CYPRESS
INTEGRATION SOLUTIONS

Wireless Handheld Reader
with OSDP™ Secure Channel

HHR-4000 Dual-Lane Kits

Data Sheet

Cypress Handheld Reader System
with OSDP Secure Channel wireless communication

HHR Reader   Encrypted Wireless Connection   HHR Base Unit   Access Control Panel
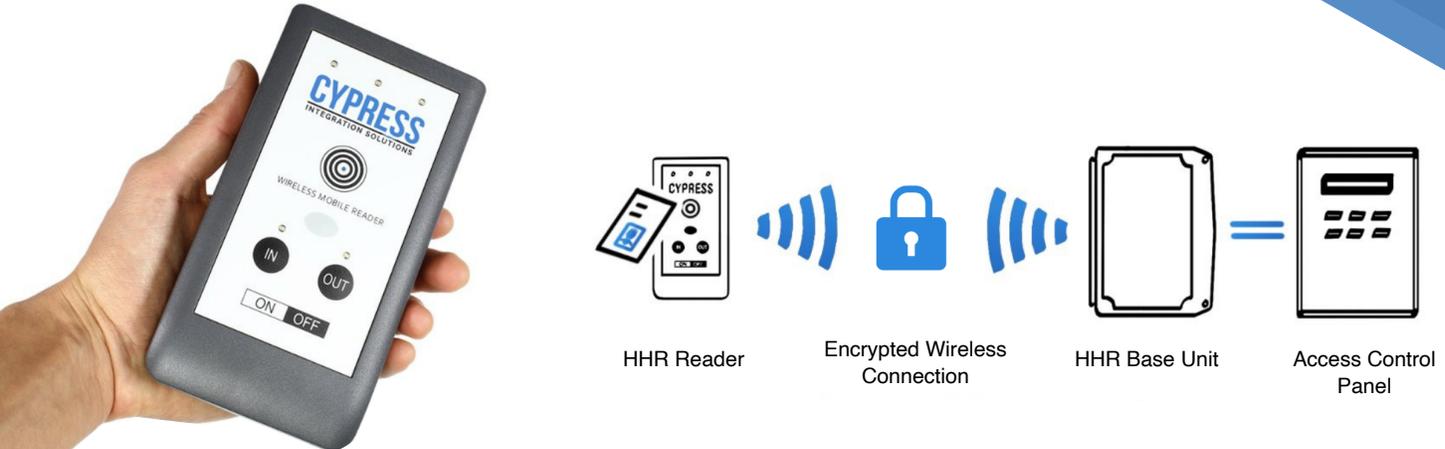
The Handheld Reader communicates with the Base Unit over an encrypted wireless connection, using SIA's OSDP protocol with Secure Channel. The Base Unit connects to the access controller similar to a standard Wiegand reader; the access control panel validates the credentials.

Features:

- HHR Reader displays Access Granted or Access Denied responses after reading credentials (LEDs, buzzer, and vibrate)
- HHR reader can switch between IN and OUT modes with buttons on the face of the reader
- Vend Button on the HHR Reader controls a relay output on the Base Unit for duress alarms or manual door/gate control
- Credential data is not stored by the HHR Reader or the Base Unit; the HHR system is connected to the access controller's live database of credentials
- Kits include HHR Reader(s), Base Unit, Charging Dock(s), and wall-plug Charger(s)

Kit Part Numbers	
1-Reader, Dual-lane kit	HHR-4156-GY (UPC: 816684002441), HHR-4156-WH (UPC: 816684002458)
2-Reader, Dual-lane kit	HHR-4256-GY (UPC: 816684002700), HHR-4256-WH (UPC: 816684002717)
3-Reader, Dual-lane kit	HHR-4356-GY (UPC: 816684002724), HHR-4356-WH (UPC: 816684002731)

HHR-4000_Dual_DS_210920

Specifications		
Kit Contents	HHR-4156-GY	HHR-8056-GY, HHR-8400, HHR-DOCK-GY, HHR-RCHL
	HHR-4156-WH	HHR-8056-WH, HHR-8400, HHR-DOCK-WH. HHR-RCHL
	HHR-4256-GY	HHR-8056-GY x2, HHR-8400, HHR-DOCK-GY x2, HHR-RCHL x2
	HHR-4256-WH	HHR-8056-WH x2, HHR-8400, HHR-DOCK-WH x2, HHR-RCHL x2
	HHR-4356-GY	HHR-8056-GY x3, HHR-8400, HHR-DOCK-GY x2, HHR-RCHL x2
	HHR-4356-WH	HHR-8056-WH x3, HHR-8400, HHR-DOCK-WH x2, HHR-RCHL x2
Individual Part Numbers	Reader - Dual-lane	HHR-8056-GY (UPC: 816684002632), HHR-8056-WH (UPC: 816684002649)
	Base - Dual-lane	HHR-8400 (UPC: 816684002489)
	Dock	HHR-DOCK-GY (UPC: 816684001291), HHR-DOCK-WH (UPC: 816684001307)
	Charger	HHR-RCHL (UPC: 816684001284)
Physical	Handheld Reader	6.81" x 3.63" x 1.58" (17.30 x 9.22 x 4.01 cm) / 1.2 lbs (0.54 kg)
	Charging Dock	4.76" x 4.1" x 2.2" (12.09 x 10.41 x 5.59 cm) / 0.35 lbs (0.16 kg)
	Base Unit	9.25" x 7.0" x 2.25" (23.50 x 17.78 x 5.72 cm) / 1.3 lbs (0.59 kg)
Environmental	Temperature Range	-17 to 54 C
	HHR Reader	Weatherproof Enclosure - ASA+PC-FR - IP65
	HHR Base Unit	Weatherproof Enclosure - Polycarbonate (PC) - IP65
Electrical	Base Unit Supply Voltage	8-16Vdc Current 600mA
	Handheld Reader Internal	7.4V 3800mAh Rechargeable (not field-serviceable)
	Charging Dock	Input: 100-240 Vac, 1A, 50/60Hz Max
	Relays — Max Switching	220Vdc 30W (resistive) 1A / 250Vac 37.5VA 1A
	Relays — Running Spec with load	30Vdc 1A (resistive) / 125 Vac 0.3A (resistive), 1×10^5 operations @ 20˚C
Credential Technologies	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®)	
Radio	Wireless Physical Layer	IEEE 802.15.4
	Frequency	2.4 GHz ISM Band
	Type	Direct Sequence Spread Spectrum (DSSS)
	Transmit Power	15 dBm
	Receiver Sensitivity	-103 dBm (1% PER, 250Kbps)
	Modulation	O-QPSK
	Agency Approvals	FCC Part 15.247: FCC ID: U90-SM220
		Industry Canada (IC): 7084A-SM220
		CE Certified: Certified to EN300 328 Version 1.8.1
	Security Encryption	OSDP v2.2 with Secure Channel Encryption (IEC 60839-11-5)
Wireless range	Indoor	150 feet* (45 meters*) typical range
	Outdoor	500 feet* (150 meters*) typical range
	*Note: Distances are typical line-of-sight. Actual distance may vary depending upon terrain, RF environment, building	
Additional Features	Vend button controls a relay for functions such as operating gates or possible duress notification.	
	Handheld Reader's gate-selection feature can be used for ingress and egress lanes or gates.	