

Features

The is an addressable 50 point fire alarm control unit (FACU) that is suitable for both new and retrofit applications.

UI

- Eight programmable LEDs
- A 4 x 40 character display that shows the following key FACU information:
 - Alarm
 - Supervisory
 - Trouble
 - CO/Priority 2
 - Ground fault
 - System normal
 - Silence
 - Acknowledge
 - Walk test

MX initiating circuit

- Connect up to 50 addressable initiating devices using innovative MX technology on a single loop
- Smoke detectors are UL268 7th Edition listed
- One amp of current for each MX loop for powering sounder bases and other devices
- Class B or Class A wiring
- UL listed to 864
- Hard or soft addressing of initiating devices

Compatible devices

- Smoke sensors, heat sensors, combination photo/heat
- Photo/heat/CO triple sensor
- Loop powered sounder bases
- Duct detector. *Available in the future*
- Mini IAM, Relay IAM, Monitor ZAM
- Single action, dual action break glass, and double action pull stations.
- Line isolator module

Optional modules

- City circuit module with disconnect switch
- GSM 4G/LTE Cellular modem with antenna extension kit options
- Connected Services Gateway
- Available NAC extender with 4 Class B NACs and 8 A power supply; 120 VAC or 240 VAC versions

Notification appliance circuit

- Two NACs, 3 A maximum for each
- Use TrueAlert non-addressable notification appliances

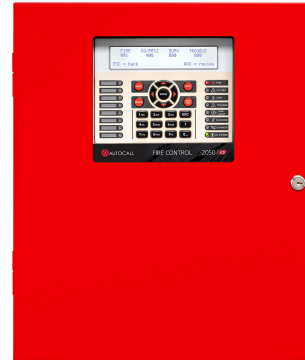
General mechanical

- Red cabinet

FACU listings reference

- UL 864 - Control Units, Systems (UOJZ)
- UL 2017 - Emergency Alarm Control Units (CO detection), FSZI

Figure 1: FACU front view



Addressing options

- DIP switch
- Soft addressing
- QR code

Remote LCD annunciator

- A maximum of eight for each FACU
- 4 x 40 character display
- Alarm, trouble, and supervisory LEDs
- Acknowledge, Silence, and Reset switches
- Up, Down, and Enter keys for quick menu access
- Key lock switch to prevent tampering

Communication protocols

IP Communicator

The IP Communicator provides the following specific building event information:

- Communicates point status changes, phone line status, and other off normal information to the central station and enterprise server
- Reports up to ten events through a call

The IP Communicator format is CID. You can configure the Communicator as either Per Point or Event Reporting Type.

Central station communication

Central station supported interfaces include the following:

- Dual Line Phone Digital Alarm Communicator Transmitter (DACT) (ADEMCO Contact ID)
- 10/100 Base-T Ethernet (Fibro protocol)
- Cellular (Fibro protocol)

Standards and codes

You can configure central station reporting with one path, or dual paths with a primary path and a secondary path. You can configure paths to use any of the external connections, telephone line, cellular or LAN Ethernet connections.

Antenna extension kits are available for installations with inadequate cellular signal.

Connected Services Gateway

The Connected Services Gateway (CSG) is an all-in-one interface card that supports central station communication and enables SafeLINC Cloud Services.

The CSG provides wired or wireless central station communication through LAN Ethernet, cellular, and plain old telephone service (POTS)

The CSG enables authorized users to access their managed FACUS remotely through SafeLINC web or mobile app

Operator interface

The user interface is a 4 x 40 backlit LCD screen with LEDs and keypad, see [screens](#). With the locking door closed, the glass window allows viewing of the display status LEDs.

The LED indicators display the general category of activity and the LCD displays more detail. Authorized users can unlock the door to gain access to the control functions and scroll through the display for additional detail.

Operator interface and software features

- A logical, menu-driven touchscreen display for convenient access to detailed operator information
- Password access control
- Multiple automatic and manual diagnostics for maintenance reduction
- Alarm and Trouble History Logs are available for viewing from the display or downloaded to a service computer
- WALKTEST silent or audible system test performs an automatic self-resetting test cycle and supports up to eight WALKTEST groups

screens

System normal



Fire



Supervisory



Trouble



Menu



CO/PRI2



Mechanical description

- Locking door with polycarbonate window
- Modules are power-limited except as noted, such as relay modules
- The bottom battery compartment accepts two batteries, up to 18 Ah, to be mounted within the cabinet without interfering with module

space. Charger capacity is up to 25 Ah. You can use batteries up to 25 Ah in a separate battery cabinet. For information about batteries greater than 18 Ah and external battery cabinets, see [Module and accessories selection information](#)

Product selection

Table 1: FACU product selection

Model	Color	Description	Standby	Alarm
	Red	FACU with 4 x 40 LCD display, single MX addressable initiating loop with 50 devices maximum and 2 conventional NAC circuits	175 mA	215 mA

Table 2: Add-ons and accessories

PID	Device description	Device type
	Trim Ring for Semi-Flush Mounting	Accessories
	Connected Services Gateway and IP Communicator Module	Add-on module
	Gateway Enclosure, red	Gateway enclosure
	Communication cable for external gateway	Communication cable
	City Circuit Module with disconnect switch for addressable panels, with chassis, maximum one per panel.	Add-on module
	LCD Annunciator, a maximum of eight for each	Add-on module
	Circuit Protection, isolated loop circuit protector (ILCP). See note.	Surge protector
	Circuit Protection, overvoltage protector. See note.	Surge protector
	DACT cable, 14 ft (4.3 m) long. RJ45 plug at one end, spade lugs at the other. Order one for each phone line connection required.	Communication cable

Note: Required if wiring is routed outside the building. For NAC, DACT, Annunciator, City circuits, and Aux Power

Table 3: Cellular modem and extension kits

PID	Device description
	GSM 4G/LTE Cellular module kit
	15 ft (4.57 m) antenna extension kit
	25 ft (7.62 m) antenna extension kit
	50 ft (15.24 m) antenna extension kit

Table 4: MX sensors

PID	Device description
	MX Photo Sensor with Address Switch
	MX Photo/Heat Sensor with Address Switch
	MX Heat Sensor with Address Switch
	MX Triple Sensor with Address Switch (future availability)

Table 5: Devices

PID	Device description
	Line Isolator Module, for MX
	Mini IAM, with DIP switch
	Relay IAM, with DIP switch
	Monitor ZAM, with DIP switch
	Pullstation Single Action, with DIP switch
	Pullstation, DA Break Glass, with DIP switch
	Double Action Station, push type

Table 6: Bases

PID	Device description	Device type
	4 in. MX Digital Loop LP Sounder Base, 85dB at 10 ft, existing	Sounder base
	5 in. Addressable Sensor Base with remote LED output, existing	Standard base
	4 in. Detector Base	Standard base
	6 in. Adaptor for 5 in. Base. Also works on a 4 in. octagonal box.	Adaptor for base
	5 in. Adaptor for 5210	Adaptor for base
	6 in. Adaptor for 5210	Adaptor for base

Table 7: Addressable MX sensors

PID	Device description	Compatible bases			
		4 in. standard	4 in. sounder, non-addressable	5 in. standard, existing	6 in. adaptor for 5 in. base
	MX Photo Sensor with Address Switch				
	MX Photo/Heat Sensor with Address Switch				
	MX Heat Sensor with Address Switch				
	MX Triple Sensor with Address Switch (future availability)				

Table 8: Duct housing

PID	Device description
	Duct sensor housing only, addressable. For use with , order separately. <i>Available in the future</i>

Table 9: Sampling tubes

PID	Device description
STS-2.5	Sampling tube 6 in. to 30 in. (152 mm to 762 mm) duct width. <i>Available in the future</i>
STS-5.0	Sampling tube 30 in. to 60 in. (762 mm to 1,524 mm) duct width. <i>Available in the future</i>
STS-10.0	Sampling tube 60 in. to 120 in. (1,524 mm to 3,048 mm) duct width. <i>Available in the future</i>

Module and accessories selection information

Table 10: Field installed optional modules

SKU	Description	Supv.	Alarm
	LCD annunciator. A maximum of eight per panel.	40 mA	48 mA
	City Circuit Module with disconnect switch	30 mA	60 mA
	Connected Services Gateway with IP Communicator	125 mA	125 mA

Table 11: Batteries

SKU	Capacity	Battery mounting details
	7 Ah	12 V Batteries for cabinet mounting; select one battery model for each system standby requirements; order quantity of two; to be wired in series for 24 VDC
	10 Ah	
	12.7 Ah	
	18 Ah	
	25 Ah	Requires external battery cabinet, see Table 12

Table 12: Battery cabinets

SKU	Color	Capacity	Dimensions (H x W x D)	Description
	Beige	For up to 25 Ah batteries	13 1/2 in. x 16 1/4 in. x 5 3/4 in. (413 mm x 343 mm x 146 mm)	External battery cabinet without charger for mounting close-nipped to the fire alarm control unit cabinet; includes locking solid door. Use battery harness for a NAC power supply and harness for an IDNAC power supply. Battery harnesses are shipped with the FACU.

Table 13: Battery accessories

SKU	Description
	Battery Bracket Addressable, for seismic use

Additional NAC power

For additional NAC power, use the 4009 NAC Extender. Refer to datasheet S4009-0002 for additional information.

Table 14: NAC power accessories

PID	Description
	4009 IDNet NAC Extender with 4, Class B NACs and 8 A power supply. 120 VAC input, seismic tested, UL Listed
	4009 IDNet NAC Extender with 4, Class B NACs and 8 A power supply. 240 VAC input, UL Listed
	NAC Option Card. Adds four conventional NACs, one maximum
	Dual Class A adapter, for two NAC outputs, four maximum
	Semi-Flush Trim Kit, red trim

mounting and module location reference

Figure 2: board and cabinet, in.

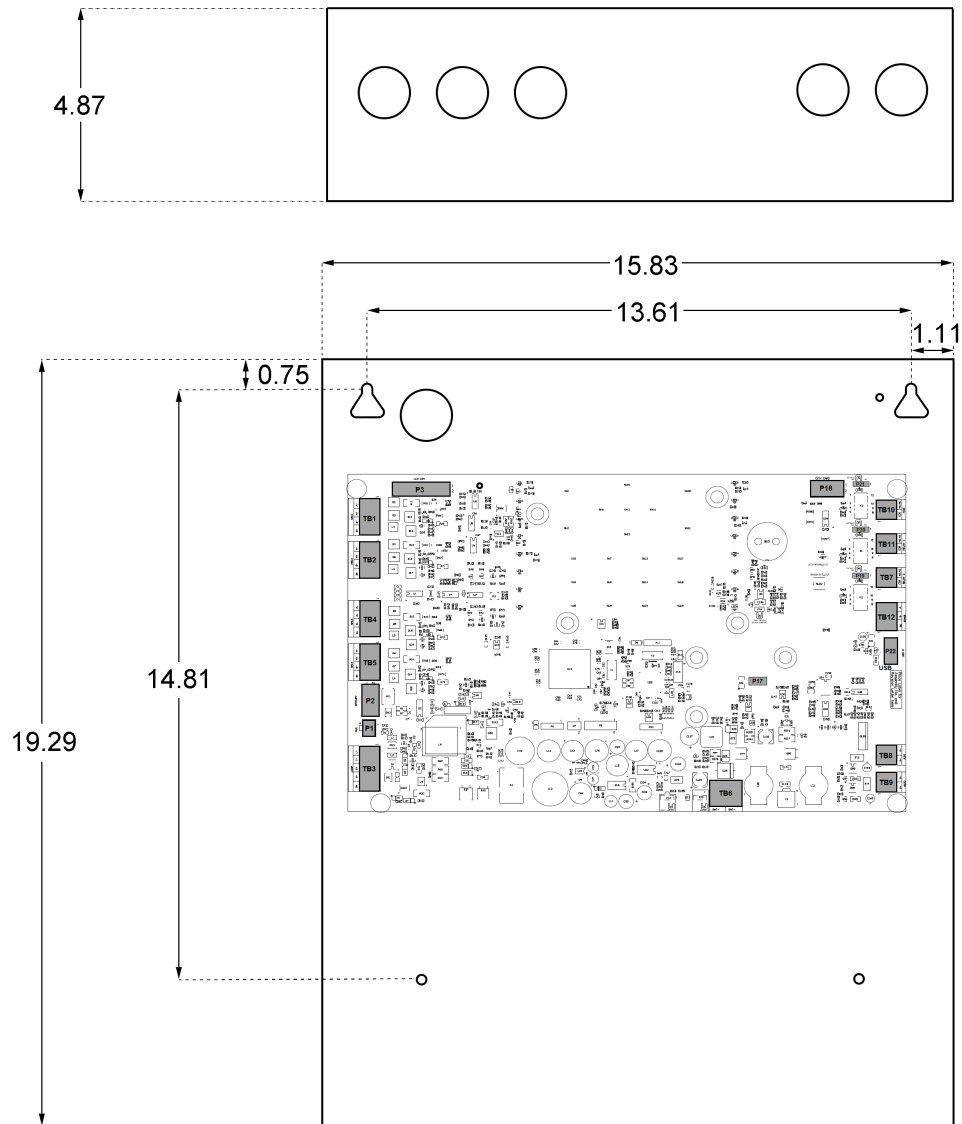


Figure 3: control unit board

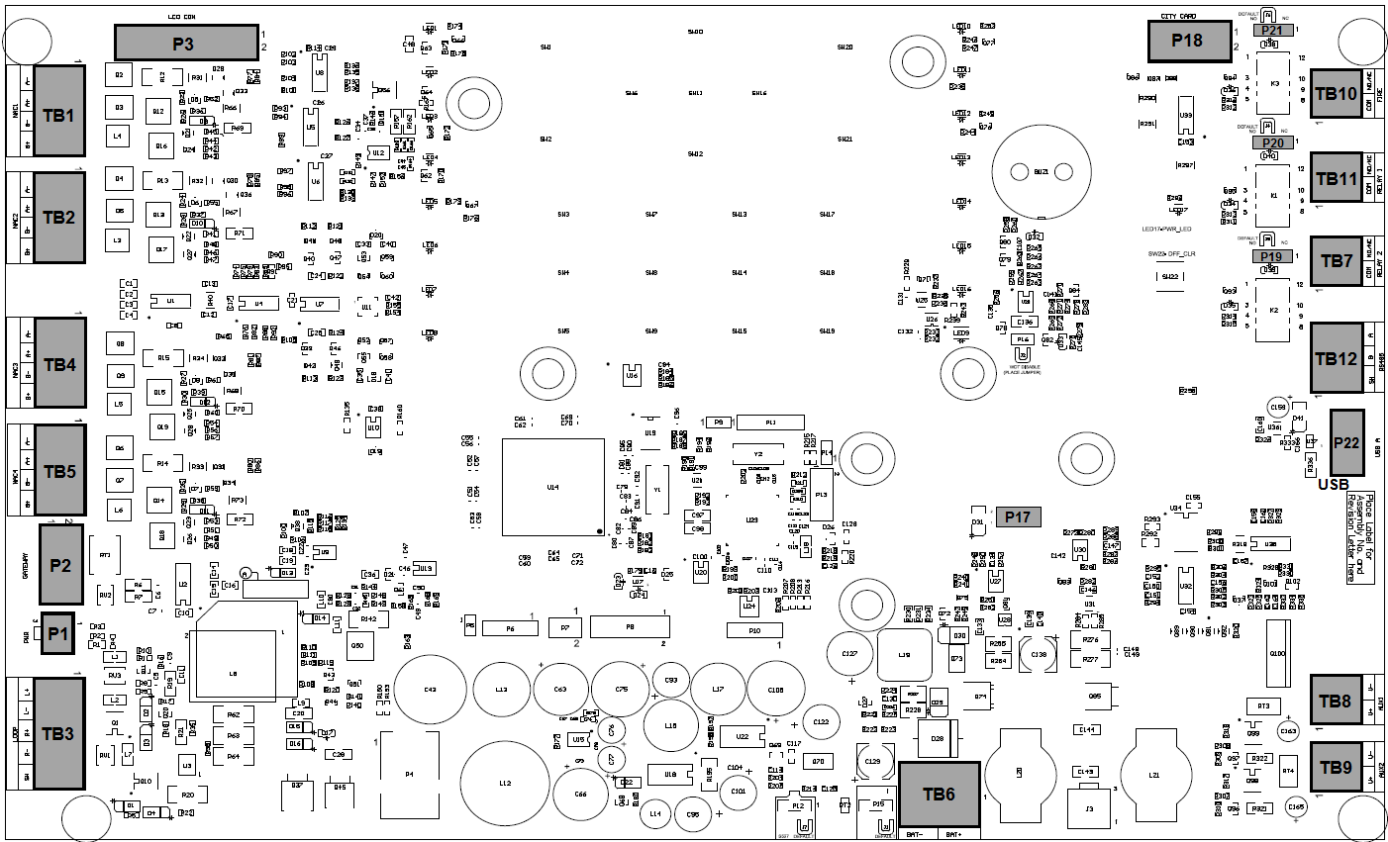


Table 15: Main components information

Identifier	Description	Identifier	Description	Identifier	Description
TB1	NAC1	TB7	Relay-3	P3	LCD display connector
TB2	NAC2	TB8	Aux-1 (Non-resettable power)	P17	RFID connector
TB3	MX Loop	TB9	Aux-2 (Resettable power)	P18	City Card connector
TB4	NAC3	TB10	Relay-1	P19	Jumper for Relay-3 setting
TB5	NAC4	TB11	Relay-2	P20	Jumper for Relay-2 setting
	The TB4 is not available in the control unit board	P1	Gateway module connector	P21	Jumper for Relay-1 setting
TB6	Battery terminal			P22	USB port
	The TB5 is not available in the control unit board	P2	Gateway module power connector		

General specifications

Table 16: General specifications

Specification		Rating	
AC input ratings	Input voltage	120 VAC, 50/60 Hz, 240 VAC, 50/60 Hz, Auto-select	
	Input current, standard	2 A maximum at 120 VAC input; 1 A maximum at 240 VAC input	
Power supply output ratings	Power supply output rating	6 A maximum at 24 VDC in alarm	
	Battery charger	Temperature compensated charger is rated for up to 25 Ah	
	Standby current	150mA	
Notification appliance circuits (NACs)		3 A maximum at 24 VDC, per circuit; available as Class A or Class B; Class B end-of-line resistor = 10 kohm, 1/2 W; Model (P/N 733-894) See note.	
Maximum load allowed on MX loop		945 mA at 40 V	
Annunciator Communications	Quantity supported	Up to eight annunciators	
	Wiring type	Twisted pair; 18 AWG (0.82 mm ²)	
	Bus-style wiring	Up to 4000 ft (1,219 m); 0.58 µF (580 nF) maximum capacitance; 35 ohm	
	Line matching resistor	Bus-style, connect one at FACU and one at end of line.	100 ohm, 1/2 W, , part number 733-974
		T-tap, connect one at FACU and one at farthest device.	
Suppression	Use Overvoltage Protectors where wiring leaves and enters a building, refer to data sheet		
Auxiliary power output	Aux 1 Aux 2	1 A maximum at 24 VDC is available at each auxiliary circuit. Total load on FACU power supply should be within 6 A	
Standard auxiliary relay outputs	Relay 1	Trouble operation	Contacts rated 24 VDC at 2 A, jumper selectable as N.O or N.C.
	Relay 2 and 3	Programmable operation	
Note: The NAC Class B circuit can additionally support 3.9 kohm, 4.7 kohm, 5.1 kohm, 5.6 kohm and 15 kohm values for end-of-line (EOL) resistors to accommodate retrofit applications.			

Additional product reference data sheets

Table 17: Additional product reference data sheets

Title	Document number
IDNet NAC Extender	
Mini-IAM (Individual Addressable Module) Model	
Individual Addressable Relay Module (Relay IAM) Model	
Addressable Manual Stations Single and Dual Action	
Electronic Horn, Free-Run or SmartSync™ Operation, Non-Addressable	
SmartSync™ Two-Wire Operation, Non-Addressable Mini-Horns	
SmartSync™ 2-Wire Operation, Non-Addressable Electronic Chime	
Non-Addressable Audible/Visible Notification Appliances for 4-Wire Operation (Horn/Strobe)	
Visible Notification Appliances with Synchronized Flash;Non-Addressable, SmartSync™ Operation Compatible	
SmartSync™ Operation Audible/Visible Notification with Horn and Synchronized Flash, Non-Addressable	
Weatherproof Notification Appliances (non-addressable) Wall Mount Visible Only (V/O) and Audible/Visible (A/V)	
Multi-Candela, High Intensity (non-addressable) Strobe and Horn/Strobe	
SmartSync™ Operation Audible/Visible Notification with Chime and Synchronized Flash, Non-Addressable	
Multi-Tone Horns; SmartSync™ Controlled or Free-run; with 520 Hz output, Non-Addressable	
Audible/Visible Notification Appliances; Multi-Tone FM Approved* Horn/Strobe with 520 Hz Output, Non-Addressable	

annunciators

Figure 4: LCD annunciator

