

Features

IDNet expansion module for 4100ES fire alarm control panels:

- Provides 250 IDNet device point control including both QuickConnect and QuickConnect2 sensors
- Extends the 4100ES QuickConnect and QuickConnect2 sensor sensitivity to seven levels of adjustment from 0.2% to 3.7%
- Requires a single block (4" x 5") module location
- Also compatible with 4100U systems

Intended for upgrade of Simplex® 4010 fire alarm control panels:

- Allows for system expansion beyond 250 addressable points, up to the 2500 point capacity of the 4100ES control panel
- Systems can retain the installed QuickConnect and/or QuickConnect2 sensors
- Additional IDNet SLC (Signaling Line Circuit) channels are available from 4100ES standard or expansion IDNet modules

UL Listed to Standard 864

Description

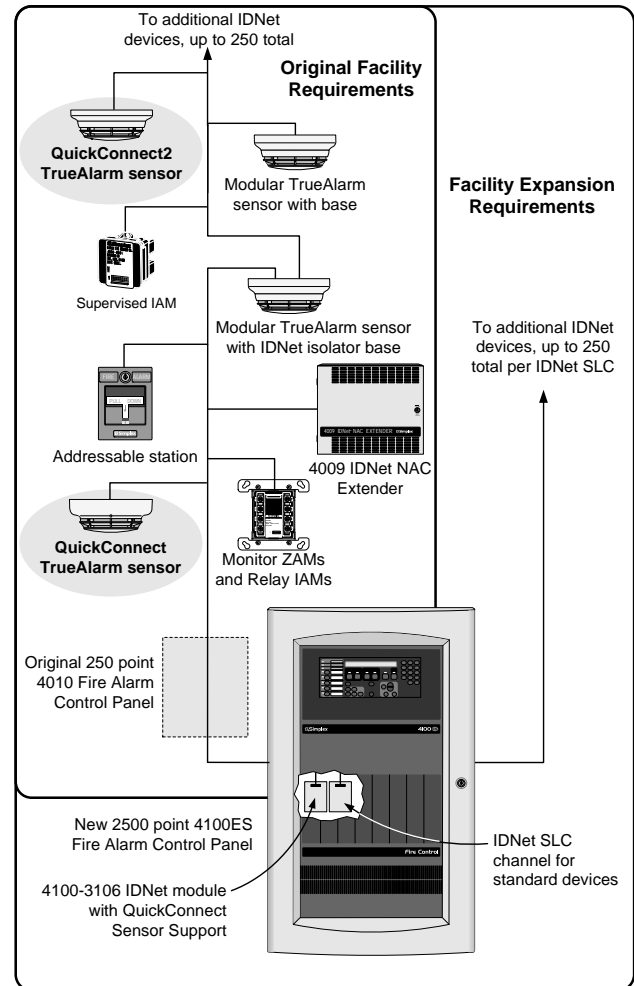
4010 System Upgrade. The Simplex model 4010 fire alarm control panel provides for up to 250 addressable points using IDNet communications. One of the 4010 unique devices is the QuickConnect sensor.

QuickConnect sensors provide TrueAlarm analog sensing in a feature optimized package, primarily suited to smaller systems. The original QuickConnect sensor has been replaced with the QuickConnect2 sensor.

When a facility expands beyond the capacity of the 4010 control panel, the preferred upgrade is the 4100ES fire alarm control panel. Standard 4100ES IDNet signaling line circuits (SLCs) are not compatible with QuickConnect sensors. However, with the 4100-3106, all of the 4100ES compatible IDNet devices and the QuickConnect and QuickConnect2 sensors can be connected to the same fire alarm control panel.

Expanded Sensitivity Range. Additionally, the 4100ES with the 4100-3106 module can provide a full range of sensitivity for the QuickConnect sensors with seven levels of adjustment from 0.2% to 3.7%. Standard sensitivities are 1.5%, 2.0%, 2.5%, and 3.7%. Sensitivities of 0.2%, 0.5%, and 1% are for special applications in clean areas. (For detailed application information including sensitivity selection, refer to Installation Instructions 574-709.)

* 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. This product was not approved by MEA (NYC) as of document revision date. 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.



4010 System Expansion using a 4100-3106 IDNet Module

4100-3106 Specifications

Capacity	250 points	
Standby Current	with 250 devices	275 mA
	without devices	75 mA
	per device	0.8 mA
Alarm Current	with 250 devices	265 mA
	without devices	115 mA
	per device	1 mA
Operating Temperature Range	32° F to 120° F (0° C to 49° C)	
Humidity Range	Up to 93% RH, non-condensing @ 90° F (32° C)	
Mounting	Single 4100ES block; 4" x 5" (102 mm x 127 mm)	
Installation Instructions	574-800	

Addressable Device Control Reference

Overview. The 4100ES provides standard addressable device communications for IDNet compatible devices and accepts optional modules for communications with MAPNET II compatible devices. Using a two-wire communications circuit, individual devices such as manual fire alarm stations, TrueAlarm sensors, conventional IDC zones, and sprinkler waterflow switches can be interfaced to the addressable controller to communicate their identity and status.

Addressability allows the location and condition of the connected device to be displayed on the operator interface LCD and on remote system annunciators. Additionally, control circuits (fans, dampers, etc.) may be individually controlled by using a relay IAM (individual addressable module).

Addressable Operation. Each addressable device on the communication channel is continuously interrogated for status condition such as: normal, off-normal, alarm, supervisory, or trouble. Sophisticated poll and response communication techniques ensure supervision integrity and allow for "T-tapping" of the circuit for Class B (Style 4) operation. The device LED blinks to indicate receipt of a communications poll and is steady on to indicate an alarm (or trouble) condition.

IDNet Channel Capacity. The CPU bay system power supply (SPS) provides an IDNet signaling line circuit (SLC) that supports up to 250 addressable monitor and control points intermixed on the same pair of wires. Additional IDNet circuit modules are available for 64, 127, or 250 addressable devices.

Wiring Requirements for IDNet Communications. Refer to the specifications chart below. Distances are for shielded or unshielded wire. Shielded wire may provide protection from unexpected sources of interference.

Wiring Specifications

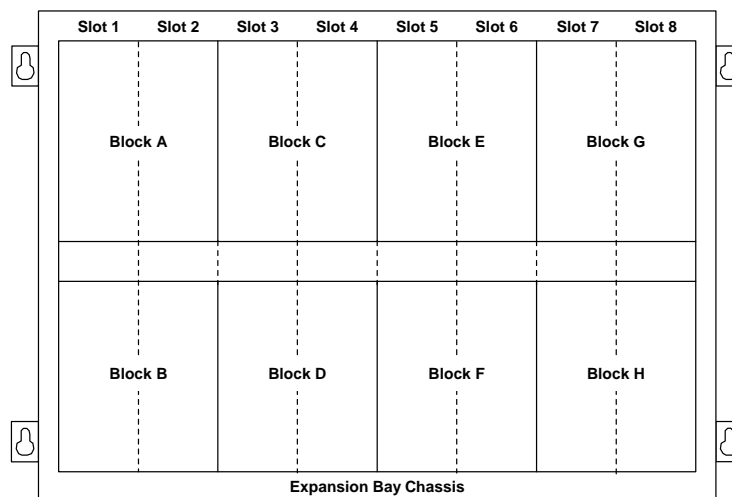
Size	18 AWG minimum (0.82 mm ²)
Type	Preferred: Shielded twisted pair (STP) Acceptable*: Unshielded twisted pair (UTP)
Farthest Distance from Control Panel to Device	Up to 2500 feet (762 m)
Total Wire Length Allowed With "T" Taps for Class B Wiring	Up to 10,000 ft (3 km).

* Some applications may require shielded wiring. Review system with your local Simplex product supplier.

Additional Simplex Product Reference

Product	Data Sheet Reference
QuickConnect2 Sensors	S4098-0034
Standard TrueAlarm Sensors	S4098-0019
Basic 4100ES Fire Alarm Control Panels	S4100-0031
Basic 4100ES Fire Alarm Control Panels with EPS/EPS+ for IDNAC Addressable Notification	S4100-0100

Expansion Bay Module Loading Reference



Size Definitions: Block = 4" W x 5" H card area
Slot = 2" W x 8" H motherboard with daughter card

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