BOSCH

Wireless handheld readers
Integrated solution for movable access control with Cypress handheld readers

BOSCH

CYPRESS
INTEGRATION SOLUTIONS

Integrating Cypress wireless handheld readers with a Bosch access control system allows identities to be verified outside buildings, to facilitate emergency management and integrate credential verification across the customer's organization. The reader verifies active credential data in real time by wirelessly communicating with the Bosch Access Modular Controller (AMC). Mustering points are easily established outside a building, and credentials are quickly verified at temporary entrances and parking areas, remote work sites, and truck gates. Access control is readily deployed in zones where infrastructure has been damaged, to verify personnel entering or leaving areas. The reader integration also makes it simple to register attendance where readers are not typically installed, to manage reporting of staff attendance at training sessions, register students attending outdoor events, or register benefits allocated to staff, such as meals provided by food trucks. In case of emergency, the reader provides officers handheld control of relays, for functions such as opening gates or duress notifications.
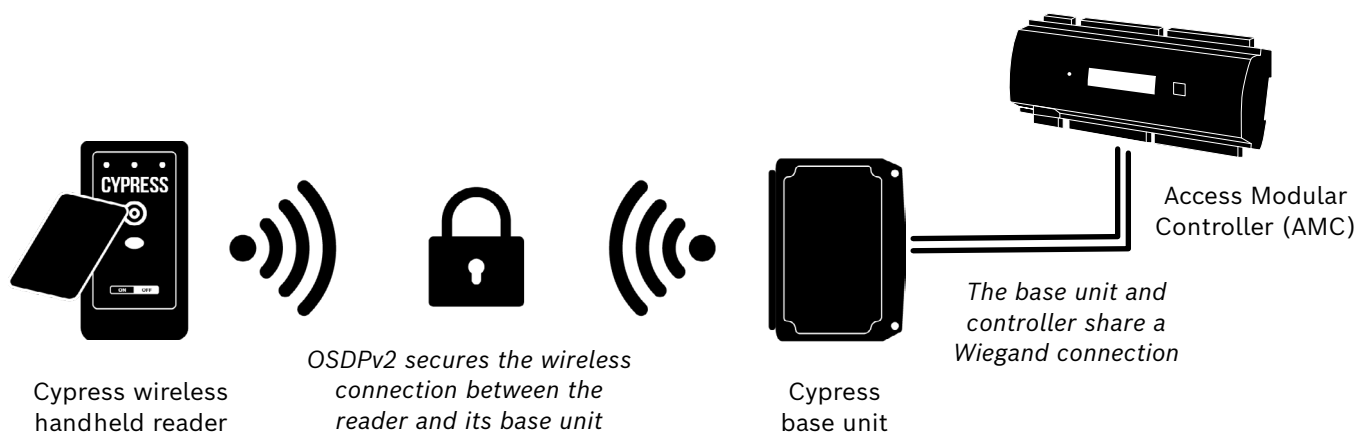
The Cypress handheld reader wirelessly connects with its base unit, which is wired to the access controller. On HHR-4000 Series readers, the wireless connection between the reader and its base unit is encrypted and authenticated with OSDPv2 secure channel. HHR-4000B Series readers are issued additional physical protection from drops and falls, thanks to a custom-fit protective silicone rubber boot. An adjustable breakaway strap allows the reader to be worn by the user.

- HID embedded reader module* supports high/low frequency credentials (125kHz / 13.56MHz)
- Wireless radio 2.4GHz frequency; physical layer protocol IEEE 802.15.4
- Access granted/ access denied LED indicators
- Connects wirelessly with access controller's existing live database
- Reader button controls relay output (Example: trigger alarm, open gate)
- Wireless connection uses OSDP v2 Secure Channel Protocol for robust encryption and authentication

Compatibility

Cypress	Bosch Security and Safety Systems
HHR-4000B Series Wireless Handheld Reader Kits	Building Integration System v5.0 and higher Access Engine with Access Modular Controller (AMC)
RPT-8651 Wireless 2.4 GHz Repeater	

* HID Prox, EM4102, AWID Prox; ISO14443A/B ISO15693, FeliCa™ (IDm); MIFARE Classic®, MIFARE DESFire® 0.6, MIFARE DESFire® EV1 (32 bit CSN), HID: iCLASS® Standard/SE/SR/Seos; PIV II, Secure Identity Object® (SIO®)

Access Modular Controller (AMC)

The base unit and controller share a Wiegand connection

Cypress wireless handheld reader

OSDPv2 secures the wireless connection between the reader and its base unit

Cypress base unit

Mustering

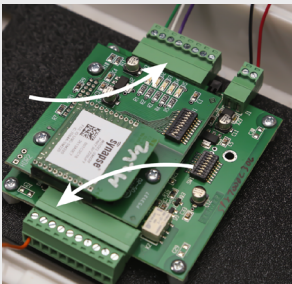Construction / temporary entrances

Event registration / reporting

Rapid access control deployment

Key features

- **Easily facilitate registering people at mustering points outside buildings during emergency**

- **Quickly verify credentials at temporary entrances such as construction sites**

- **Manage reporting of event/session attendance and meal/bookstore credits**

- **Rapidly deploy access control to verify personnel entering or leaving zones where infrastructure has been damaged**

Step 1
Connect base unit to power, ground, Wiegand Data 0, Wiegand Data 1, LED, and Relay 1 input; then to Bosch AMC

Step 2
Power on the handheld reader unit (charge handheld unit if necessary)

Step 3
Check that the handheld unit's blue communications LED is flashing

Step 4
Test configuration by swiping credential on handheld unit. Green LED will be lit for access granted; red LED for access denied

Bosch Security and Safety Systems is a leading global supplier of security, safety, and communications products, solutions and services. Protecting lives, buildings and assets is our aim. The product portfolio includes video surveillance, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communication of voice, sound and music complete the range. Bosch Security and Safety Systems develops and manufactures in its own plants across the world.

For more information, visit **boschsecurity.com**

Cypress Integration Solutions is the U.S. manufacturer known for 40 years of the most innovative and reliable solutions in the access control industry. Cypress devices save time, labor, and money, solve installation and system design challenges, and advance adoption of SIA's OSDP protocol. The Cypress lineup includes HHR Wireless Handheld Readers, Suprex® Reader-Extenders, data converters, keyboard data wedges, OSDP tools and retrofit products, and custom solutions trusted within the security industry and beyond.

For more information, visit **cypressIntegration.com**