

NEXSENTRY STAR II CONTROLLER WITH MIRO OPTIONS



Advanced technology controller

NEXSENTRY STAR II CONTROLLER redefines access control technology by offering the latest innovative controller that utilizes surface-mount technology. The Star II controller incorporates this state-of-the-art enhanced digital technology which provides more powerful features, all on one small single board. Easy installation, modular components, and an affordable price makes NEXSENTRY Star II Controller the right solution for managing even the most demanding access control applications. With a 32-bit Intel® microprocessor built-in, the controller provides superfast and accurate control of up to sixteen doors. Each Star II controller comes with NSMLite, a Graphical User Interface software (GUI) that is used to configure the controller, doors, points, cardholders and elevator configurations. Other advanced features include: scalable door architecture, card capacity for up to 100,000 cardholders; independent PIN entry for each card holder; assignable door lock relays, 16 on-board monitor inputs / 4 relay outputs (MIRO), built-in battery charging circuit for low power installs, on-board support for 2-Wiegand readers without additional physical interface, elevator control and optional Ethernet interface.

Personality chip for easy upgrades

NEXSENTRY Star II Controller modular architecture allows flexible system design options for tailoring secure and dependable access control solutions for any facility, regardless of size. Base two-door system can be field upgraded to a 16-door unit with a simple personality chip change. Add readers or other advanced features when you want and when you need it. Support for proximity, magnetic stripe, keypad, biometric, smartcard and third party (Wiegand) reader access control technologies allows for easy integration of custom applications at each door. Each unit can monitor 255 inputs and control 96 relay outputs using additional MIROs. A NEXSENTRY WIRO 4/8/4 Wiegand reader and I/O module allows facilities with more than two third-party Wiegand readers to upgrade to NexWatch's advanced technology. They also allow a site to keep the current wiring and reader / card relationships along with adding 8 additional monitor inputs and 4 relay outputs. An on-board plug-in port is included for optional 10baseT Ethernet CoBox Micro interface.

Easy installation

Installation time and cost have been greatly reduced with the advanced technology offered in the Star controller. Switchable selectable baud rates and addressing can now be done directly on the panel rather than through a laptop or terminal. In addition, twisted-pair wiring (RS-485 data) greatly reduces the cost and difficulty of installing an access control system and allows up to a 4,000 foot distance between Host and NEXSENTRY Star II Controller.* It also provides the same distance between a Controller, MIROs, WIUs and readers. Common power supplies and batteries can take advantage of the controllers built-in charging circuitry for low power installations. While providing an advanced access control solution, NEXSENTRY Star controller is also economically priced so any organization can implement an advanced multiple technology system at a cost similar to less secure single technology systems.

FEATURES

- Fully integrated access control system
- Base two-door system can be field upgraded to a 16-door unit with a simple personality chip change
- Advanced digital technology with embedded Intel® 32-bit microprocessor provides fastest response time in the industry
- Support for multiple access technologies:
 - Digital proximity
 - Magnetic Stripe
 - Smart Card
 - Keypad
 - Biometrics
- On-board integrated MIRO 16/4
- Can monitor 255 inputs and control 96 outputs with additional MIROs
- Modular MIRO options for easy customization and expansion:
 - MIRO 32/0, 2/16, 4/2, WIRO 4/8/4
- Switch selectable Baud rate and address for ease of installation
- Elevator control
- Cardholder capacity: 100,000
- S-NET dual twisted-pair wire installation
- 2 Wiegand ports on-board; can be expanded by additional Wiegand external board
- Host Communications
 - RS-232
 - RS-485
 - Dial-up
 - Optional Ethernet LAN module
- NexSentry® Manager Lite



* Most PC communications ports are RS-232 which can directly connect to NexStar with optional RS-232 converter.

CONTROLLER SPECIFICATIONS

BENEFITS

- Modular architecture allow for easy upgrade to future technologies
- Advanced digital technology with embedded Intel® 32-bit microprocessor provides fastest response time in the industry
- Independent PIN codes
- Hard/soft anti-passback with “forgiveness”
- Normal and reverse lock operation
- Log Printer interface
- Built-in battery charger for low powered systems
- Easy installation
- Personality chip for easy upgrades
- Economically priced

Database: †

Scalable architecture through personality chip:

- 2, 4, 8, & 16-door units, all use base platform with only a personality chip change to increase door capacity
- Cardholders: 100,000
- Flash programming for firmware revision updates
- Access codes: 120
- User defined holidays: 30
- Time codes: 128
- Actions: 64
- Authorization levels: 6
- Individual operator IDs: 8
- Transaction buffer:
 - 5,000 maximum in security management system port
 - 100 circular in Terminal port
- Elevator: 96 floors

Monitor Inputs and Relay Outputs:

- On-board MIRO with 16 four state monitor inputs and 4 Form C, relay outputs
- MIRO expansion: up to 15 units per controller, with max. support for 255 monitor inputs and 96 relay outputs
- Relay outputs: zone mode, alarm, latched alarm, and locks

Interface and Communication Specifications:

- Security management System communication: RS-485 or RS-232
 - Optional host communication provided with addition of on-board ethernet adapter
- Terminal Interface:
 - ASCII through separate RS-232 terminal port
 - Switch selectable baud rate and address for ease of installation (there is no longer a need for a terminal or laptop in order to connect to the host)
- Log printing through terminal port
- Microprocessor: Intel 32-bit industrial microprocessor
- Self-protection: power input failures, controller tampering
- Direct to reader Wiegand interface: 2 readers directly to controller
- S-NET to NexWatch readers and controller peripherals
- Dial-up communication
- NSMLite

Dimensions:

- Board: 12.7 X 38.1 X 3.2 cm / 5 X 15 X 1.25 in.
- Enclosure: 14.3 X 42.6 X 4.8 cm / 5.63 X 16.75 X 1.88 in.

Environment:

- Temperature: -7° to 49° C / 20° to 120° F
- Humidity: 0 to 95% non-condensing

Power:

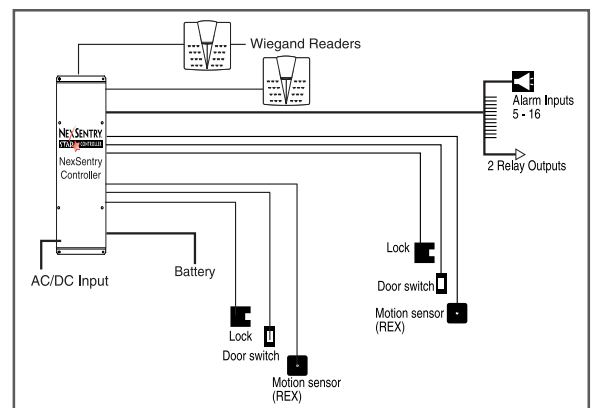
- On-board output charging circuit for 12 V, 12 Amp hour, lead acid gel cell batteries
- Board only input: 16-28 VDC (16-20 VAC) for board operation without charging
- Input for battery charging circuit: 20 - 28 VDC (16-20 VAC), 1A (max. charging)
- Backup battery operating range: 10.5 - 14 VDC
- Consumption: less that 5 watts

Wiring:

- Dual twisted pair (shielded communication)
- Wiegand interface:
 - supports 2 physical Wiegand connections through 3 pair (shielded communication)
- Connection of 4 wiegand units through WIU using S-Net
- 2, 4, 8, or all 16 doors may be Wiegand
- S-NET data channel up to 4,000 feet
- Mounting: board-only or with optional enclosures
- Security Management System:
 - 9-pin D-sub DTE
 - RS-485 Host: Phoenix type
 - RJ-45 with optional ethernet interface
- Terminal port: 9-pin, D-sub DTE
- S-NET Communications: 4 Phoenix type, first 2 S-Net ports double as Wiegand interface
- Power and input battery: Phoenix type

Diagnostics:

- LED status lights:
 - Operational status of the controller
 - Relay output status
 - Comm. TX/RX traffic through host, serial terminal, S-Net and operational ethernet interface
- Internal Diagnostics/System Configuration through terminal port



Sample 2-Door system Configuration—Digital Proximity with keypad and magnetic stripe

†Database values may exceed current limitations of some Security Management Systems.

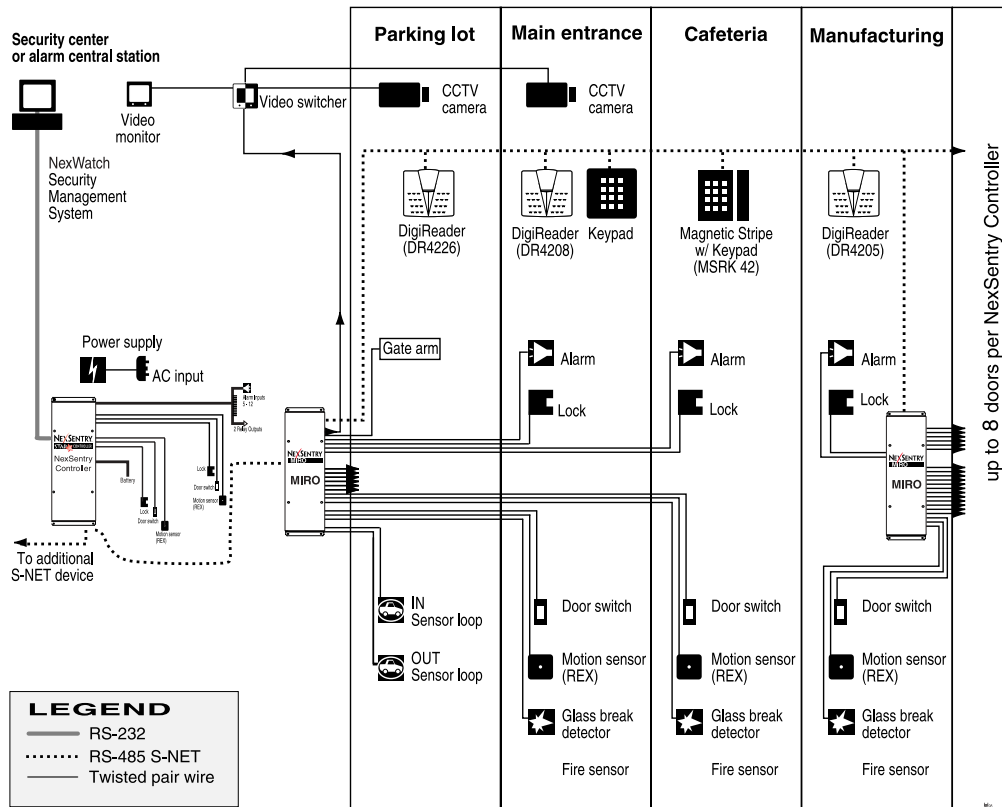
NEXSENTRY MIRO OPTIONS AND SPECIFICATIONS

	WIRO 4/8/4	MIRO 32/0	MIRO 2/16	MIRO 4/2
Relay Outputs	4 Form C Relays	None	16 Form C Relays	2 Form C Relays
Monitor Inputs	8 four-state monitor inputs	32 four-state monitor points	2 four-state monitor inputs	4 four-state monitor points
Board Dimensions	5 x 7 x 1.25 in. / 12.7 x 17.8 x 3.2 cm	5 x 7 x 1.25 in. / 12.7 x 17.8 x 3.2 cm	5 x 7 x 1.25 in. / 12.7 x 17.8 x 3.2 cm	Mounted in MSM-type enclosure
Enclosure Dimensions	5.75 x 16.97 x 1.75 in./ 14.6 x 42.95 x 4.45 cm	5.75 x 16.97 x 1.75 in./ 14.6 x 42.95 x 4.45 cm	5.75 x 16.97 x 1.75 in./ 14.6 x 42.95 x 4.45 cm	5.88 x 7.56 x 1.33 in./ 14.9 x 19.2 x 3.4 cm
Humidity	0 to 95% non-condensing			
Weigand Reader Interface	4 -6 wire Weigand Interface Ports	N/A	N/A	N/A
Mounting	Board only or in enclosure			MSM-type enclosure
Temperature	19° to 120° F / -7° to 49° C			
Power	Source: Twisted pair (shielding optional) connected to Controller via S-Net			
Consumption	Less than 3 watts with 10.5 to 30 VDC	Less than 3 watts with 10.5 to 30 VDC	Less than 3 watts with 10.5 to 30 VDC	Less than 1watt with 16 to 28 VDC
Wiring	Connectors: Twisted pair (shielding optional) Monitor Inputs: Phoenix-type Relay Outputs: Phoenix-type	Connectors: Twisted pair (shielding optional) Monitor Inputs: Phoenix-type Relay Outputs: None	Connectors: Twisted pair (shielding optional) Monitor Inputs: Phoenix-type Relay Outputs: Phoenix-type	Connectors: Twisted pair (shielding optional) Monitor Inputs: Phoenix-type Relay Outputs: Phoenix-type
Communication	S-Net through 2 (two) RS-485 connectors via the twisted pair (shielding optional) wiring			

Panel Architecture
NexSentry STAR II
Controller with MIRO



Double Board Modular
Enclosure for
WIRO 4/8/4, MIRO 32/0,
MIRO 2/16



NEXSENTRY MIRO 4/2



Components and Options

MIROs

- WIRO 4/8/4 - board only
- MIRO 4/2 board in Molded enclosure
- MIROs: 2/16 - board only or with enclosure

Enclosure / Cabinet

- Modular enclosure available
- Large cabinet

Communication device

- Cobox Micro Ethernet Interface
- Cobox Universal thin Server
- NexLine
- NexLine Plus (MIRO 4/0)
- NexStar

Security Management Systems

- Pro-Watch™ Suite
- NexSentry StarGaze™
- NexSentry Manager 3.0

Readers

- DigiReader Series Digital Proximity Readers
- OmniProx and OmniSmart Readers
- DR4200K Keypad
- MSR42 Series Magnetic stripe/keypad Readers
- Precise Biometric Fingerprint Reader
- Bioscript V-Series Readers

Credentials

- QuadraKey, 2Smart Key, NexKey, KeyMate, Pico Pass

Power Supplies

- PI-1 (115V)
- PI-2 (230V)
- Universal Low-Cost Power Supply

ORDERING INFORMATION

Order #	Description
Controller	
92410250030	Star II Controller ; supports 2-door / 100,000 cardholders, 255/96 MIRO capacity
92410450020	4-Door Chip Set ; supports 4-door / 100,000 cardholders, 255/96 MIRO capacity, (requires Star II controller 92410250030)
92410850020	8-Door Chip Set ; supports 8-door / 100,000 cardholders, 255/96 MIRO capacity, (requires Star II controller 92410250030)
92411650030	16-Door Chip Set ; supports 16-door / 100,000 cardholders, 255/96 MIRO capacity, (requires Star II controller 92410250030)
MIRO Options	
92410034840	WIRO 4/8/4 - board only
92410026000	MIRO 32/0 board only
92410027000	MIRO 2/16 board only
92410025200	MIRO 4/2 board in modular MSM-type enclosure
Enclosure Options	
92410000300	Modular Enclosure for STAR® controller
92410086000	Large cabinet only
92410000400	Double board modular enclosure for MIRO's and WIRO's
Ethernet Options	
92410000020	On-board CoBox Micro Ethernet interface
92000151000	CoBox Universal Thin Server

Complete system solutions for access control and security management



Security Management Systems



Access Control Systems



Readers



Credentials

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