *See LDM data sheet 85-3042.*

ACM-8R: Remote Relay Module with eight Form-C contacts. Can be located up to 6,000 ft. (1828.8 m) from panel on four wires. *See ACM-8R data sheet 85-3046.*

SCS: Smoke control stations SCS-8, SCE-8, with lamp drivers SCS-8L, SCE-8L; eight (expandable to 16) circuits. *See SCS data sheet 85-3048.*

TM-4: Transmitter Module. Includes three reverse-polarity circuits and one municipal box circuit. Mounts in panel module position (single-address-style) or in CHS2-M2 position. *See 85-3005.*

UDACT: Universal Digital Alarm Communicator Transmitter, 636 channel.

UZC-256: Programmable Universal Zone Coder provides positive non-interfering successive zone coding. Microprocessor-controlled, field-programmable from IBM®-compatible PCs (requires optional programming kit). Up to 256 programmable codes. Mounts in **BB-UZC** or other compatible chassis (purchased separately). *See 85-3045.*

COMPATIBLE INTELLIGENT DEVICES

BEAMHK: Heating kit for transmitter/receiver unit of TC847A1004 below. *See 74-3940.*

BEAMHKR: Heating kit for use with the reflector of TC847A1004 below. *See 74-3940.*

BEAMLRK: Long-range accessory kit, TC847A1004 below. *See 74-3940.*

BEAMMKR: Multi-mount kit, TC847A1004 below. *See 74-3940.*

BEAMSMK: Surface-mount kit, TC847A1004 below. *See 74-3940.*

TC847A1004: Intelligent beam smoke detector with integral sensitivity test. *See 74-3940.*

TC840C1000: FlashScan COPTIR Advanced Multi-Criteria Detector. *See 74-5070.*

TC807B1059: Low-profile FlashScan ionization detector. *See 85-3089.*

TC806B1076: Low-profile FlashScan photoelectric detector. *See 74-1941.*

TC806DNR: TC806B1076 plus dual electronic thermistors that add 135°F (57°C) fixed-temperature thermal sensing. *See 74-1941.*

TC806B1084: TC806B1076, remote-test capable. For use with DNR(W). *See 74-1941.*

TC808B1041: FlashScan thermal detector 135°F (57°C). *See 74-3354.*

TC808B1058: FlashScan thermal detector 135°F (57°C) with rate-of-rise. *See 74-3354.*

TC808B1066: FlashScan 190°F (88°C) high-temperature thermal detector. *See 74-3354.*

DNR: InnovairFlex low-flow non-relay duct-detector housing (order TC806DNR separately). Replaces TC806D1049/ TC806D1056. *See 74-4076.*

DNRW: Same as above with NEMA-4 rating, watertight. *See 74-4076.*

TC840M1021: FlashScan Acclimate low-profile multi-sensor detector. *See 74-3387.*

TC846A1013: FlashScan Pinnacle laser photo detector. See *74-3373.*

TC846A1005: Low-profile Pinnacle laser photo detector.

B224RB: Low-profile relay base. *See 85-3043.*

14507371-005: Isolator base for low-profile detectors. *See 85-3043.*

14507371-001: Low-profile base. Standard U.S. style. *See 85-3043.*

14506414-002: European-style, 4" (10.16 cm) base. *See 85-3043.*

B200S: Intelligent addressable sounder base, capable of producing a variety of tone patterns including ANSI Temporal 3. Compatible with sychronization protocol. *See 85-3043.*

B200SR: Intelligent sounder base, Temporal 3 or Continuous tone. *See 85-3043.*

TC809A1059: FlashScan monitor module.

TC809D1004: FlashScan dual monitor module. *See 74-3993.*

TC841A1000: FlashScan two-wire detector monitor module. *See 74-3993.*

TC809B1008: FlashScan miniature monitor module. *See 74-3993.*

TC810S1000: FlashScan releasing control module. *See 74-5068.*

TC810N1013: FlashScan NAC control module. *See 74-3995.*

TC810R1024: FlashScan relay module. *See 74-3995.*

S464G1007: Manual pull station, addressable (CLIP/FlashScan). *See 74-3365.*

S464H1006: Manual pull station, addressable (Eclipse). *See 74-4014.*

TC811A1006: Isolator module. *See 74-4555.*

XP6-C: FlashScan six-circuit supervised control module. *See 85-3069.*

XP6-MA: FlashScan six-zone interface module; connects intelligent alarm system to two-wire conventional detection zone. *See 85-3070.*

XP6-R: FlashScan six-relay (Form-C) control module. *See 85-3071.*

XP10-M: FlashScan ten-input monitor module. *See 85-3068.*

NETWORK OPTIONS

NCM-W, NCM-F: Network Communications Modules. Wire and multi-mode fiber versions available. One required for each network node (XLS3000, XLS140, XLS140-2, XLS-DVC, BACNET GATEWAY, FNA) on XLS-NET. Mounts in a standard chassis position or on a BMP-1 plate. *See 85-3007*.

HS-NCM-W/MF/SF/WMF/WSF/MFSF: High-speed network communications modules. Wire, single-mode fiber, multi-mode fiber, and media conversion models are available. *See 74-4082.*

RPT-W, RPT-F, RPT-WF: Repeater board with wire connection (RPT-W), fiber connection (RPT-F), or allowing a change in media type between wire and fiber (RPT-WF). *See 85-3007.*

FNA: Fire Network Adapter. Connects to an XLS•NET network to provide a TCP/IP interface to an EBI.

XLS-GW-EM-3: XLS•NET Gateway, embedded. *See 74-5084 .*

OTHER OPTIONS

IPDACT-2/2UD Internet Monitoring Module: Mounts in IPENC enclosure. Connects to primary and secondary DACT telephone output ports for internet communications over customer-provided ethernet connection. Requires compatible Teldat VisorALARM Central Station Receiver. Can use DHCP or static IP. *See DN-60408.*

IPCHSKIT: IP Communicator Chassis Mounting Kit. For mounting an IPDACT-2/2UD onto the panel chassis or CHS-4 series chassis. Use IPENC for external mounting applications.

IPENC: External enclosure for IPDACT, includes IPBRKT mounting bracket; Red. For Black order IPENC-B.

IPSPLT: Y-adaptor option allow connection of both panel dialer outputs to one IPDACT-2/2UD cable input.

DPI-232: Direct Panel Interface, specialized modem for extending serial data links to remotely located FACPs and/or peripherals. *See 85-3006.*

LEM-320: Loop Expander Module. Expands each 140-2 to two Signaling Line Circuits.

BAT Series: Batteries. XLS140-2 utilizes two 12 volt, 18 to 200 AH batteries. This series of products replaces the previous PS Series.

XLS-LBB: Battery Box (required for batteries larger than 25 AH).

XLS-LBBR: Same as above but red.

411: Slave digital alarm communicator. See 85-3063.

BB-UZC: Backbox for housing the UZC-256 in applications where the UZC-256 will not fit in panel enclosure. Black; for red, order BB-UZC-R.

SYSTEM SPECIFICATIONS

System Capacity

- Intelligent Signaling Line Circuits .....1 expandable to 2
- Intelligent detectors .....159 per loop
- Addressable monitor/control modules .....159 per loop
- Programmable software zones 99
- Special programming zones 14
- LCD annunciators per XLS140-CPU2/-CPU2E and XLS-NCA2 *(observe power)* 32
- ACS annunciators per XLS140-CPU2/-CPU2E.....32 addresses x 64 points
- ACS annunciators per XLS-NCA2.....32 addresses x 64 or 96 points

NOTE: *The* XLS-NCA2 *supports up to 96 annunciator address points per ACM-24/48.*

Specifications

- Primary input power, **XLS140-CPU2 board:** 120 VAC, 50/60 Hz, 3.0 A. **XLS140-CPU2E board:** 220/240 VAC, 50/60 Hz, 1.5 A.
- Total output 24 V power: 6.0 A in alarm.

NOTE: *The power supply has a total of 6.0 Amps of available power. This is shared by all internal circuits.*

- Standard notification circuits (4): 1.5 A each.
- Resettable regulated 24V power: 1.25 A.
- Two non-resettable regulated 24V power outputs:
  – 1.25 A
  – 0.50 A.
- Non-resettable 5V power: 0.15 A.
- Battery charger range: 18 AH – 200 AH. Use separate cabinet for batteries over 25 AH.
- Float rate: 27.6 V.

Cabinet Specifications

Systems can be installed in CAB-4 Series cabinets *(four sizes with various door options, see 85-3002)*. Requires XLS-BP2-4 Battery Plate.

Temperature and Humidity Ranges

This system meets NFPA requirements for operation at 0 – 49°C/32 – 120°F and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15 – 27°C/60 – 80°F.

Agency Listings and Approvals

The listings and approvals below apply to the basic XLS140-2 control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL Listed:** S470
- **ULC Listed:** S7564, S7566
- **FM Approved**
- **MEA:** 128-07-E Vol. 3
- **FDNY:** COA#6039
- **CSFM:** 7165-1130:0265

Standards

The XLS140-2 complies with the following UL Standards and NFPA 72 Fire Alarm Systems requirements:

- **UL 864, 9th Edition** (Fire).
- **UL 1076** (Burglary).
- **LOCAL** (Automatic, Manual, Waterflow and Sprinkler Supervisory).
- **AUXILIARY** (Automatic, Manual and Waterflow) (requires TM-4).
- **REMOTE STATION** (Automatic, Manual, Waterflow and Sprinkler Supervisory) (requires TM-4).
- **PROPRIETARY** (Automatic, Manual and Waterflow). *Not applicable for FM.*
- **EMERGENCY VOICE/ALARM**.
- **OT, PSDN** (Other Technologies, Packet-switched Data Network)

Automation and Control Solutions

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Golden Valley, MN 55422
www.honeywell.com

Honeywell Limited-Honeywell Limitée
35 Dynamic Drive
Scarborough, Ontario M1V 4Z9

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