SFP-5UDC/SFP-10UDC

Five Zone Fire Alarm Control Panel
Ten Zone Fire Alarm Control Panel

NOTIFIER® by Honeywell

Conventional Fire Alarm Control Panels

General

The **SFP-5UDC** is a five-zone FACP (Fire Alarm Control Panel) and the **SFP-10UDC** is a ten-zone FACP. These control panels provide reliable fire signaling protection for small to medium-sized commercial, industrial, and institutional buildings. Both panels include built-in communicators for Central Station Service and remote upload/download.

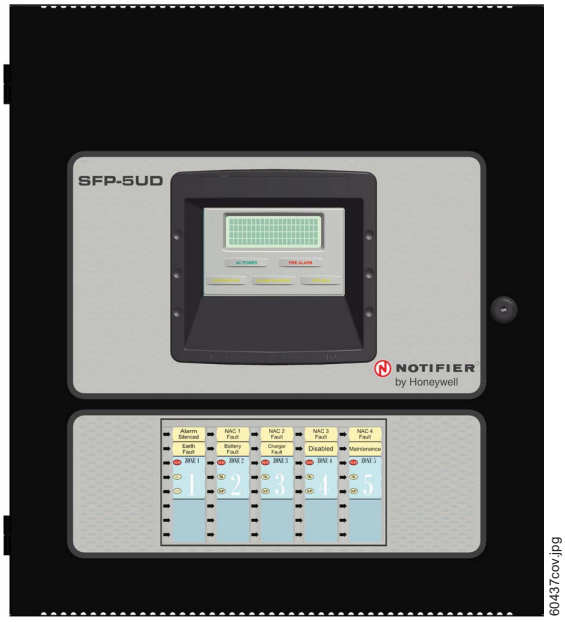
Each of these FACPs is compatible with System Sensor's microprocessor-based i^3 series detectors. These conventional smoke detectors can transmit a maintenance trouble signal to the FACP indicating the need for cleaning and a supervisory "freeze" signal when the ambient temperature falls below the detector rating. Additionally, both the SFP-5UDC and SFP-10UDC are compatible with conventional input devices such as two- and four-wire smoke detectors, pull stations, waterflow devices, tamper switches, and other normally-open contact devices. Refer to the *Notifier Device Compatibility Document* for a complete listing of compatible devices.

Outputs include four NACs (Notification Appliance Circuits), three programmable Form-C relays (factory programmed for Alarm, Trouble, and Supervisory) and 24 VDC special application resettable and nonresettable power outputs. The FACPs supervise all wiring, AC voltage, battery level and telephone line integrity.

Activation of a compatible smoke detector or any normally-open fire alarm initiating device will activate audible and visual signaling devices, illuminate an indicating LED, sound the piezo sounder at the FACP, activate the communicator and FACP alarm relay, and operate an optional module used to notify a remote station or initiate an auxiliary control function.

Features

- Listed to ULC S527-99, S559-01.
  Listed to UL Standard 864, 9th edition.
- Built-in DACT (Digital Alarm Communicator/Transmitter).
- Style B (Class B) IDC (Initiating Device Circuit)
  - SFP-5UDC - five IDCs.
  - SFP-10UDC - ten IDCs.
- Style Y (Class B) NAC (Notification Appliance Circuit) - special application power
  - SFP-5UDC - four NACs.
  - SFP-10UDC - four NACs.
- Notification Appliances may be programmed as
  - Silence Inhibit.
  - Auto-Silence.
  - Strobe Synchronization for System Sensor, Wheelock, Gentex, Faraday, or Amseco devices.
  - Selective Silence (horn-strobe mute).
  - Temporal or Steady Signal.
  - Silenceable or Nonsilenceable.
- Optional N-CAC-5X Style Z (Class A) Converter Module for NACs and IDCs (2 required for SFP-10UDC).
- Form-C Relays for Alarm, Trouble and Supervisory - Contact Ratings 2.0 A@ 30 VDC or 0.5 A @ 30 VAC (resistive).
- 7.0 A total system current for SFP-5UDC.



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SFP-5UDC

- 7.0 A total system current for SFP-10UDC.
- Optional Trim Ring TR-CE-B for semi-flush mounting.
- 24 volt operation.
- Low AC voltage sense.
- Alarm Verification.
- PAS (Positive Alarm Sequence).
- Automatic battery trickle charger.
- Built-in LED Annunciator Module N-ANN-LED
- Optional 4XTM module (conventional reverse polarity/city box transmitter).

PROGRAMMING AND SOFTWARE:

- Can be programmed at the panel with no special software or additional equipment.
- Programmable Make/Break Ratio.
- Upload/Download (local or remote) of program and data via integral DACT.

USER INTERFACE:

- Built-in DACT (Digital Alarm Communicator/Transmitter).
- Integral 80-character LCD display with backlighting and keypad.
- Real-time clock/calendar with automatic daylight savings adjustments.
- ANN-BUS for connection to annunciators.
- Audible or silent walk test capabilities.
- Piezo sounder for alarm, trouble, and supervisory.

Controls and Indicators

LED INDICATORS

- FIRE ALARM (red)
- SUPERVISORY (yellow)
- TROUBLE (yellow)
- AC POWER (green)
- ALARM SILENCED (yellow)

CONTROL BUTTONS

- ACKNOWLEDGE
- ALARM SILENCE
- SYSTEM RESET (lamp test)
- DRILL

Terminal Blocks

AC Power – TB1:

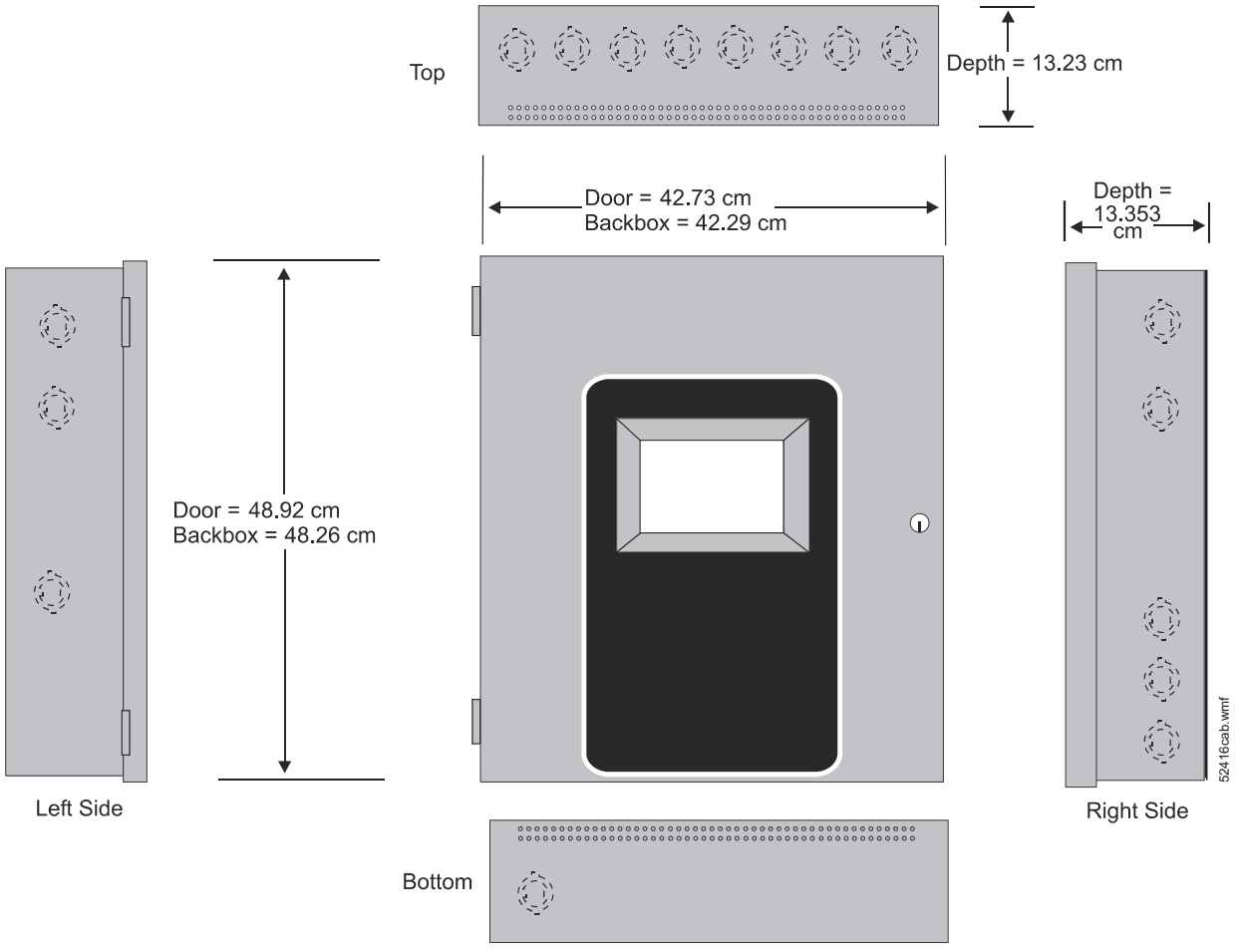
- **SFP-5UDC** (FLPS-7 Power Supply): 120 VAC, 50/60 HZ, 3.90 A.
- **SFP-10UDC** (FLPS-7 Power Supply): 120 VAC, 50/60 Hz, 3.90 A.
- **Wire size:** minimum 14 AWG (2.00 mm²) with 600 V insulation. Supervised, nonpower-limited.

Battery (sealed lead acid only) – J12:

- Maximum Charging Circuit - Normal Flat Charge: 27.6 VDC @ 1.4 A. Supervised, nonpower-limited.
- Maximum Charger Capacity: 18 AH battery for SFP-5UDC, and 26 AH battery for SFP-10UDC. [Two 18 Ah batteries can be housed in the FACP cabinet. Larger batteries require separate battery box such as the BB-26 or NFS-LBB.]
- Minimum Battery Size: 12 AH.

Initiating Device Circuits – TB4 (and TB 6 on SFP-10UDC only):

- Alarm Zones 1 - 5 on TB 4 (SFP-5UDC and SFP-10UDC).
- Alarm Zones 6 - 10 on TB6 (SFP-10UDC only).
- Supervised and power-limited circuitry.
- Operation: All zones Style B (Class B).
- Normal Operating Voltage: Nominal 20 VDC.
- Alarm Current: 15 mA minimum.
- Short Circuit Current: 40 mA max.
- Maximum Loop Resistance: 100 ohms.



Cabinet Measurements

- End-of-Line Resistor: 4.7K ohm, 1/2 watt (P/N 71252 UL-listed).
- Standby Current: 2 mA.

Refer to the *Notifier Device Compatibility Document* for listed compatible devices.

Notification Appliance Circuits – TB5 (and TB 7 on SFP-10UDC only):

- Four NACs
- Operation: Style Y (Class B)
- Special Application power
- Supervised and power-limited circuitry
- Normal Operating Voltage: Nominal 24 VDC
- Maximum Signaling Current: 7.0 A for SFP-5UDC, 2.5 A maximum per NAC; 7.0 A for SFP-10UDC, 3.0 A maximum per NAC.
- End-of-Line Resistor: 4.7K ohm, 1/2 watt (Part #71252)
- Max. Wiring Voltage Drop: 2 VDC

Refer to the *Notifier Device Compatibility Document* for compatible listed devices.

Form C Relays – TB8:

- *Relay 1* (factory default programmed as Alarm Relay)
- *Relay 2* (factory default programmed as fail-safe Trouble Relay)
- *Relay 3* (factory default programmed as Supervisory Relay)

Special Application Resettable Power – TB9:

- Jumper selectable by JP31 for resettable or nonresettable power.
- Operating voltage: 24 VDC nominal.
- Maximum available current: 500 mA - appropriate for powering four-wire smoke detectors.
- Power-limited circuit.

Refer to the *Notifier Device Compatibility Document* for listed compatible devices.

Remote Sync Output - TB2: Remote power supply synchronization output, only required for the SFP-5UDC. 24 VDC nominal special application power. Maximum current is 40 mA. End-of-Line Resistor: 4.7K ohm. Supervised and power-limited circuit.

Product Line Information

SFP-5UDC: Five-zone, 24-volt Fire Alarm Control Panel (includes black backbox, FLPS-7 power supply, technical manual, and a frame & post operating instruction sheet).

SFP-10UDC: Ten-zone, 24-volt Fire Alarm Control Panel (includes black backbox, FLPS-7 power supply, technical manual, and a frame & post operating instruction sheet).

OPTIONAL MODULES

N-CAC-5X: Optional (Class A) Converter Module. Converts Style B (Class B) Initiating Device Circuits to Style D (Class A); and Style Y (Class B) Notification Appliance Circuits to Style Z (Class A). Connects to J2 on the SFP-5UDC and SFP-10UDC main circuit board.

NOTE: *Two Class A Converter Modules are required for the ten-zone panel.*

4XTM: Transmitter module. Provides a supervised output for local energy municipal box transmitter and alarm and trouble reverse polarity. Includes a disable switch and disable trouble LED. A module jumper option allows the reverse polarity circuit to open with a system trouble condition if no alarm conditions exists. Mounts to the main circuit board connectors J4 and J5.

COMPATIBLE ANNUNCIATORS

N-ANN-LED: Comes mounted in the dress panel and provides three LEDs for each zone: Alarm, Trouble, and Supervisory. In non-ULC applications, additional N-ANN-LED modules can be used for remote LED annunciation. Black. (For white, order **N-ANN-LED-W**. For red, order **N-ANN-LED-R**.)

N-ANN-RLY: Relay module. Mounts inside the cabinet. Provides ten Form C relays.

N-ANN-80: Remote LCD Annunciator for non-ULC applications. Mimics the information displayed on the FACP's LCD. Black. (For white, order: **N-ANN-80-W**.)

N-ANN-S/PG: Serial/parallel printer gateway for non-ULC applications. Provides a connection for a serial or parallel printer.

N-ANN-I/O: Driver module for non-ULC applications. Provides connections to a user-supplied graphic annunciator.

ACCESSORIES

BB-26: Battery backbox, holds up to two 25 AH batteries.

NFS-LBB: Battery backbox, holds up to two 55 AH batteries. Black.

TR-CE-B: Optional black trim-ring for semi-flush mounted cabinets.

PRN-6: UL listed printer for use in non-ULC applications.

SYSTEM SPECIFICATIONS

System Capacity

- Annunciators 2

Electrical Specifications

- **SFP-5UDC (FLPS-7 Power Supply):** 120 VAC, 50/60 HZ, 3.90 A
- **SFP-10UDC (FLPS-7 Power Supply):** 120 VAC, 50/60 HZ, 3.90 A
- **Wire size:** minimum 14 AWG (2.0 mm^2) with 600 V insulation, supervised, nonpower-limited
- **Battery size**: minimum 12 AH; maximum 18 AH.

Cabinet Specifications

Door: 48.92 cm. (19.26") high x 42.73 cm. (16.82") wide x 1.82 cm. (0.72") deep. **Backbox:** 48.26 cm. (19.00") high x 42.29 cm. (16.65") wide x 13.34 cm. (5.25") deep. **Trim Ring (TR-CE-B):** 55.88 cm. (22.00") high x 49.91 cm. (19.65") wide.

Shipping Specifications

Dimensions:

– 50.80 cm (20.00") high

– 57.15 cm (22.5") wide

– 21.59 cm (8.5") deep.

Weight: 12.20 kg (27 lb)

Temperature and Humidity Ranges

This system meets NFPA requirements for operation at 0 – 49°C and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C. 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.

Agency Listings and Approvals

The listings and approvals below apply to the basic SFP-5UDC and SFP-10UDC control panels. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL/ULC Listed:** File S635
- **FM Approved**
- **CSFM:** 7165-0028:0246

NOTE: *For additional UL-listed models, see DN-60185.*

NFPA Standards

The SFP-5UDC/SFP-10UDC complies with the following NFPA 72 Fire Alarm Systems requirements:

– **LOCAL** (Automatic, Manual, Waterflow and Sprinkler Supervisory).

– **AUXILIARY** (Automatic, Manual and Waterflow) (requires 4XTM).

– **REMOTE STATION** (Automatic, Manual and Waterflow) (Where a DACT is not accepted, the alarm, trouble and supervisory relays may be connected to UL 864 listed transmitters. For reverse polarity signaling of alarm and trouble, 4XTM is required.)

– **PROPRIETARY** (Automatic, Manual and Waterflow).

– **CENTRAL STATION** (Automatic, Manual and Waterflow, and Sprinkler Supervised).

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QUALITY SYSTEMS

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For more information, contact Notifier.
In Canada: (888) 289-1114
10 Whitmore Road
Woodbridge, Ontario L4L 7Z4
Outside Canada: Phone: (203) 484-7161
On the web: www.notifier.com