

DESCRIPTION

Fireguard IQ605 is an advanced Addressable Fire Alarm Control Panel designed for small to medium-sized facilities. It is ideal for new installations and retrofitting in commercial, institutional, and industrial settings, offering state-of-the-art fire control that meets UL864 10th edition.

It supports a single Addressable Signaling Line Circuit (SLC), accommodating up to 252 addressable devices or points. It can handle 4 Notification Appliance Circuits (NACs), expandable to 8 and is equipped with 4 form C dry relay contacts dedicated to Fire Department connections. The IQ605 features a Digital signal processor-based design with a user-friendly interface display, enhancing the system's intuitiveness. Additionally, it can connect seamlessly to up to 109 remote panels or annunciators through an external network, forming an integrated fire detection and notification system.

FEATURES

- 8-line colored 7" LCD with 800X480 resolution
- 9 LED indicators, making it a highly intuitive fire alarm interface with 6 auxiliary function keys
- Single intelligent signaling line circuits (SLC), Class A or Class B. Supports 252 devices
- Supports iQ600 series intelligent detectors, manual stations and modules
- Automatic addressing function allowing the panel to sequentially assign addresses
- Up to 8 notification appliances circuits (NAC), Class A or Class B
- Built-in 30 zone switch/LED annunciator
- Programmable via PC configuration software or Field programmable through front panel
- Modular design for custom system configurations
- USB port on board for programming and firmware upgrade
- Network support for up to 109 iQ600 series remote panels and annunciators
- Form C dry relay contacts dedicated for Alarm, Trouble, Supervisory and Monitor. One additional programmable relay
- Supports positive alarm sequence to avoid false alarms
- Configurable for Two Stage operation
- Supports RJ45 ab RS232 interface for third-party monitoring software
- Four-levels of password protection with field-programmable definitions enables the installer to determine which functions are accessible at each password level
- Two separate event history logs, including a 1000 alarm only history log and a 5000-events log for all other events



SPECIFICATION

Primary Supply	» 110 - 120 VAC 50Hz/60Hz 3.86 A max » 220 - 240 VAC 50Hz/60Hz 1.96 A max Set the switch to the desired option
Back Battery	» Voltage: 24VDC, Two 12VDC in series » Type: Sealed lead acid » Charging capacity: 40Ah » Charging current: 3A max » Up to two 40Ah batteries can fit in the control panel enclosure
Environmental	» Operating temperature: 32°F - 120°F (0°-49°C) (UL) & 32°F - 122°F (0°-50°C)(Factory Tested) » Relative humidity: Up to 93% @ 90°F (32°C) » To be installed in a normal dry indoor environment only
Addressable Devices loops	1 loop, expandable to 4 loops, Class A and /or Class B, each loop supporting up to 252 devices addressees
Notification Appliance Circuits (NAC)	» Up to 10 Class A and/or Class B circuits, » 2.0 A each max per circuit, total 8 A max in the panel
External network circuit	Up to 109 IQ600 series panels and/or annunciator in Class B configuration
Relay Outputs	» 4 non-programmable status relay. Status indicated are Alarm, Supervisory, Trouble, Monitor. » All relays are Form-C contacts » Contact Rating: 2A 30VDC
Isolator Unit	Add 4 to 8 isolated class B loops on the existing SLC
Local LED/ Switch Annunciator	30 zones (2 LEDs and 1 Switch per zone) for alarm/trouble events display & control
Connections	All terminals are rated for 18 to 12 AWG (0.82mm ² to 3.31mm ²)

***See System Wiring section below for more information.*

SYSTEM CONFIGURATION

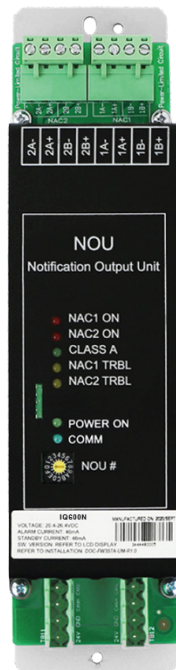
The default IQ605 panel is equipped with AMI, PCU, MFU, and LDU modules as a standard configuration. Two optional units are available, NOU (Notification Output Unit) to expand the panel notification capabilities and an ISU (Isolator Unit) that adds 4 isolated class B loops to the existing SLC.

Both optional units are installed as mezzanine cards on the main multi-functional unit in the panel.

Model	Description	Configurable	Qty	Standby	Alarm
IQ600AMI	AMI- Advance Machine Interface	X	1	143 mA	146 mA
IQ600PST	PST- Power-supply Transformer Unit	X	1	NA	NA
IQ600PCU	PCU- Power-supply Charger Unit	X	1	65 mA	65 mA
IQ600L	ALU- Addressable Loop Unit	✓	0-1	27 mA	27 mA
IQ600N	NOU- Notification Output Unit	✓	0-1	36 mA	54 mA
IQ600R	ROU- Relay Output Unit	✓	0-1	35 mA	35 mA
IQ600E	XNU- External Network Unit - Class B	✓	0-1	27 mA	27 mA



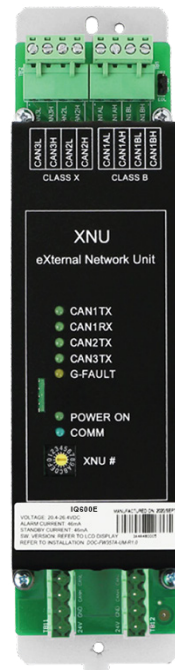
IQ600L



IQ600N



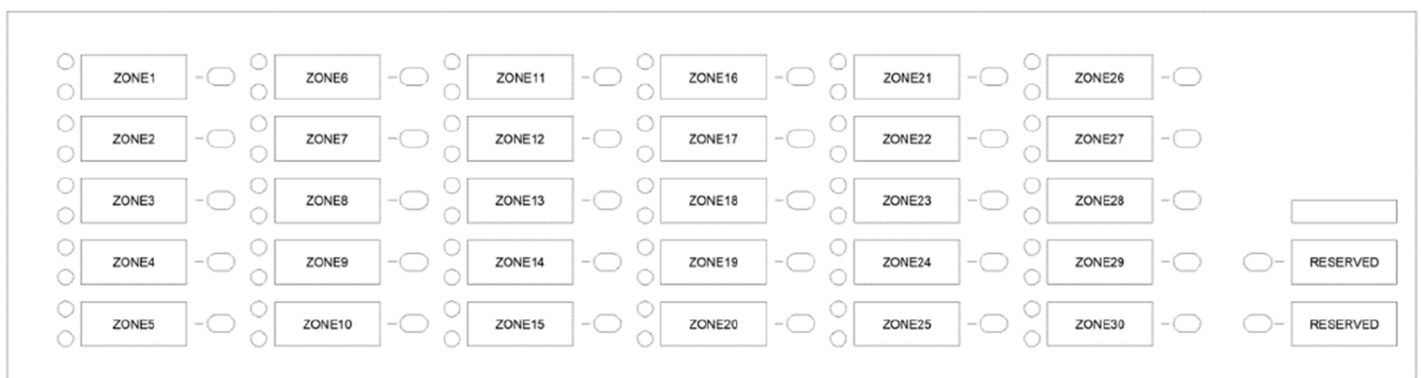
IQ600R



IQ600R

LED DISPLAY ANNUNCIATOR

The IQ605 panel features a local LED display unit that provides 30 zones (2 LEDs and 1 Switch per zone) for alarm/supervisory/ trouble events display and control. Two additional zones on the right are reserved for future use. Zones can be identified by sliding a zone label beside each LED.



SYSTEM WIRING

Addressable Device Loop

The IQ605 panel supports one signaling line circuit (SLC) with a capacity of 252 devices addresses. The loop is supervised for opens, shorts, and grounds.

Circuit Specification	IQ600L
Loops	One Class B or A loop, supporting 252 IQ600 series addressable devices
Circuits Current	0.4 A max
Output Voltage Current	20.2V ~ 26.2V
Standby Current	100 mA max
Alarm Current	220 mA max
Circuit Impedance	10Ω, 0.1 μF, max
Isolators	50 max

Notification Appliance Circuits

The IQ605 panel provides up to 8 notification appliance circuits (NAC). Each circuit is supervised.

Circuit Specification	IQ600L
Circuits	2 Class B or 2 Class A
Alarm Voltage	24 VDC nominal
Circuits Current	2.0 A max per circuits
EOLR	10 KΩ
Bell Code	ANSI Temporal

****Voltage drop calculations are required to determine the number of notification appliance per circuit.**

Relay Outputs

The IQ600 panel provides 4 non-programmable relays to connect to remote monitoring panel.

Relay Specification	IQ600R
Relay 1	Alarm
Relay 2	Supervisory
Relay 3	Trouble
Relay 4	Monitor
Relay 5	Special Application
Contact Rating	30 VDC at 2 A
Type	Form C contact

External Network Circuit

The panel can connect to up to 109 panels and/or remote annunciators via XNU modules.

Circuit Specification	IQ600E
Circuits	Class B
Communication Protocol	CAN
Circuit Impedance	25Ω, 0.05 μF, max

****The number of remote annunciators powered by a single panel is limited by the auxiliary power output current rating.**

Auxiliary Power Output

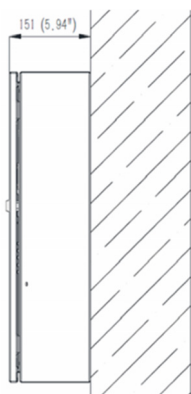
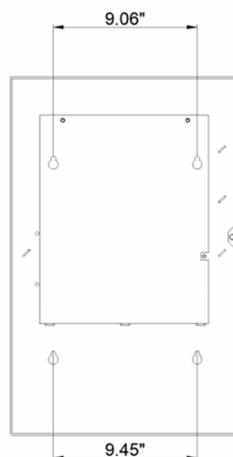
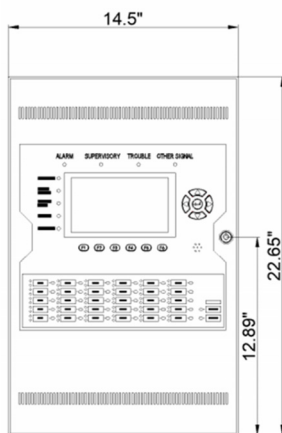
The IQ605 panel provides one auxiliary power output from the PCU module that can be used for powering remote annunciator and I/O modules.

Circuit Specification	
Circuits Voltage	24 VDC
Standby Current	500 mA max
Alarm Current	1200 mA max
Power Factor	0.35
Configuration	Non-Resettable/Resettable

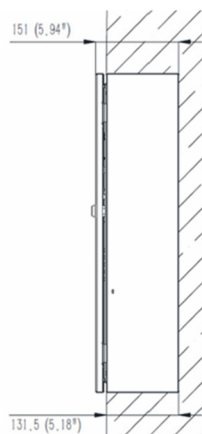


DIMENSION AND MOUNTING

The IQ605 Panel is suitable for surface mounting and semi-flush mounting installation. Please refer to the installation manual for detailed installation instructions.



Surface



Semi-Flush

CATALOG NUMBER TO ORDER

Model	Description
IQ605	Expandable Addressable Panel (AMI, MFU, PCU, LDU, Enclosure, Internal & External door with pictograms)
IQ600AMI	AMI- Advance Machine Interface
IQ600PST	PST- Power-supply Transformer Unit
IQ600PCU	PCU- Power-supply Charger Unit
IQ600L	ALU- Addressable Loop Unit
IQ600N	NOU- Notification Output Unit
IQ600R	ROU- Relay Output Unit
IQ600E	XNU- External Network Unit - Class B
IQPK	Panel Key