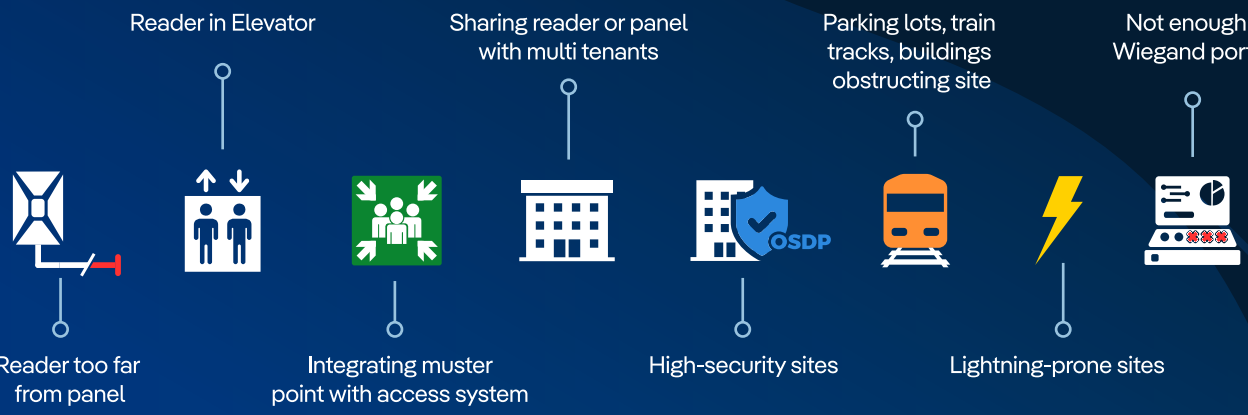
Need solutions for access control challenges?



Whether you're planning an access control site or installing equipment, rely on Cypress Integration Solutions, the industry problem solver. Factoring in Cypress solutions saves time, money, and protects your hard-earned reputation for excellence.

Wiegand

Extenders • Splitters • Converters

Suprex® Supervised Reader-Extenders

- Add supervised connection to reader
- Wireless 2.4 GHz
- TCP/IP
- RS-485 for single door or multiple doors
- Fiber Optic

Wiegand Splitters

- Passive model supports 5-16Vdc power input
- Custom Intelligent Splitter available

Data Converters

- Multi-format model
- TransCore model
- Custom model

Handheld Readers

Wireless RFID Readers

HHR Wireless Handheld Reader Kits

- Wireless 2.4 GHz
- Wireless connection encrypted with OSDP Secure Channel
- Kits with 1 or 2 readers

Improve security across the organization

- Digital mustering
- Gates, access points without readers
- Staff, student event attendance
- Temporary, construction entrances

OSDP

Extenders • Splitters • Converters

OSDP-Wiegand Converters

- Panel interface model
- Panel or reader interface model

OSDP Tools

- Portable standalone reader configuration tool
- Benchtesting hub
- Trace tool

SIA's OSDP protocol

- International standard
- Enhanced security, functionality, interoperability

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PROBLEM | SOLUTION

CYPRESS INTEGRATION SOLUTIONS

Handheld Wireless Reader Kits
2.4 GHz IEEE 802.15.4 wireless protocol Typical wireless range: 150 ft. indoors; 500 ft. outdoors / 45 m indoors; 152 m outdoors

PROBLEM	SOLUTION		
• Limited access control at construction, industrial, or temporary sites • Using access control system for mustering • Verifying staff credentials aboard shuttles • Tracking staff training / campus event attendance • In-vehicle credential verification at gates • Creating temporary lanes for turnstile/ access point overflow during shift change or at other high-traffic times	**HHR-4000 Series** Secures wireless connection between reader and base unit (OSDP Secure Channel communication with AES-128 encryption) **Credentials:** HID iCLASS SE® embedded reader module High / Low Frequency (13.56 MHz/125 kHz) HID Prox, AWID Prox; ISO14443A/B ISO15693; MIFARE Classic®, MIFARE DESFire® 0.6, MIFARE DESFire® EV1 (32 bit CSN), HID: iCLASS® Standard/ SE/SR/Seos; PIV II, Secure Identity Object® (SIO®) | **CE Certified**	**Dual-Lane Reader Kits** with Gate-Selection Feature	**Single-Lane Reader Kits** (No Gate Selection)
		Includes Reader(s), Charging Dock + Wall-Plug Charger (per Reader), Protective Boot (per Reader), 1 Base Unit	
		1-Reader Kit **HHR-4156B-GY**	1-Reader Kit **HHR-4166B-GY**
		2-Reader Kit **HHR-4256B-GY**	2-Reader Kit **HHR-4266B-GY**

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

• Cannot connect RFID reader with cable due to damaged conduit, or obstacles such as parking lots, roads and railroad tracks	**Wireless Suprex** 2.4 GHz Wireless IEEE 802.15.4 wireless protocol	**SPX-5631** (5,000 ft. /1524 m typical outdoor line-of-sight range, depending on environment) **CE Certified**	**SPX-5641** (10,000 ft. /3048 m typical outdoor line-of-sight range, depending on environment)
• Reader more than 500 ft. from panel/ limited conductors available / electrical noise causing Wiegand signal interference	**RS-485 Suprex** (2-wire)	**SPX-1300** (single reader; 10,000 ft. / 3048 m typical range) CE Certified	**SPX-7500** (supports Expansion Pairs; 4,000 ft. /1219 m typical range)
• No available cable to install credential readers, but TCP/IP network is available	**Ethernet Suprex** for IP networks	**SPX-7200** (typical range 328 ft. / 99 m with direct connection to network switch; can communicate across entire IP network)	
• Reader is long distance from controller / Fiber available / Lightning-prone sites	**Fiber Optic Suprex**	**SPX-7400** (multi-mode; 2 mile / 3.21 km typical range)	**SPX-7410** (single-mode; 24 mile / 38.62 km typical range)
• Connecting multiple readers in close proximity using a Suprex Reader-Extender	**Expansion Module Pair** *Supports all SPX models except SPX-1300*	**EXP-2000** CE Certified (Up to 7 EXP-2000 Expansion Pairs may be used with each Suprex, allowing a total of 8 readers & door I/O per Suprex)	

Data Converters

• Reader/controller data incompatibilities • Using RS-232 serial devices with access system	**Multi-Format Converter**	**CVX-1300** supports RS-232 to Wiegand conversions, Wiegand to Wiegand, Wiegand to RS-232 and more; see manual for details | CE Certified
• Unique data incompatibility challenges	**Custom Converter**	**CVX-14XX** for unique conversions not supported in CVX-1300 | Custom product; contact Cypress for details | CE Certified

Wiegand Splitters & Routers

• Too few Wiegand ports to connect readers • 2 Wiegand controllers to monitor 1 reader • Voltage/ground potential incompatibilities between reader and panel	**Passive Splitter**	**OPTW-100** *Note: This is the upgraded model; supports 5-16 Vdc power input*
	Intelligent Splitter / Router	**CVX-OPTS** Custom product; contact Cypress for details | CE Certified

Barcode Scanner Kits

• Visitor management system does not connect to existing Wiegand access control system • Need to connect turnstile barcodes to access control system	**Optical 2D Barcode Kit**	**TSP-2104** Honeywell 3320G scanner
	Optical 2D Barcode Kit	**TSP-2105** with Code CR1100 scanner
	Laser 1D Barcode Kit	**TSP-3100** with Microscan MS-3 scanner

OSDP Devices & Tools Using SIA'S Open Supervised Device Protocol

• Budget limitations prevent using OSDP • Lack of available OSDP readers	**OSDP-Wiegand Converter** (for panel or reader)	**OSM-2400** (4,000 ft. / 1219m typical RS-485 range) *Note: Upgraded replacement for OSM-1000*
• Budget limitations prevent using OSDP • Upgrading Wiegand controller for OSDP	**OSDP-Wiegand In-Panel Converter**	**OSM-CPI** for connecting OSDP readers to Wiegand control panels
• Matching OSDP reader device address / baud rate with installation requirements • Preconfiguring OSDP readers	**Handheld OSDP COMSET Tool**	**OTT-2100** Configure OSDP reader device address & baud rate | Diagnose state of OSDP communication session between reader and controller
• No simple way to connect OSDP devices for testing / development	**OSDP Hub Test Tool**	**OSM-HUB** OSDP Cross-point switch; provides power and data connections for bench testing / development of OSDP devices
• Troubleshooting credential data in the field • Enrollment reader solutions • Need credential database in site takeover	**USB Data Wedge** for Wiegand & OSDP readers | Configurable	**WDG-6112** Connect reader to computer via USB-C connection and output credential data; for diagnostic / enrollment reader applications.