PROBLEM

SOLUTION

Cypress Solution Sheet

CYPRESS INTEGRATION SOLUTIONS

Suprex® Supervised Reader-Extenders (Includes Central and Remote units)

- Reader-panel distance exceeds 500 ft.
- Limited conductors
- Electrical noise/Wiegand signal interference
- Installing readers in elevator cabs over traveler cable

SPX-1300 Suprex Reader-Extender
(Twisted pair / RS-485)
Connects a single reader; does not support Expansion Pairs
Typical range: 2 miles / 1318 m

SPX-7500 Suprex Reader-Extender
(Twisted pair / RS-485)
Connects up to 8 readers when used with EXP-2000 Expansion Pairs
Typical range: 4,000 ft. / 1219 m

- No conductors for door I/O when installing OSDP readers (door strike, REX switch, DPS)

SPX-1400 OSDP I/O Extender extends physical I/O between reader and panel over the OSDP data lines.
Maximum range: 4000 ft. / 1219 m

- Connecting reader requires trenching under parking lots or streets
- Reader-panel distance exceeds 500 ft.
- Limited or no conductors
- Connectivity lost when conduit damaged
- Installing readers in elevator cabs

SPX-5631 Wireless Reader-Extender
Supports Wiegand and OSDP.
2.4 GHz wireless IEEE 802.15.4 wireless protocol. CE Certified.
Typical outdoor range: 1 mile / 1609 m line-of-sight, depending on environment

SPX-5641 Long-Range Wireless Reader-Extender
Supports Wiegand and OSDP.
2.4 GHz wireless IEEE 802.15.4 wireless protocol.
Typical outdoor range: 2 miles / 3218 m line-of-sight, depending on environment

SPX-5632 Wireless Reader-Extender for 2 readers
Connects 2 readers and door I/O line-of-sight 2.4 GHz wireless IEEE 802.15.4 wireless protocol.
Typical outdoor range: 1 mile / 1609 m depending on environment

- No cable to install readers, but TCP/IP network is available

SPX-7200 Reader Extender for IP networks
Typical range: 328 ft. / 99m with direct connection to network switch, or communicate across entire IP network

- No cable to install readers, but fiber cable available
- Lightning-prone or corrosive sites
- Long distance between reader and panel

SPX-7400 Fiber Optic Reader Extender
Multi-Mode
Typical range: 2 mile / 3218 m

SPX-7410 Fiber Optic Reader Extender
Single Mode
Typical range: 24 mile / 38624 m

SPX-7420 Fiber Optic Reader Extender Single or Multi-Mode.
Includes ST connector and LT adapter.
Typical range: 2.4 miles (multi-mode), 24 miles (single-mode).

- Installing multiple Wiegand readers over one connection

EXP-2000 Expansion Pair
Adds up to 7 additional readers to Suprex connection (1 pair per additional reader)

Handheld Wireless Reader Kits

- Verifying identities at remote / temporary sites
- Creating muster points without power / data connections
- Rapidly deploying access control when infrastructure damaged
- Tracking staff /student event attendance, volunteer hours, meal credits, training sessions
- Providing overflow access points during peak hours
- Verifying credentials at parking lots, vehicle gates, on shuttle buses

Wireless Handheld Readers HHR-4000B Series
Allows security personnel to verify credentials at sites where no reader exists. Reader wirelessly connects to its base unit. Base unit is wired to the controller, similar to a standard Wiegand reader.

Supports low-frequency and high-frequency credentials.

2.4 GHz IEEE 802.15.4 wireless protocol. CE Certified.

Typical wireless range, depending on environment: Indoor: 150 ft. / 45 m, Outdoor: 500 ft. / 152 m

HHR-4156B 1-Reader Kit Dual-Lane Reader Kit
(1 Reader, 2 Wiegand outputs)

HHR-4166B 1-Reader Kit Single-Lane Reader Kit
(1 Reader, 1 Wiegand output)

HHR-4256B 2-Reader Kit Dual-Lane Reader Kit
(2 Readers, 2 Wiegand outputs)

HHR-4266B 2-Reader Kit Single-Lane Reader Kit
(2 Readers, 2 Wiegand outputs)

Data Splitters

- Connecting 2 readers with 1 panel
- Minimizing Wiegand ports used at in-out doors or high-low gates
- Sharing card data between access control system and other systems such as alarm, key cabinet, elevator, or time & attendance system

OPTW-100 Wiegand Splitter sends same data from 2 readers to 1 Wiegand panel, or sends same data from 1 Wiegand reader to 2 different Wiegand panels.

- Connecting 1 reader to 2 panels without sharing credential data

CVX-OPTS Intelligent Wiegand Splitter connects 1 Wiegand reader with 2 Wiegand panels, and directs reader data to appropriate panel.
Custom engineering required.

- Connecting same OSDP reader data to 2 panels (example: multi-tenant spaces)
- Sharing card data between access control system and other systems such as alarm, key cabinet, elevator, or time & attendance system

ODM-2010 OSDP Splitter connects 1 OSDP reader to 2 OSDP panels. Shares same reader data with both panels.

ODM-2015 OSDP Splitter connects 1 OSDP reader to 1 OSDP panel + 1 Wiegand panel. Shares same reader data with both panels.

- Connecting 1 OSDP reader to 2 panels, and directing reader data to appropriate panel
- Sharing card data between access control system and other systems such as alarm, key cabinet, elevator, or time & attendance system

ODM-2020 Custom OSDP Intelligent Splitter connects 1 OSDP reader to 2 OSDP panels. Directs reader data to appropriate panel.
Custom engineering required.

ODM-2030 Custom OSDP Intelligent Splitter connects 1 OSDP reader to 1 OSDP panel + 1 Wiegand panel. Directs reader data to appropriate panel.
Custom engineering required.

PROBLEM	SOLUTION
Data & OSDP-Wiegand Converters	
• Avoiding reissuing credentials due to card format incompatibilities • Adding RS-232 readers or barcode scanners to Wiegand access control systems	**CVX-1300 Multi-Format Data Converter** Supports RS-232 to Wiegand conversions, Wiegand to Wiegand, Wiegand to RS-232 and more; see manual for details. CE Certified.
• Unique data or hardware incompatibility challenges • Integrating custom equipment	**CVX-1400 Custom Data Converter** For unique conversions not supported in CVX-1300. CE Certified. *Custom engineering required; contact Cypress.*
• Budget prevents upgrading to OSDP systems • Incompatibilities between Wiegand panel and OSDP reader, or Wiegand reader and OSDP panel	**OSM-2400 OSDP-Wiegand Converter** Connects Wiegand panel or reader with OSDP reader or panel. Typical RS-485 range 4,000 ft. / 1219 m
• Budget prevents upgrading to OSDP systems • Incompatibilities between Wiegand panel and OSDP reader	**OSM-CPI OSDP-Wiegand In-Panel Converter** For connecting OSDP readers to Wiegand control panels.
• Specialty readers lack OSDP capability	**OSM-RCI Wiegand-OSDP Interface** For connecting a Wiegand reader to an OSDP panel.
OSDP Tools	
• Unsure if existing cable supports OSDP readers when bidding projects • Configuring OSDP reader address/ baud rate	**OTT-2100-2 OSDP Cable Test Tool** Simulates OSDP communication over cable and measures packet loss. Also supports OSDP COMSET feature for easy configuration of OSDP reader address/baud rate.
• Lack of OSDP troubleshooting options	**OTT-1100 OSDP Trace Tool PRO interface** allows troubleshooting by displaying OSDP communication messages in software. Use with free Cypress Trace Tool software (free download from Cypress website), enables PRO features.
• Easily connecting OSDP readers, access controllers, and other tools/devices when troubleshooting or prototyping OSDP systems	**OSM-HUB OSDP Cross-Point Switch** with pluggable terminal blocks. Provides power and data connections for bench testing / development of OSDP devices.
	OTT-KIT1 OSDP Tool Kit: Includes Cable Test Tool, Trace Tool PRO Interface, OSDP Cross-Point Switch, USB Data Wedge, and hardshell case.
More Access Control Accessories	
• Unknown credential data output from Wiegand or OSDP readers • Testing Wiegand or OSDP readers	**WDG-6112 USB Data Wedge** Connects Wiegand or OSDP reader to computer; credential data is output in any text field (Notepad, Word, Excel, etc.).
• Standardizing Wiegand signals from hybrid Wiegand/OSDP readers when Wiegand readers must be paralleled (high/low vehicle gate, in /out readers, etc.)	**OPTW-200 Wiegand Signal Standardizer** Parallels non-standard Wiegand readers and Wiegand readers with non-standard interfaces that cannot properly communicate with a Wiegand panel.
• Integrating barcode scanner into Wiegand access control system	**TSP-2104 2D Optical Honeywell Barcode Scanner Kit** | **TSP-2105 2D Optical Code Barcode Scanner Kit** | **TSP-3100 1D Laser Barcode Scanner Kit**
• Connecting Wiegand reader to network software over TCP/IP network • Outputting Wiegand data from network to panel	**SIO-7300 Edge Device** Interface device that goes between a Wiegand reader and a TCP/IP network. *Customer is responsible for writing software to interface with Cypress SIO Protocol.*

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PROBLEM SOLVED.