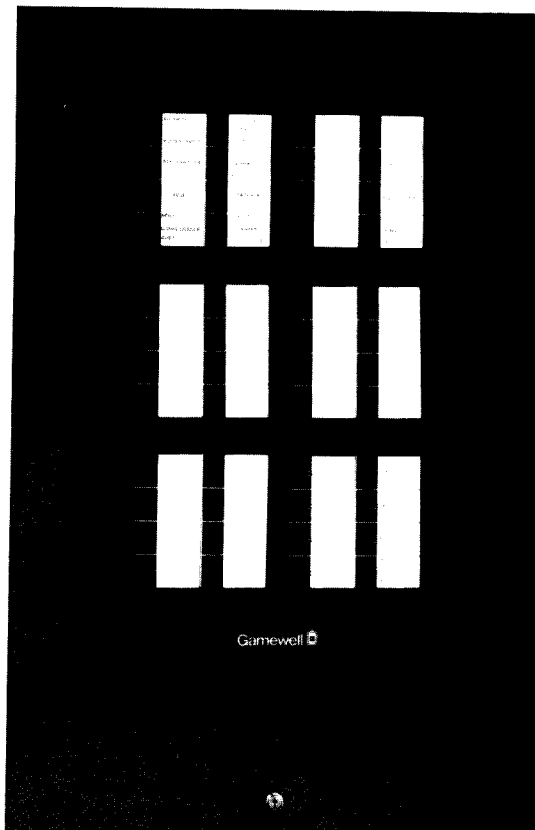


Flex 620 Conventional Control Panel

Features

- SmartStart™ System
- Microprocessor based control
- Expandable from 4 to 128 zones
- Field programmable
- Default alarm mode
- Power limited I/O circuits
- LED prompted operation and programming
- LED annunciation of all system functions
- RS-232 interface
- Walk Test
- Upload/Download PC compatible
- History logging
- Positive alarm sequence
- Coded signaling
- City connection
- Supervisory service
- Alarm verification
- MPU Bus accommodates up to sixteen 600 Series I/O modules
- Style B, C, D and E wiring
- Parallel bus communications
- Remote CRT, serial annunciator, printer and alphanumeric support
- Modules can be removed without disturbing field wiring
- Signal silence inhibit
- "And", "Or" and Cross Zoning
- ADA in-rush tolerant signal circuits
- Earth fault detection on system external wiring



Description

The Flexalarm 620 Conventional Fire Alarm Control Panel combines the latest in microprocessor technology with unparalleled years of experience. The Flex 620 provides the building owner with a fire alarm system that will provide years of service only Gamewell can offer.

The Flex 620 can monitor and control up to 128 Conventional Hardwire Input/Output circuits. All circuits are backed up by Gamewell's Default Alarm Mode for added security, while the 1000 event history log furnishes a complete record of system activities. The interactive Operator's Display uses LED prompting to ease both user operation and programming.

Field programming is easily accomplished by changing key functions on the Operator's Display or via a PC link.

With its embedded CPU that utilizes an Intel microprocessor, the Flex 620 offers all the features of today's most advanced life safety systems. Through individual selection of I/O

modules, the system engineer can customize the control panel to maximize efficiencies based on the application. The CPU automatically senses the system configuration to ensure that modules are correctly positioned to speed installation and maintenance of the most complex system. Assimilation of Emergency Voice capabilities is also simplified since all control can be handled by the main CPU.

The Flex 620's housing was designed to be both aesthetically pleasing and functionally sound. The dead front construction is designed to allow routine maintenance of the system without worry about disturbing the I/O Modules. Access to system function keys is limited by multiple levels of password protection to prohibit unauthorized use. In the event that a module needs service, the cabinet has been designed with permanent terminal strips so that a module can be quickly removed and replaced without disturbing the external wiring. This also allows wiring into the cabinet to be accomplished without exposing the modules to the construction site's environment.

Operator's Display

The Flex 620's Operator's Display is the center of all user access to the system. The display supplies all the necessary keys and annunciation points to maintain and monitor the system. Alarm, Supervisory and Trouble conditions are all indicated on the Operator's Display by dedicated LED's and the internal sounder.

The System Acknowledge key is used to acknowledge all off-normal conditions. Depressing this key will silence the internal sounder and flashing LED's will illuminate steady until conditions are returned to normal.

The Reset key is used to return the control panel to the idle mode after an alarm condition has been cleared. Trouble conditions that have been cleared will automatically return the control panel to the idle mode if the problem has been corrected. Trouble conditions that have been acknowledged will resound the internal sounder if the condition is not corrected within a programmed time period.

The Signal Silence key can be used to deactivate notification appliances. This function can be modified by user programming to only operate after a specified time period to insure that the signals are not turned off before the cause has been investigated.

LED annunciation is also provided for AC Power, PreAlarm, Alarm, Trouble, Supervisory Alarm and Earth Fault conditions. Keys for programming and bypass functions along with LED's for active and trouble conditions are provided for the City Connection and two signal circuits which are part of the Common Control section.

Standard Module Descriptions

Flex 620 Common Control

The Flex 620 Common Control section comprises the heart of the system. The Common Control section houses the main CPU and all system memory as well as providing local and remote communications and supervision. The common control contains the common system relays, two signal circuits, city tie and RS-232 port. All interaction with the Common Control section is accomplished through the Operator's Display panel.

600 Series Conventional Input Module

The Conventional Input module provides either

4 or 8 hardwire input circuits for monitoring of conventional detectors and contact type devices. This module monitors and reports to the CPU each circuit's analog status in order to distinguish between detectors and contact devices and to determine if two or more detectors are in alarm. Each Input module uses one slot in the MPU bus and is supplied with its own display module.

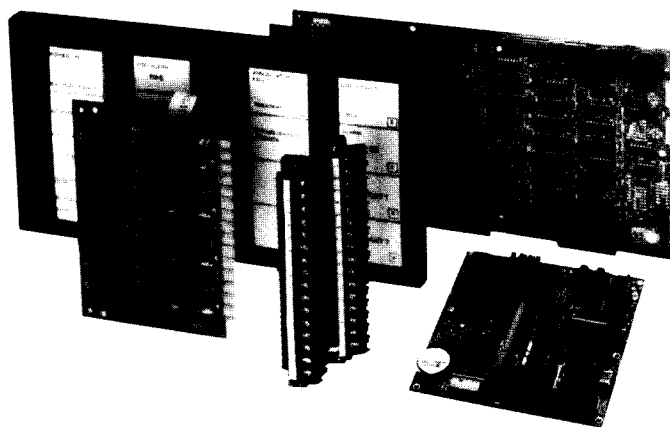
The Display module provides LED annunciation of alarm and trouble conditions and has a switch per circuit for programming and bypass functions. The display has provisions for user-defined custom labels per circuit.

Beyond normal alarm and supervisory functions the input circuits can be programmed for

in two circuit increments making it possible to perform all four functions with a single module. Signal circuits can provide a steady output or can be coded as required. All circuits are power limited per NEC 760 and UL864. Signal circuits can be installed using either style Y or Z wiring.

Signal modules are supplied with their own display module that provides LED annunciation of activation and trouble conditions and has a switch per circuit for programming and bypass functions. The display has provisions for user defined custom labels per circuit.

Complete specifications and descriptions are available on Data Sheet 3020.



Flex 620 Common Control

Remote Acknowledge, Reset, Signal Silence and Release Abort switches. Circuits can be wired for either style B, C, D and E service and are capable of monitoring normally closed devices. Complete specifications and descriptions are available on Data Sheet 3010.

600 Series Universal Signal Module

The 600 Series Universal Signal Module is a multi-functional output module that is available in 4 or 8 circuit increments. Modules communicate via the MPU bus and require 1 expansion slot each. The Universal Signal Module can be configured as 24VDC signaling circuits, speaker circuits, telephone circuits or releasing circuits. Modules are programmed

600 Series Power Supply

The 600 Series Power Supply furnishes system operating and signaling power. The integral 8 Amp supply is equipped with a battery charger capable of maintaining the secondary power source. The Power Supply is monitored by the main CPU to ensure that adequate power levels are maintained. The power supply design allows for high efficiency while still providing precise power output.

The battery charger is capable of operating with lead acid batteries. The charger is sized to maintain up to 50Ah Batteries. The charger's automatic high rate circuitry is monitored by the main CPU.

Multiple auxiliary power supplies may be added

to the system when additional power is required for Door Holders or 24VDC signaling. Complete specifications and descriptions are available on Data Sheet 3020-PS.

600 Series Relay Module

The 600 Series Relay module has been designed to supply 4 or 8 NO/NC relays for control of auxiliary functions. The relays are controlled by the main CPU and are fully field programmable. Each position on the MPU bus can accommodate an expanded relay module. The relays are rated at 10 Amps and are all provided with a feedback point for positive confirmation of activation. Like all 600 Series expansion modules, the Relay module reports activation and can be programmed or bypassed via its integral display. Refer to Data Sheet 3030 for details.

600 Series Building Control Module

The 600 Series Building Control module is designed to provide an interface between the fire alarm and HVAC systems. Relays rated at 10 Amps are accompanied by feedback points for positive confirmation of the programmed action. The Building Control module is available in 4 or 8 circuit modules that are monitored and controlled by the MPU Bus which can monitor and control one expanded (i.e., 8 circuit) Building Control module per position.

The display for the Building Control module provides LED's for annunciation of relay state or feedback along with windows for user-defined custom labeling. In addition, the display for the Building Control module comes with a three position On/Off/Auto switch per circuit for manual override of the programmed automatic functions. Refer to Data Sheet 3030 for details.

600 Series City Tie Module

Although the Common Control module is equipped with a City Tie circuit which is suitable for most applications, an optional 4 circuit City Tie module has been developed for those special applications that require multiple connections. Similar to all 600 Series modules, the City Tie module connects to the MPU bus and is supplied with a display module.

600 Series System Housings

There are two different size housings available for the Flex 620 control panel. The 4 bay cabinet will accommodate four of the 600 Series modules in addition to the Common Control, Power Supply and batteries. As an expansion cabinet it can house an additional four modules

plus a power supply and battery storage.

The 8 bay cabinet will accommodate eight of the 600 Series modules in addition to the Common Control, Power Supply and batteries. As an Expansion cabinet it can house an additional eight modules plus a power supply and battery storage.

The housings are designed with ample wiring space, conduit knockouts and mounting options. The unit's dead front design allows all operation, programming and user interface to take place without exposure of system modules or field wiring. Field wiring terminals that modules plug into are mounted directly to the backbox for ease of installation and servicing. Modules can be removed for servicing without disturbing field wiring.

Applications

The Flex 620 Conventional Control Panel is designed for those small to large projects that require state of the art conventional hardwired life safety systems. The embedded CPU offers users unrivaled reliability without sacrificing flexibility or value.

Gamewell's complete line of 600 Series I/O modules can be configured to offer system designs and lay-outs which maximize efficiency and economies without sacrificing quality or coverage. The Flex 620, with Gamewell's complete line of conventional devices, provide the foundation for system design. The 620's RS-232 output expands the system's monitoring and control capability.

Serial Annunciators can be added to display system activity and control. The serial annunciator drivers are available in 16 point increments and are an ideal interface to graphic annunciators. The serial annunciators can be outfitted with up to eight freely programmable switches that can be used for remote system control. Switches can be used for Acknowledge, Reset, Signal Silence, Scroll, etc., in order to customize the remote status control network.

An alphanumeric display can also be used for remote status and control. The alphanumeric display is designed to communicate over the serial communications network. The eight programmable switches are also available with the alphanumeric display.

Rounding out the line is the IF620's ability to communicate with a printer either locally or remotely for documentation of system activity. The printer interface has been designed to accept the serial communications from the control panel and provide a parallel output to

the printer. The parallel printer output has been designed into the product to provide superior speed and control over a serial connection while offering the end user a wider variety of printers to choose from.

The Flex 620 and its related I/O modules, along with a complete line of conventional devices (including three different lines of conventional detectors to choose from) and remote status and control capabilities, provide system engineers with all the tools necessary to design effective system solutions for any application.

Electrical Specifications

Common Control:	
Quiescent Current	275 mA
Alarm Current	407 mA plus signal circuit power plus 2 mA for master box or 22 mA for reverse polarity
Input Power	120 VAC, 2 amps
Auxiliary Output:	
S+ , S-	24 VDC, 2 amps max
A+ , A-	24 VDC, 2 amps max
12 VDC	12 VDC, 2 amps max
Common Relays	10 amps at 30 VDC or 250VAC
Signal Circuits	24 VDC, at 2 amps

Mechanical Specifications

4 Bay Cabinet:	
Dimensions	37.2" H x 24" W x 6" D
Battery Storage	8" H x 14.25" W x 6" D
8 Bay Cabinet:	
Dimensions	52.5" H x 24" W x 6" D
Battery Storage	8" H x 14.25" W x 6" D

Gamewell's SmartStart™ Systems

Gamewell's 600 Series of control panels incorporate a unique automated programming process that allows the 600 Series of controls to configure and program themselves. This initialization process sets the project's specific system configuration in memory. The 600 system then automatically ties its inputs to its outputs through the creation of the system's control by event tables. Upon completion of the process the system is completely operable and the premises are protected immediately without the necessity of lengthy programming routines.

How do Gamewell's SmartStart™ Systems work on analog addressable systems? After the initial setup is complete the system then proceeds to read each analog addressable circuit. Identifying each address and device type through its unique signature, the SmartStart program builds a customized control by event table for each of the system's addressable devices in conjunction with all the other input and output circuits of the system. This feature comes standard on all 600 Series systems available only from Gamewell.

The SmartStart setup is directly accessible through the Operator's Display and can then be changed quickly and easily with the push of a button if necessary. All 600 Series systems have been designed around a simple user interface which allows changes to the SmartStart setup, as well as future changes to the system, to be made entirely on site. The 600 Series systems can be re-programmed with the simple push of a button on the Operator's Display, ensuring that the building owners have an operating system in the shortest period of time regardless of the changes. Of course, password protection of the Operator's Display is an integral part of the system ensuring that the system cannot be tampered with or changed accidentally.

SmartNet™ System Network Features

Gamewell's SmartNet System Network is a centrally controlled network that supports between 2 and 250 control panels (nodes) in a unified network configuration made up of any combination of Gamewell's 600 Series control panels (i.e., 620 conventional systems, 630 analog addressable systems and 650 dual technology systems). Each control panel's SmartStart routine can be accessed from the SmartNet controller for quick and efficient set-up of or change to any node in the network.

- Other features accessible from a central location through the SmartNet controller include:
- Full programming capabilities of all connected nodes
- Bypass of any zone, circuit or individual device on any connected node
- Walk test of any zone, circuit or individual device on any connected node
- Ability to test any analog device on any circuit at any node
- Upload/download capability of each node's unique program configuration from the SmartNet controller.

With the SmartNet controller providing full access to each node in the network, features such as the downloading of individual history logs to the central network, programming custom user text, adjusting the sensitivity of analog devices, turning drift compensation on/off, re-initializing individual analog circuits and much more are available to the end user from a single, centralized location. Whether you are tying multiple floors or multiple buildings into a unified network, Gamewell's SmartNet System Network offers you a simple, easy to use and reliable centralized reporting and control center for managing your Life Safety system.

Ordering Information

Supplied	Quantity	Model	Part Number	Description
☐	—	F624		Flexalarm 620 Base Conventional System, consists of: F620 Common Control (Main CPU, F620 front display, bus driver module, common system relays, ribbon cables), 8 Amp Main Power Supply and 4 Bay Cabinet Assembly
☐	—	F628		Flexalarm 620 Base Conventional System, consists of: F620 Common Control (Main CPU, F620 front display, bus driver module, common system relays, ribbon cables), 8 Amp Main Power Supply and 8 Bay Cabinet Assembly
☐	—	SYS-EXP4		MPU Bus Expander module, allows expansion for additional 600 Series modules into a second 4 bay cabinet; complete with cables
☐	—	SYS-EXP8		MPU Bus Expander module, allows expansion for additional 600 Series modules into a second 8 bay cabinet; complete with cables
☐	—	CAB600-4		4 Bay Cabinet Assembly, with space for 4 MPU Bus modules
☐	—	CAB600-8		8 Bay Cabinet Assembly, with space for 8 MPU Bus modules
☐	—	GD-4		Outer Door with clear lexan viewing area for 4 Bay Cabinet
☐	—	GD-8		Outer Door with clear lexan viewing area for 8 Bay Cabinet
☐	—	71217		Installation and Maintenance Manual - Flex 620

Note: Complete engineering specifications on the Flex 620 are available upon request.



Specifications and wiring information are provided for information only and are believed to be accurate. However, Gamewell assumes no responsibility for their use. Specifications are subject to change without notice; installation and wiring instructions shipped with the product should always be used for actual installation.