NITTAN

Network Analogue Addressable

SPERA™

Fire Alarm System

SPERA™

The Most Versatile and Powerful Systems in the Industry

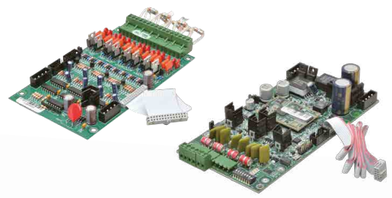
SPERA™ is a ‘next generation’ modular network system that is designed for the most demanding fire protection and emergency communications applications. SPERA™ introduces an impressive new range of system configurations, including a wide array of cabinets and sizes for control and annunciation requirements.

SPERA™ is derived from the Latin word *‘spera’* which means hope and trust.

OVERVIEW

Modular System Design

SPERA™ is designed to be highly versatile and **can be customized** with a wide array of adder modules to meet various needs of applications.
Maximum **8 display/control modules and 7 loop driver cards** can be added in a single panel.
In addition, the base panel supports maximum **16 conventional circuit adder modules** such as initiating circuit module, indicating circuit module and relay circuit module.



EVA series Detectors and Modules

SPERA™ supports Nittan’s EVA series intelligent detectors and modules, which are the industry’s most advanced, highly reliable devices.
EVA series smoke detectors incorporate a unique technology developed by Nittan, that is, **dual optical sensing method to reduce false alarm** and special smoke chamber to respond equally to various type of smoke from a fire.

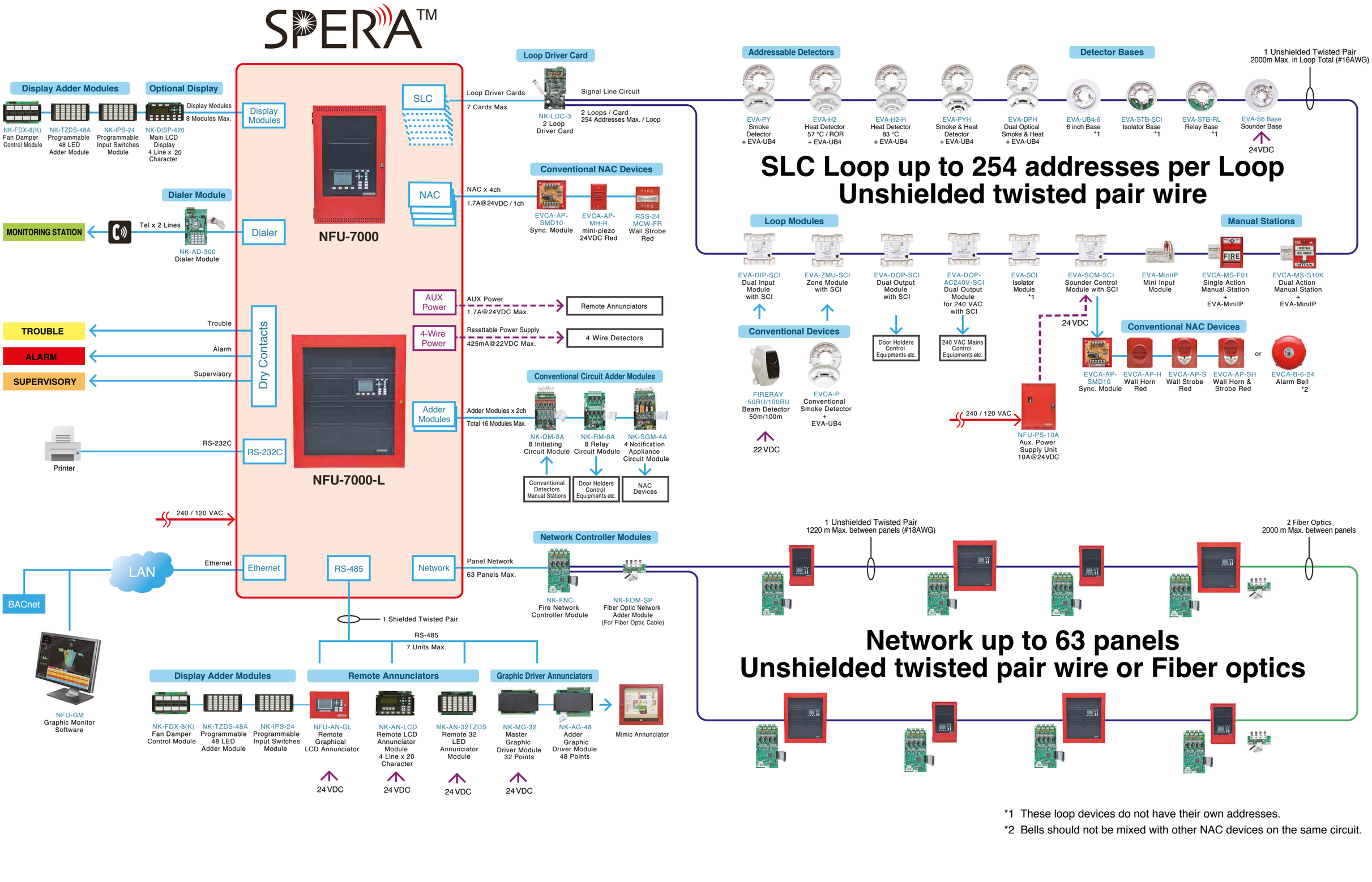
EVA series devices employ a highly reliable communication protocol “EV” developed by Nittan, which has been used **in Europe and in marine market for many years and proved to be reliable.** EV protocol has high-level immunity against noise and large capacity to handle various information which goes through the fire alarm system. Therefore, EV protocol is very stable and reliable communication protocol to be used in life safety system.

Expandable, Networkable Fire Alarm System

SPERA™ fire alarm panel is expandable to maximum **14 loops (7 loop cards) in a single panel.**
The network interface module allows SPERA™ to make a large peer-to-peer network fire alarm system with **maximum 63 panels,** that support **up to 224,000 addressable devices.**

For commercial building, **BACnet** interface allows SPERA™connection to BMS.
SPERA™ is an ideal fire alarm solution from a small size to a large size project with multiple buildings.

SYSTEM CONFIGURATION



*1 These loop devices do not have their own addresses.

*2 Bells should not be mixed with other NAC devices on the same circuit.

SYSTEM COMPONENTS

The SPERA™ intelligent network system has extensive, various range of system modules, detection devices and signaling appliances. More than an advanced network system, SPERA™ delivers a complete project solution with the support of advanced, proven and trusted Nittan's fire detection modules.

Expandability and Flexibility

- **2 loops** equipped as **standard**
- Expandable up to **6 loops** on NFU-7000 and **14 loops** on NFU-7000-L
- One loop supports 254 addresses without any partition to allocate
- Modular system design using variable displays and adder modules
- Designed to support both conventional and addressable system
- BACnet support
- Real time 3D graphical monitoring and control available

Networkability

- **Up to 63 panels**
- Peer-to-peer network communications by ARCNET protocol
- Mutual surveillance and 2 way control available
- Supports unshielded copper and/or fiber optic network cable

Annunciator

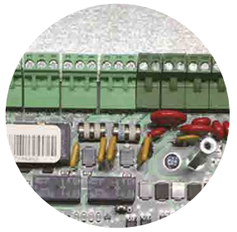
- Provides the **same functions as a main display** on SPERA™ panel
- 7 annunciators available per single SPERA™ panel
- LCD and LED annunciation available
- Full network annunciation
- Enclosures selectable from 3 sizes with keylock door
- Supports many display / control modules

Conventional Circuit Adder Modules

- Conventional Input, NAC and Relay modules **support retrofit applications**
- Removable terminal blocks for easy wiring and servicing
- Extensive transient protection on all circuits

Large System Capacity

- 12 Ampere power supply is available by one control panel
- Built-in 4 outputs for NAC devices **(1.7A@24VDC x 4)**
- Optional NAC circuit adder modules available
- NFU-7000-L has **space for 8 display modules** and **21 adder modules**



Serviceability

- **Large LCD Display** with 16 lines x 40 alphanumeric characters
- Interlocking simulation and Manual activation from control panels
- Built-in **One Man Walk Test** operation
- Multiple group bypass function on every nodes, outputs, zones, relays, devices, and circuits
- 6,000 event-logs; 1,000 for alarm related events and 5,000 for all events
- Capable to store up to 3 configuration data
- '**Hot swap' function** allows to change configurations without panel off-line

Loop Modules

- Simple lineup with Zone, Input and Output modules
- Loop powered
- Up to 127 modules per loop
- Freely addressable within 254
- **Short Circuit Isolator equipped as standard** (except for EVA-MiniIP)
- 'Subtype' setting available for various operation of Zone/Input modules

Intelligent Detectors

- **Omniview360°** visible indicator
- Responses well to both black and white smoke(Nittan PY chamber)
- Low-profile stylish design
- Drift compensation function against dust accumulation
- Capability to **adjust smoke sensitivity levels**
- Dual-photo Smoke Detector EVA-DPH **distinguishes the smoke and steam**
- Freely addressable within 254

Graphic Monitor Software

- Centralized and integrated graphical building monitoring system
- **3D visualization**
- Real-time reports of all events
- Custom event messaging
- Custom color graphical icons depict up to **500,000 addressable devices**
- **500,000 event log capacity**
- Upload/download configuration files without taking the whole system off-line
- Monitors remote sites from multiple workstations or smart phones located anywhere in the world.

Specifications

	NFU-7000	NFU-7000-L
Appearances		
General		
SLC Loops	2 loops (Default) expandable up to 6 loops	2 loops (Default) expandable up to 14 loops
Addresses per Loop	254 addresses per Loop	
Display	Large 16 by 40 Character Graphic LCD	
Network	Max. 63 fire alarm panels (Copper and/or Fiber Optic Cable)	
Annunciators	Max. 7 units (LCD type / LED type)	
Notification Appliance Circuits	4 x 1.7 A @ 24 VDC (Class A or B)	
4-Wire Power Supply	1 x 425 mA @ 22 VDC (Resettable)	
Auxiliary Power Supply	1 x 1.7 A @ 24 VDC	
Auxiliary Relays	3 relays (Common Alarm, Common Supervisory, Common Trouble)	
BACnet	1 ch (Optional)	
Graphic Monitor	1 ch (Optional)	
Printer	1 ch (Optional)	
Dimensions	H 710 x W 430 x D 146 mm	H 950 x W 795 x D 200 mm
Electrical Ratings		
AC Line Voltage	120 V 60 Hz / 240 V 50Hz, 4 A / 2 A (primary)	
Power Supply Ratings	12 A max. (secondary)	
For Indicating Circus	10 A max.	
Battery	24 VDC, Gel-Cell/Sealed Lead-Acid	
Charging Capability	17 - 65 AH batteries	
Current Consumption	Stanby: 310 mA, Alarm: 733 mA (in default setting, connected devices are not considered)	

Nittan implements detailed sales activities and support activities for customers in response to each individual fire prevention issue, with the establishment of 45 branch offices and service centers as well as more than 120 distributors throughout Japan.
Overseas, global coverage encompasses Europe to Africa and the Middle East to Southeast Asia, with a local subsidiary established in the United Kingdom in 1972, as well as subsidiaries in Sweden.
The Nittan brand provides security to sites using state of the art fire prevention technologies.

Distributor

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