

Cheetah® Xi 50 Intelligent Suppression Control System

Fike's Cheetah Xi 50 (P/N 10-071) is a state-of-the-art true intelligent digital peer-to-peer modular suppression control system. It is ideal for all life safety and property protection applications and is intended for both commercial and industrial use. It is designed with extensive programmability that allows instantaneous relay of information to perform process management tasks efficiently, including HVAC shutdowns, Emergency Voice Evacuation, damper control, door closure, elevator recall, security, and CCTV/Building Management Awareness.

This cost-effective panel comes standard with one Signaling Line Circuit (SLC) that supports 50 devices, with any mix and match of sensors and modules. The Cheetah Xi 50 utilizes extreme intelligence via its Eclipse® based sensors, including photoelectric, photoelectric with heat, ionization, photoelectric duct, and heat detectors. It also uses Eclipse-based modules such as the monitor, mini-monitor, relay, intelligent pull station, releasing, and control modules. With Cheetah Xi 50, every device communicates as a peer on the signaling line circuit. These peers not only communicate up-to-the-second information to the control panel but also communicate with each other. Each device is capable of generating accurate and highly detailed information. Conventional suppression alarm systems give a general idea of the fire's location, while the Cheetah Xi 50's intelligent sensors indicate precisely which device is in an alarm state. This intelligence provides incredible speed with response times as little as one-quarter second between manual pull station and notification appliance. Its flexibility allows you to attach the intelligent devices that are required for your specific application.

The system is programmed with either the Windows-based field configuration software C-LINX™ or a comprehensive password-protected front-panel keypad programming option. This option allows you to quickly update and adapt to any future requirements or changes in the system, such as changes in occupancy or remodeling. The sophisticated control panel circuitry coupled with the software allows you to read specific information and sensitivity levels of the different Eclipse devices. The sensors also compensate for any changes due to age, contamination, or other environmental factors.



APPROVALS:

- UL
- CSFM
- City of New York
- City of Denver
- State of CA Seismic

Refer to agency website for approval information.

SYSTEM OPERATION

The Cheetah Xi 50 Control system operates on a “Zone and State” relationship. In this design, all input and output devices must be assigned to at least one zone or to all zones (254 are available), each defining an area to be protected. Input devices can be assigned up to 253 zones (one zone is typical), and output devices may be assigned up to 254 zones.

These devices use the SLC signaling line circuit to exchange status information with other devices and the control panel. When an input is activated, it is configured to cause its associated zone to enter into an operational state. Any detection device will cause its associated zone to enter into an alarm state. The output devices are configured to activate to protect and evaluate the endangered zone. This system is entirely modular, allowing you the flexibility to design a system that is just right for your application. A typical system diagram is shown on page 4 that illustrates the communications of a Cheetah Xi 50 system.

STANDARD FEATURES

The Cheetah Xi features are designed to save lives and protect your valuable capital investments through unprecedented speed, intelligence, and flexibility. These features include:

- All Cheetah Xi 50 panels come standard with a controller, transformer, and enclosure (see ordering information for details)
- 254 user-defined zones
- 80 characters, backlit LCD
- Real-time clock
- 3200 event history buffer
- Critical process monitoring
- One-person walk test capability
- Disable by circuit, zone, or device
- Drill function at panel and remote
- Provides solenoid releasing operation
- Alarm verification capability
- Easy to add/remove devices
- Diagnostic menus
- Local piezo with distinct event tones
- 10 Status LEDs to quickly identify system status
- Built-in point ID DACT Module
- Supports up to 31 peripheral devices such as Remote Display, LED Graphic, Zone Annunciators, Ethernet Modules, and Multi-Interface Modules
- USB port for programming

SPECIFICATIONS

Enclosure

- Steel Enclosure 22.5" H x 14.5" W x 3.25" D (Back-box dimensions)
- Flush or surface mounting
- Removable door for ease of installation
- Available in red or black
- Dead Front option available to isolate panel's internal electronics and wiring

Power

- 5.25 amps useable alarm power
- Operation from 120VAC/60 Hz or 240 VAC/50 Hz transformer
- Two 24V DC, 1.75A continuous auxiliary power outputs
- Supports up to 75AH of batteries
- Controller consumes 0.116A @ 24VDC in normal standby mode and 0.176 @ 24 VDC in alarm

Signaling Line Circuit

- Address devices with Infrared (IR) tool, similar to a remote control device
- One SLC loop, NFPA style 4, 6 or 7
- 50 devices, any mix, and match of sensors and modules
- True peer-to-peer digital protocol for high-speed and reliable communications
- Auto address function
- Automatic day/night sensitivity adjustment
- Automatic holiday sensitivity adjustment
- Acclimate operation for sensors
- IR Tool provides the ability to read sensitivity levels or perform a remote test of a device
- Devices contain multi-color LED for quick reference of device status
- Sensors provide early warning pre-alarm detection and can also provide a summing feature (up to eight sensors)
- Maximum Resistance: 70 ohms
- Maximum Capacitance: .60 μ f
- 12,000 ft. maximum distance total from panel to last device.

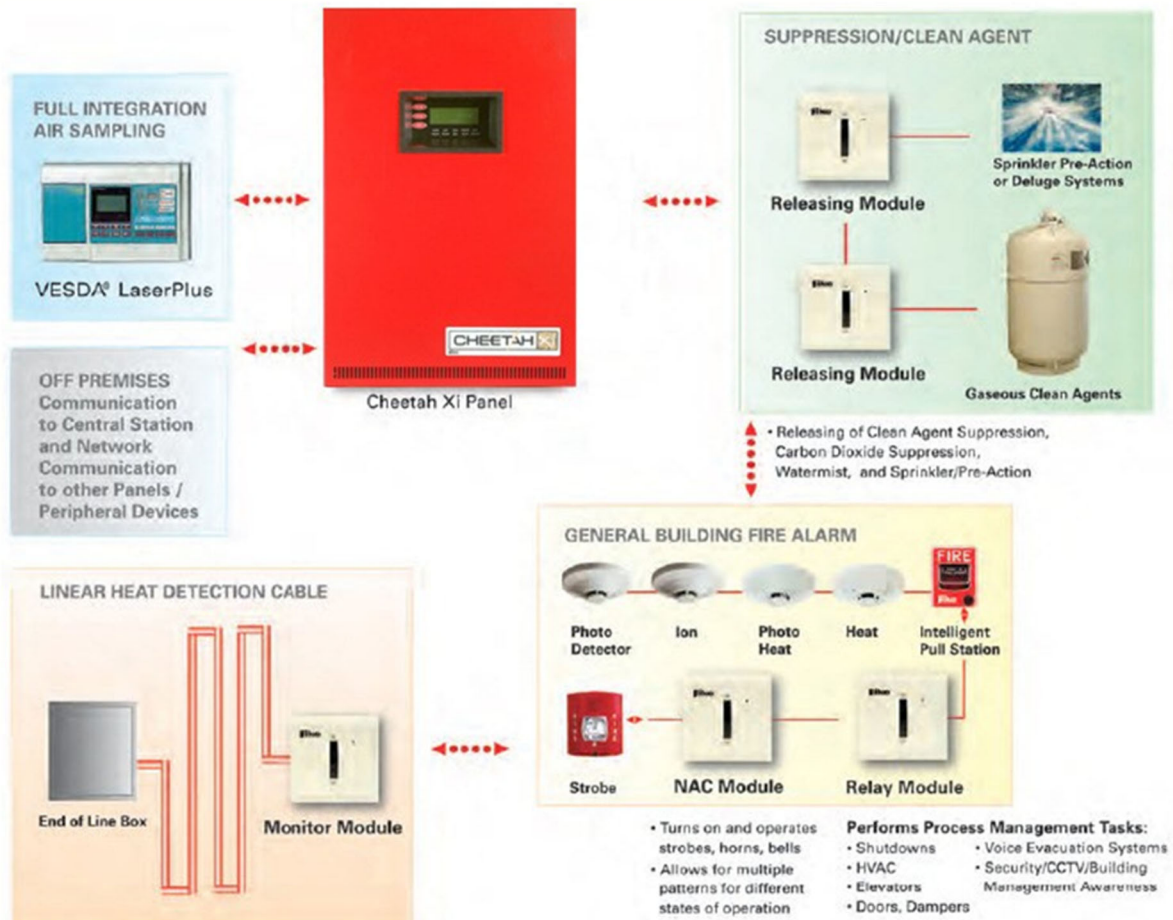
NAC Circuit

- Two NAC circuits standard
- Rated at 24VDC, 1.75 Amps maximum Class A or B
- Built-in synch protocol for System Sensor® and Gentex® devices

Operating Environment

- 32 - 120°F (0 - 49°C)
- 93% relative humidity, non-condensing

SYSTEM DIAGRAM



ORDERING

PART NUMBER	DESCRIPTION	DATASHEET
10-071-c-p or 10-071-c-p-d	Cheetah Xi 50 System, includes Controller, Enclosure, and Transformer c: (R=Red, G=Grey) p: (1=120V, 2= 240V) d: Deadfront	D.1.20.01
10-2622	Cheetah Xi 50 System Controller (included with 10-071-c-p and –L)	D.1.20.01
10-2628-c	Dead Front Option c: (R=Red, G=Grey)	
Peripheral Devices		
10-2630	2 Button Expanded Protocol Remote Display	P.1.103.01
10-2631	10 Button Expanded Protocol Remote Display	P.1.107.01
10-2646	14 Button Expanded Protocol Remote Display	P.1.108.01
10-2667	Zone Annunciator	P.1.118.01
10-2627	Ethernet Module	D.1.22.01
10-2583	Multi-Interface Module	P.1.85.01
10-2528	Point ID DACT (Internal Mounting)	D.1.18.01
Intelligent Sensors		
63-1052	Photoelectric Smoke Sensor Non-Isolator Version	P.1.88.01
63-1058	Photoelectric Smoke Sensor Isolator Version	P.1.88.01
63-1053	Photo/Heat Combination Sensor Non-Isolator Version	P.1.89.01
63-1059	Photo/Heat Combination Sensor Isolator Version	P.1.89.01
60-1039	Thermal Sensor Non-Isolator Version	P.1.90.01
60-1040	Thermal Sensor Isolator Version	P.1.90.01
67-033	Ion Sensor Non-Isolator Version	P.1.91.01
67-034	Ion Sensor Isolator Version	P.1.91.01
63-1057	Duct Sensor Non-Isolator Version	P.106.01
63-1062	Duct Sensor Isolator Version	P.106.01
63-1056	Duct Housing	P.106.01
Intelligent Sensor Bases		
63-1054	6" Sensor Base Non-Isolator Version	P.1.98.01
63-1060	6" Sensor Base Isolator Version	P.1.98.01
63-1055	4" Sensor Base Non-Isolator Version	P.1.99.01
63-1061	4" Sensor Base Isolator Version	P.1.99.01
63-1064	Sounder Base	P.101.01
63-1063	Relay Base	P.101.01

PART NUMBER	DESCRIPTION	DATASHEET
Intelligent Modules		
55-045	Mini-Monitor Module Non-Isolator Version	P.1.93.01
55-050	Mini-Monitor Module Isolator Version	P.1.93.01
55-041	4" Monitor Module Non-Isolator Version	P.1.92.01
55-046	4" Monitor Module Isolator Version	P.1.92.01
20-1063	Intelligent Pull Station Non-Isolator Version	P.1.65.01
20-1064	Intelligent Pull Station Isolator Version	P.1.65.01
20-1343	Intelligent Pull Station Non-Isolator Version (Agent)	P.1.104.01
55-042	Supervised Control Module Non-Isolator Version	P.1.94.01
55-047	Supervised Control Module Isolator Version	P.1.94.01
10-2360	Series Solenoid Diode/Resistor (Needed for solenoids)	
10-2413	Masterbox Interface	
55-043	Relay Module Non-Isolator Version	P.1.95.01
55-048	Relay Module Isolator Version	P.1.95.01
55-052	Releasing Control Module Non-Isolator Version	P.1.96.01
55-053	Releasing Control Module Isolator Version	P.1.96.01
10-1832	ARM III Agent Release Module	C.1.04.01
10-2748	Impulse Release Module (IR)	IV.1.15.01
Programming Parts		
55-051	Infrared (IR) Remote Control Tool	P.1.97.01
06-327	C-LINX Software	
10-2629	Interface cable, USB/A Male to USB/B Male	
10-2477	DACT Programmer	