data sheet VYKON security JACE® and accessories

PRODUCT DEFINITION

The VYKON Security JACE is an embedded controller that includes the VYKON Security application. As part of a VYKON Enterprise Security Supervisor system, a field of VYKON Security JACEs can be managed as one enterprise-level multi-building access and automation control system. Stand alone, the VYKON Security JACE is a full-featured access control and security system that includes an intuitive graphical user interface for managing access control and security. The system can be tailored with custom reports and graphics. Optional video surveillance integration provides a single user interface for monitoring video and system status. Standard BACnet® and Niagara drivers enable seamless control of multiple building systems from a single platform. Web-browser clients provide full configuration and operator functionality for up to 10 simultaneous users.



VYKON Security JACE is an embedded controller with on-board I/O for controlling up to 2 access-controlled doors and 2 security zones. Scalable by adding up to 15 modules to increase the access capacity to 32 readers, the VYKON Security JACE is appropriate for small to large installations. Optional communication cards and drivers can be added to enable BACnet*, Modbus*, LonWorks* and SNMP device communications. For larger installations, the VYKON Enterprise Security Supervisor may be used to manage multiple VYKON Security JACEs for a robust, distributed system.



VYKON Security Remote Reader Module includes I/O for 2 access-controlled doors. Interfaces to Niagara Security JACE via RS-485 port included on the Niagara Security JACE.



VYKON Security Remote Input Output Module provides 8 supervised inputs and 8 form C relay outputs. The I/O Module can be utilized for monitoring intrusion sensors, elevator controls or controlling doors which do not require a card reader. Interfaces to Niagara Security JACE via RS-485 port included on the VYKON Security JACE.



VYKON Universal Input Output Module supports 8 Universal Inputs, 4 Form A Relay Outputs and 4 0-10 VDC Analog Outputs. The Universal I/O Modules can be utilized for monitoring analog inputs, providing analog control signals and providing relay contacts when interfacing to non-security related equipment. Interfaces to VYKON Security JACE via RS-485 on optional communication card.



Intrusion Arming Keypad with LCD display and keypad for arming and disarming Intrusion Zones. Display also provides feedback to the user regarding arming status and status of individual intrusion points. Interfaces to VYKON Security JACE via RS-485 on optional communication card.



VYKON Security Enclosures are equipped with key lock, tamper switch, Din rail for easy mounting and removable cover. The medium/large enclosures are provided with a universal power supply and provide space for backup batteries. Knockouts are provided on top, bottom and sides for external connections. The enclosure interior has generous space for cable management.



FEATURES

Role based users - control what users view and can access or command

Threat Level Management – change building access control based on up to 255 different threat levels

Advanced Zone Management – count people in a zone, set min and max occupancy limits, require a Supervisor, and prevent passback

Intrusion Zone Management - Monitor, arm, disarm secured areas

Elevator Floor Control - Individual floor access control

Intuitive User Interface with context-sensitive help

Configurable Wiegand Formats - Support for most proximity card formats. Avoid replacing existing credentials when retrofitting systems.

Custom Reports - The information you need in the format you want

 ${\tt Custom\ Graphic\ /\ Map\ creation\ -\ Create\ custom\ graphics\ to\ provide\ operators\ with\ quick\ access\ to\ critical\ information}$

Video System Integration - View and control cameras from the same console as other building functions. Select associated video from the alarm console or pop-up video when alarms occur.

 ${\tt Database\ Import\ -import\ data\ from\ other\ access\ control\ systems\ or\ HR\ databases\ to\ quickly\ populate\ the\ database}$

Alarm Escalation - Escalate alarms to remote consoles or email recipients

SUPPORTED DRIVERS

Video Drivers - Milestone®, Axis®, Dedicated Micros®, Honeywell

Building Automation Drivers - BACnet®, Lonworks®, Modbus®, and SNMP

SPECIFICATIONS

Part number	Card readers	Supervised inputs	Digital inputs	Universal inputs	Relay outputs	0-10 VDC analog outputs
SEC-602	2	6	3	_	4 Form C	_
SEC-616	2	6	3	_	4 Form C	_
SEC-R2R	2	4	2	_	2 Form C	_
SEC-RIO	_	8	2	_	8 Form C	_
IO-16-485	_	_	_	8	4 Form A	4

RESOURCE CAPACITIES

	VYKON Security JACE 602	VYKON Security JACE 616	
Reader Modules	up to 151	up to 151	
I/O Modules	up to 15¹	up to 151	
Total Readers	2 with option for 32 max ²	16 with option for 32 max ²	
Universal I/O Module	41	41	
Intrusion Arming Keypad	up to 6	up to 6	
Total I/O	120 ² /120 ²	1202/1202	
Personnel Records	20,000	20,000	
Access History Records	50,000	50,000	
Supports Optional Non- Security Drivers	No ³	Yes	

 $^{^{\}mbox{\tiny 1}}$ Max of 15 modules (combined reader and I/O) per SEC-602 or SEC-616

General Note: For systems requiring multiple controllers or greater than 32 readers, consider a VYKON Enterprise Security Supervisor based solution.

KEY ADVANTAGES

- Unified graphical tool set for all connected building systems
- Scalable from 2 32 doors
- Integrated video surveillance
- Customizable access control functions using Niagara tools
- Single embedded platform for managing multiple systems



 $^{^{2}}$ Up to 32 readers or 120 I/O points, depending on module combination

³ SEC-602 may be upgraded to SEC-616

ORDERING INFORMATION

VYKON Security JACE

The Security JACE includes connections for 2 Card Readers, 6 Supervised Inputs, 4 Form C Relay Outputs, 3 Digital Inputs, 256 MB RAM/128 MB Flash, 2 10/100 Mb Ethernet ports, (1) RS-485 serial port, (1) RS-232 serial port, and 2 communication card option slots. Provides removable screw terminal connectors and status indication LEDs. VYKON Security JACE is designed for DIN rail mounting. Includes Security Appliance, Web UI and the following standard drivers: Niagara Network (Fox) Client/Server, NRIO, BACnet IP Server and oBIX Server. Supports up to 2 card readers with maximum of 32, and 20,000 personnel records 20,000 transactional history records, and intrusion and optional video drivers. Manufactured in the USA.

records, and intrusion	and optional video drivers. Manufactured in the USA.			
SEC-602	Niagara Security JACE licensed for 2 readers. Additional card reader expansion is purchased separately. Supports optional BAS drivers with purchase of SEC-602-UP.			
SEC-616	Niagara Security JACE licensed for 16 readers. Additional card reader expansion is purchased separately. Supports optional BAS drivers.			
SEC-616-DEMO	Niagara Security Demo Kit, Niagara Security JACE licensed for 32 readers. Includes BACnet, Lonworks, MODbus TCP and 16 cameras for each available video driver. Also includes Universal Power Supply, Intrusion Keypad, Mini-Prox reader and 5 prox cards. Kit is for demo use only and not for resale.			
SEC-8-RDR	Niagara Security JACE 8 reader license expansion pack.			
SEC-602-UP	Upgrades the SEC 602 controller to a SEC 616 supporting a minimum of 16 card readers. Optional SEC-8-RDR reader upgrades previously applied to the SEC 602 will transfer to the upgraded SEC 616 as additional readers. Upgrade also enables support for BAS drivers on the security controller.			
Hardware Options				
SEC-R2R	Includes connections for 2 Card Readers, 4 Supervised Inputs, 2 Form C Relay Outputs and 2 Digital Inputs. Contains removable screw terminal connectors and status indication LEDs. Manufactured in the USA.			
SEC-RIO	Includes connections for 8 Supervised Inputs, 8 Form C Relay Outputs and 2 Digital Inputs. Contains removable screw terminal connectors and status indication LEDs. Manufactured in the USA.			
IO-16-485	Includes 8 Universal Inputs, 4 Form A Relay Outputs and 4 0-10 VDC Analog Outputs Contains removable screw terminal connectors and status indication LEDs. Intended for DIN rail mounting.			
NPB-PWR-UN	Universal Power Supply 90 - 263 V AC 50/60 Hz Auto sensing, 15 VDC, 30 watt Power Supply, DIN Rail Mountable.			
NPB-2X-485	Dual Port RS-485 option card.			
NPB-LON	78 Kbps FTT-10A Lon® adapter. Uses one of the two communication slots in the VYKON Security JACE. Manufactured in the USA.			
Security Intrusion Key	/pad			
SEC-INT-KP	LCD display and keypad for arming and disarming Intrusion Zones. Display also provides feedback to the user regarding arming status and status of individual intrusion points (requires a separate NPB-2X-485 RS-485 option card for the Niagara Security JACE. A maximum of 10 Display/Keypads may be added to the 485 bus on a VYKON Security JACE 6.			
Security Enclosures*				
SEC-ENC-SML	Small enclosure with DIN rail, tamper switch and key lock. Mounting for single reader module only. Dimensions: $6"W \times 9"H \times 4"D$. Manufactured in the USA.			
SEC-ENC-MED	Medium enclosure with DIN rail, tamper switch, key lock and capacity for user-provided SLA batteries. Configurable options include VYKON Security JACE, (2) reader modules or remote I/O module. Universal Power Supply is included with enclosure. Dimensions: 17"W x 15"H x 4"D Manufactured in the USA.			
SEC-ENC-MNP	Medium enclosure without Universal Power Supply. Allows space for an additional reader module.			
SEC-ENC-LRG	Large enclosure with DIN rail, tamper switch, key lock and capacity for user-provided SLA batteries. Enclosure includes 2 DIN rails for additional module expansion. Configurable options include VYKON Security JACE, 4 reader modules or 2 remote I/O modules. Universal Power Supply is included with enclosure. Dimensions: 17"W x 22"H x 4"D. Manufactured in the USA.			

Large enclosure without Universal Power Supply. Allows space for an

additional reader module.

*Security enclosures are not sold in EMEA

SEC-ENC-LNP

PLATFORM SPECIFICATIONS

SEC-602 and SEC-616 Platforms

- PowerPC 440 524 MHz processor
- 256 MB DDR RAM & 128 MB Serial Flash
- Battery backup
- Real-time clock

JACE Communications

- 2 Ethernet Ports 10/100 Mbps
- 1 RS-232 Port (9 pin D-shell connector)
- 1 RS-485 (6 pin screw terminal)

JACE Operating System

- QNX RTOS
- Sun Hotspot JVM (Java Virtual Machine)
- Niagara AX

Power Supply

 NPB-PWR-UN: 100-263 VAC, 50/60 Hz, 15VDC power supply module, 30 Watt

I/O Module Communications

• 1 RS-485 (6 pin screw terminal)

Environment

- Operating temperature range:
 0° to 50°C (32°F to 122°F)
- Storage temperature range: 0° to 60°C (32°F to 140°F)
- Relative humidity range: 5% to 95%, non-condensing

Agency Certifications

- FCC part 15 Class A
- CE
- UL 294*

*UL 294 not valid in EMEA



ORDERING INFORMATION

Video Drivers				
DR-AXS-AX-4	Axis IP camera driver for 4 cameras.			
DR-DED-AX-4	Dedicated Micros video driver for 4 cameras.			
DR-MLS-AX-4	Milestone video driver for 4 cameras.			
DR-RPD-AX-4	Honeywell RapidEye™ video driver for 4 cameras.			
Optional BAS Drivers				
MPD-BAC	Multi-Protocol supports 60 BACnet devices, 5 LonWorks devices, 5 Modbus TCP devices, 5 Modbus RTU devices and 5 SNMP devices.			
MPD-LON	Multi-Protocol driver supports 60 LonWorks device, 5 BACnet devices, 5 Modbus TCP devices, 5 Modbus RTU devices and 5 SNMP devices.			
DR-SEC-BAC-MSTP	BACnet MS/TP Driver supports 60 BACnet devices, 2000 points, 300 histories			
DR-SEC-BAC-TCP	BACnet TCP supports 60 BACnet devices, 2000 points, 300 histories			
DR-SEC-LON-FTT	LonWorks supports 60 LonWorks devices, 2000 points, 300 histories			
DR-SEC-MDB-RTU	Modbus RTU driver supports 60 Modbus devices, 2000 points, 300 histories			
DR-SEC-MDB-TCP	Modbus TCP driver supports 60 Modbus devices, 2000 points, 300 histories			
Niagara Security JACE 6 Controller Upgrades and Maintenance				
SEC-J-REV	Upgrades a VYKON Security JACE to the current Niagara AX version.			
SEC-J-MA	VYKON Security JACE effective for one Maintenance Term (a period of at least 12 months, as defined in Tridium's Software Maintenance Terms and Conditions). Upgrades licenses to Niagara 4 releases issued during the Maintenance Term for which the maintenance is purchased. Subject to Tridium's Software Maintenance Terms and Conditions. The Software Maintenance Terms and Conditions can be found in the Resource Library on tridium.com.			

To learn more about how to purchase and install the VYKON Security JACE, please contact us.



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