

Features

Panel mounted annunciation modules for use with 4100ES/4100U Fire Alarm Control Panels, Remote Annunciators, and Network Display Units (NDU):

- Modules mount on front of panel bay providing convenient access and high visibility
- Panel monitors switches for user input and controls LED indicators to annunciate function status
- Compact 64 LED/64 switch controller modules mount on back of LED/switch modules

LED/Switch Modules:

- Raised momentary switches provide tactile feedback
- Alternate action operation provides on/off functions
- High intensity LEDs provide clear status annunciation
- Slide-in labels provide custom on-site labeling (label kit is ordered separately)

8 LED, 8 Switch Modules:

- One status LED per switch
- Available as all red LEDs or all yellow LEDs

16 LED, 8 Switch Modules:

- Two status LEDs per switch
- Available with two LEDs per switch as: red/yellow, yellow/yellow, red/green, or green/yellow

16 LED, 16 Switch Modules:

- One status LED per switch in 2" (51 mm) module
- Available as all red LEDs, or 8 red and 8 yellow
- Two configurations are available, one with pluggable LEDs, refer to illustrations on page 2 and product selection details on page 4

24 LED, 24 Switch Modules:

- Double slot module with one red status LED per switch

HOA (Hand-Off-Auto) Switch Modules:

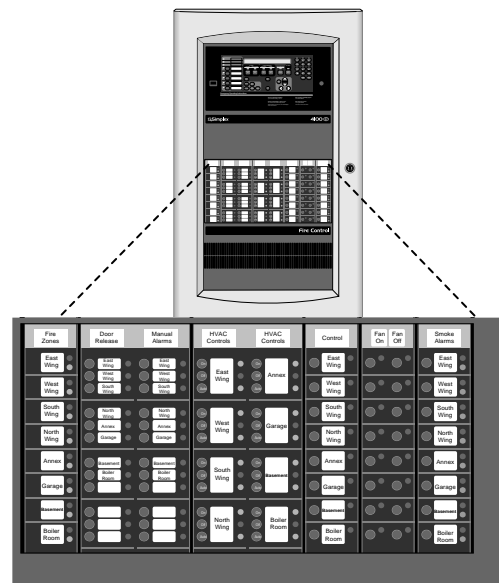
- Eight controls in a double slot module, each control has three switches for status selection and one LED per switch position
- Switch selection is On/Hand, Off, and Auto

Available with three HOA Module LED Options:

- On/Hand (green LED), Off (red LED) and Auto (green LED)
- On/Hand (green LED), Off (red LED) and Auto (white LED) to comply with International Building Code (IBC) requirements
- On/Hand (green LED), Off (yellow LED) and Auto (green LED) for applications requiring no red LEDs
- Available with or without switch buttons labels (On, Off, Auto)

LED Modules with 8 or 16 pluggable LEDs:

- 8 LED Module has red LEDs, 16 LED module has 8 red with 8 yellow
- Red, yellow, green, or blue LEDs are available in packages of eight (8) to change color on-site per application requirement (ordered separately)



4100ES 2-Bay Fire Alarm Control Panel
with Sample of Available LED/Switch Modules

Features (Continued)

24 Point I/O Module for external connections:

- Each point is selectable as either a switch input (momentary or maintained) or lamp/relay driver output
- Multiple switch monitoring modes are available

Panel mounted printer (see pages 6 and 7 for details):

- Records system events and provides 20 visible lines

Listed to:

- UL Std. 864, Fire Detection and Control (UOJZ), and Smoke Control Service (UUKL)
- UL Std. 2017, Process Management Equipment (QVAX)
- UL Std. 1076, Proprietary Alarm Units-Burglar (APOU)
- UL Std. 1730, Smoke Detector Monitor (UULH)
- ULC Std. S527-99

Description

Annunciation Options. 4100ES/4100U fire alarm panels support a variety of switch input and LED status indicators to complement the information and controls available at the operator interface. These modules provide a convenient interface efficiently packaged onto the front panel space of the cabinet bay. Additionally, the panel mounted printer can conveniently record system status without requiring a separately located printer.

* Refer to additional listing details on page 4. This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7165-0026:251 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Additional listings may be applicable; contact your local Simplex® product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.

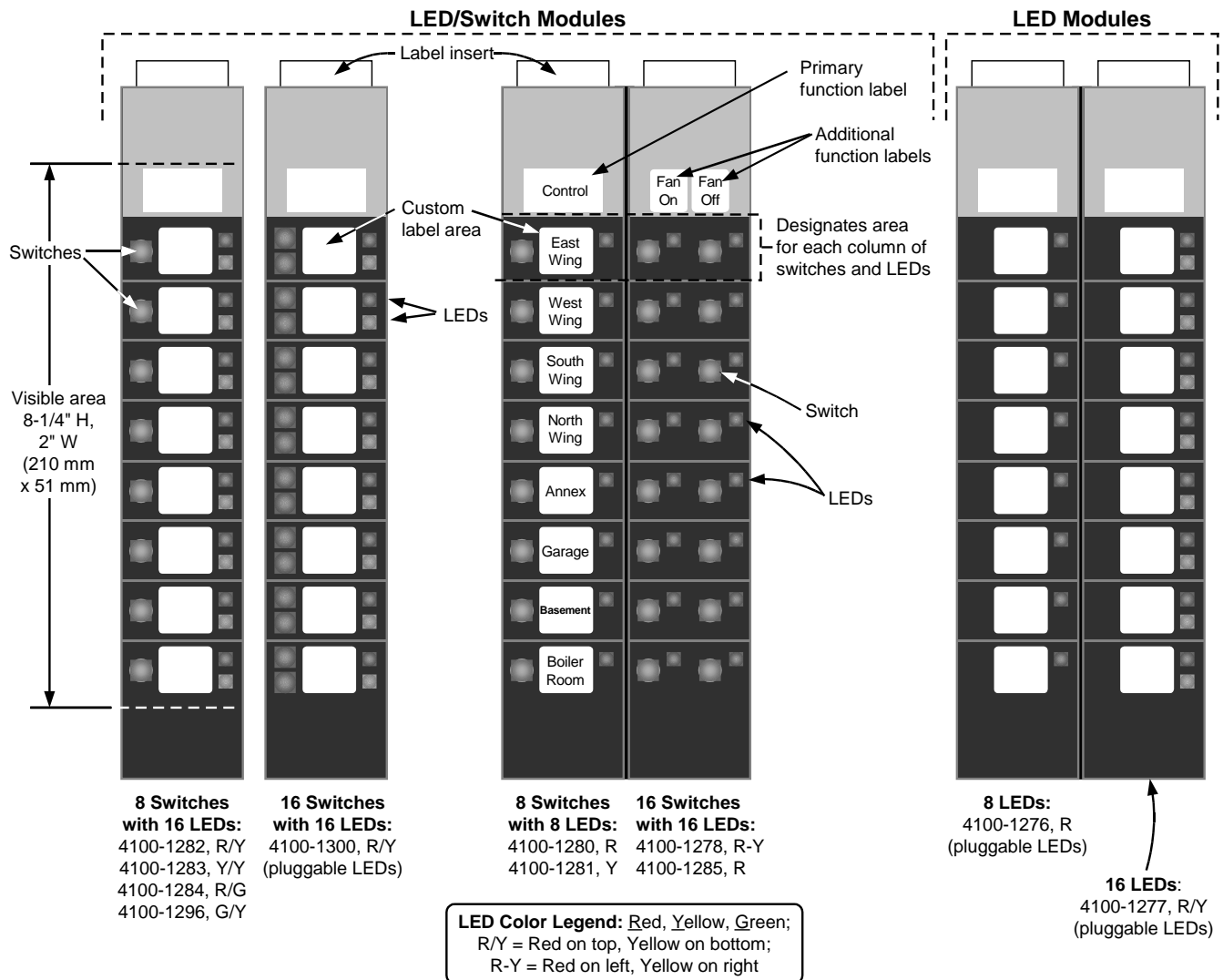
Description (Continued)

Easy Interface. Switches are alternate action ON/OFF (depending on programming selection) using a tactile feel, raised rubber button. High efficiency LEDs provide clear status annunciation readily visible through the glass door.

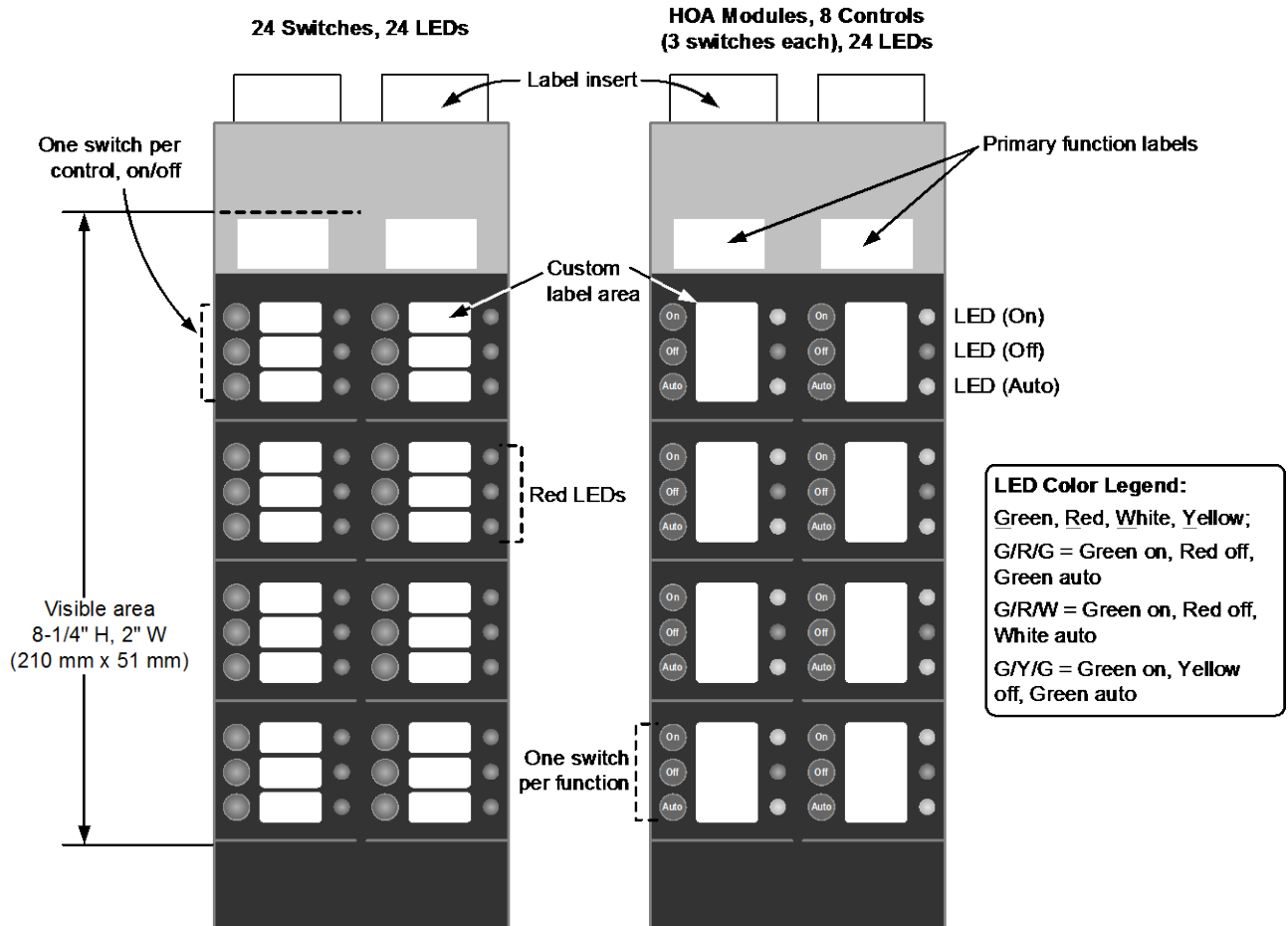
Selectable Functions. Switch functions, LED status indications, and printer output is selected when the control panel CPU is customized for site specific requirements. Slide-in labels are locally printed to indicate the exact function of the LEDs and switches.

The 24 Point I/O Module is selectable for input switch type and supervision type. Outputs are selectable for steady on or pulsing to drive remotely connected relays, incandescent lamps, or LEDs.

LED/Switch Module Detail Reference



HOA and 24/24 LED/Switch Module Detail Reference



4100-1287

HOA Modules, G/R/G LEDs:

- 4100-1286, with labeled switches as shown
- 4100-1295, with unlabeled switches (not shown)

HOA Modules for IBC Applications, G/R/W LEDs:

- 4100-1275, with labeled switches as shown
- 4100-1299, with unlabeled switches (not shown)

HOA Modules, G/Y/G LEDs:

- 4100-1302, with labeled switches as shown
- 4100-1301, with unlabeled switches (not shown)

LED/Switch Module Product Selection (panel mounted switches are momentary pushbutton)

LED/Switch Modules, General Purpose (LED/switch controller and label kit is ordered separately)

| Model | LEDs per Switch | LED Color(s) | Custom Label Area | LED Quantity | Switch Quantity |
|------------|-----------------|---|---|--------------|-----------------|
| 4100-1280 | One | Red | Per module and per switch | 8 | 8 |
| 4100-1281 | One | Yellow | | | |
| 4100-1282 | Two | Red on top, Yellow on bottom | Per module and per switch | 16 | 8 |
| 4100-1283 | Two | Yellow on top and bottom | | | |
| 4100-1284 | Two | Red on top, Green on bottom | | | |
| 4100-1296 | Two | Green on top, Yellow on bottom | | | |
| 4100-1285 | One | Red | One per column of 8 LED/switch pairs (see illustration on page 2) | 16 | 16 |
| 4100-1278 | One | 8 Red on left, 8 Yellow on right | | | |
| 4100-1300* | One | With pluggable LEDs; shipped Red on top, Yellow on bottom | Per module and per LED/switch pair | | |
| 4100-1287 | One | Red | Per module and per switch | 24 | 24 |

* UL, ULC, and CSFM listed only.

LED Only Modules and LED Kits (LED/switch controller and label kit is ordered separately)

| Model | Description | |
|-----------|--|---|
| 4100-1276 | Eight (8) LED Module with Red LEDs; custom label area per module and per LED | LEDs are pluggable; select LED kits as required to change LED color |
| 4100-1277 | Sixteen (16) LED Module; Red LED on top and Yellow LED on bottom at each position; custom label area per module and per LED pair | |
| 4100-9843 | Yellow | Kits of 8 LEDs; order as required for modules with pluggable LEDs to change LED color on-site per application requirement; compatible with LED Modules 4100-1276, 4100-1277, and 4100-1300 (Blue is typically used for Ancillary Device status indication per ULC S527) |
| 4100-9844 | Green | |
| 4100-9845 | Red | |
| 4100-9855 | Blue | |

LED/Switch Modules, HOA (Hand-Off-Auto) with Green/Red/Green LEDs

(LED/switch controller and label kit is ordered separately)

| Model | Operation | Switch Function (Location) | LED Description |
|-----------|--|----------------------------|-----------------|
| 4100-1286 | Eight function HOA (On, Off, Auto) Control Module with labeled switches; custom label area per module and per LED/switch set | On (top) | Green LED |
| | | Off (middle) | Red LED |
| | | Auto (bottom) | Green LED |
| 4100-1295 | Eight function HOA (On, Off, Auto) Control Module, same as 4100-1286 except switches are unlabeled | | |

LED/Switch Modules, HOA (Hand-Off-Auto) with Green/Red/White LEDs for IBC Applications

(LED/switch controller and label kit is ordered separately)

| Model | Operation | Switch Function (Location) | LED Description |
|-----------|--|----------------------------|-----------------|
| 4100-1275 | Eight function HOA (On, Off, Auto) Control Module with labeled switches; LED colors meet International Building Code (IBC) requirements; custom label area per module and per LED/switch set | On (top) | Green LED |
| | | Off (middle) | Red LED |
| | | Auto (bottom) | White LED |
| 4100-1299 | Eight function HOA (On, Off, Auto) Control Module, same as 4100-1275 except switches are unlabeled | | |

LED/Switch Modules, HOA (Hand-Off-Auto) with Green/Yellow/Green LEDs

(LED/switch controller and label kit is ordered separately)

| Model | Operation | Switch Function (Location) | LED Description |
|-------------|--|----------------------------|-----------------|
| 4100-1302** | Eight function HOA (On, Off, Auto) Control Module with labeled switches; for applications requiring no red LEDs; custom label area per module and per LED/switch set | On (top) | Green LED |
| | | Off (middle) | Yellow LED |
| | | Auto (bottom) | Green LED |
| 4100-1301** | Eight function HOA (On, Off, Auto) Control Module, same as 4100-1302 except switches are unlabeled | | |

** UL, ULC, and CSFM listed only.

Continued on next page

LED/Switch Module Product Selection (Continued)

LED/Switch Controller Modules and Accessories

| Model | Description | |
|-----------|--|---|
| 4100-1288 | 64 LED/64 Switch Controller Module with mounting plate; controls up to 64 LEDs and interfaces to up to 64 switches; mounts behind the LED/switch modules and has provisions for one 4100-1289 Controller Module | NOTE: LED/switch controllers and their connected modules must be in the same bay. |
| 4100-1289 | 64 LED/64 Switch Controller Module without mounting plate; mounts on extra space of 4100-1288; controls an additional 64 LEDs and 64 switches | |
| 4100-0636 | Harness Kit, Power and Communications | One of each is required per 4100-1288 that is located in the same bay as two Flex-35/50 amplifiers and an SPS |
| 4100-0641 | Harness Kit, 26 Position Flex Cable, 14-1/2" (368 mm) long | |
| 4100-1290 | 24 Point I/O Module for external connections, select each point as either input or output; 2" (51 mm) wide, 1 Slot | |
| 4100-1294 | LED/Switch Module Slide-in Labels, required when LED/switch or LED only modules are present; order one per cabinet | |
| 4100-1279 | Single blank 2" display cover; order as required (8 fill a bay front); two maximum in a row between LED/switch modules | |

Panel Mounted Printer (refer to pages 6 and 7 for printer details)

| Model | Description |
|-----------|--|
| 4100-1293 | Panel Mount Thermal Printhead Printer, supplied with one roll of paper |
| 4190-9803 | Replacement Paper for 4100-1293 Printer, one roll |

LED/ Switch Modules and Controllers Specifications

(For additional LED/Switch Module information, refer to Installation Instructions 574-843)

64 LED/64 Switch Controller Modules (4100-1288 and 4100-1289)

| | |
|------------------------------------|---|
| Input Voltage | 19 to 33 VDC, from control panel |
| Current, No LEDs On | 20 mA @ 24 VDC |
| Current, All 64 LEDs On | 180 mA nominal @ 24 VDC (2.5 mA per LED) 212 mA maximum @ 19 VDC (3.0 mA per LED) |
| Mounting Reference | Bracket of 4100-1288 attaches to the back of the LED/switch modules |
| Controllers per Bay | Maximum of two per bay; for control of LED/switch modules within that bay only |
| Bay Location Reference | Slots 1 & 2 or Slots 3 & 4; mounts onto the back of the LED/switch modules |
| Clearance Behind Controller Module | Space accepts low profile 4100ES/4100U modules only |

24 Point I/O Module (4100-1290)

| | |
|----------------------|--|
| Module Current | Supervisory = 34 mA; Alarm = 75 mA (add output currents separately) |
| Switch Input Details | Momentary or maintained, 2 or 3 position; max. distance is 2500 ft (762 m) or 65 Ω |
| Output Current | 150 mA @ 24 VDC per point; inrush current is limited for use with incandescent bulbs |
| Output Details | Diode suppress relay loads at the coil; max. distance is 600 ft (183 m) or 2 Ω |

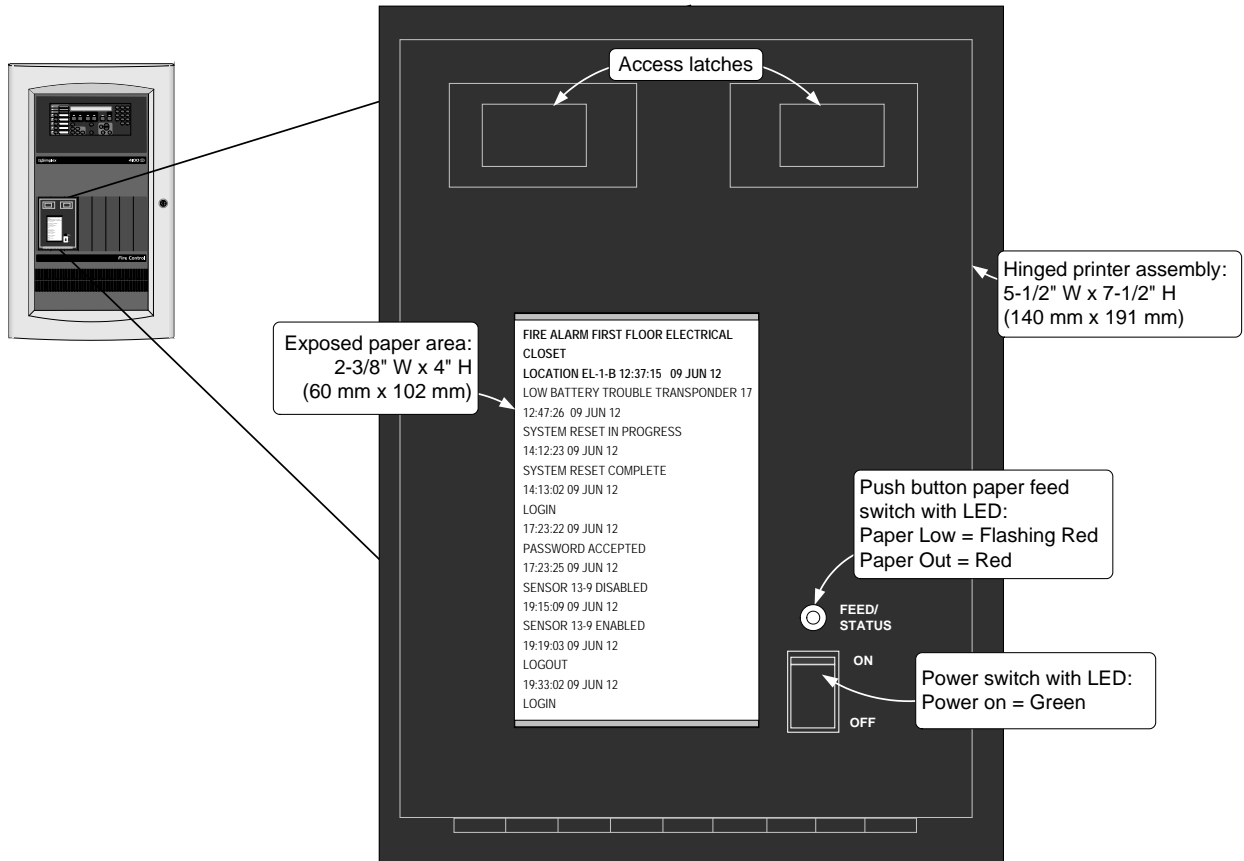
General Specifications

| | |
|-----------------------------|--|
| Operating Temperature Range | 32° to 120°F (0° to 49° C) |
| Operating Humidity Range | Up to 93% RH, non-condensing @ 90° F (32° C) maximum |

Additional 4100ES Product Reference

| Subject | Data Sheet | Subject | Data Sheet |
|--|------------|--|------------|
| 4100ES Basic Panels with SPS Power Supplies | S4100-0031 | NDU with SPS Power Supplies for ES Net | S4100-0077 |
| 4100ES Emergency Voice/Alarm Equipment | S4100-0034 | 4100ES Basic Panels with EPS Power Supplies | S4100-0100 |
| NDU with SPS Power Supplies for 4120 Network | S4100-0036 | InfoAlarm Command Center with EPS Power Supplies | S4100-0101 |
| 4100ES Remote Annunciator Panels | S4100-0038 | NDU with EPS Power Supplies for 4120 Network | S4100-0102 |
| InfoAlarm Command Center with SPS Power Supplies | S4100-0045 | NDU with EPS Power Supplies for ES Net | S4100-0104 |

Model 4100-1293 Panel Mount Printer Details



Printer Specifications

(For additional printer information, refer to Installation Instructions 579-249)

Electrical & Communications

| | | |
|----------------|---|-----------------|
| Input Voltage | 19 to 33 VDC, from control panel | |
| Current | Standby | 125 mA @ 24 VDC |
| | Printing | 800 mA @ 24 VDC |
| Communications | RS-232, 9600 baud, from control panel RS-232 module | |

Print Characteristics

| | |
|--------------|---|
| Print Format | Fixed thermal printhead producing black characters |
| Characters | 11 x 28 dot matrix; alarm information printed in bold |
| Paper Format | 40 columns; 6 lines per inch; 20 lines visible; paper is wound onto top take-up reel, paper can be manually unwound from take-up reel and rewound using Feed switch |
| Paper Speed | 1.33 in/sec maximum |
| Print Speed | 312 cps |
| Sound Output | 55 dB maximum, with cabinet door open |

Paper (one roll included)

| | |
|-------------------|---|
| Type and Size | Thermal; 2.35" wide, 160 ft long (60 mm x 49 m) |
| Replacement Paper | 4190-9803, 1 roll |

Mounting Specifications

| | |
|--------------------------|--|
| Bay Location Reference | Requires 3 expansion bay slots, can be located as required |
| Clearance Behind Printer | Space accepts low profile 4100ES/4100U modules only |

Environmental Specifications

| | |
|-----------------------------|--|
| Operating Temperature Range | 32° to 120°F (0° to 49° C) |
| Operating Humidity Range | Up to 93% RH, non-condensing @ 90° F (32° C) maximum |

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