

# HID Signo-based Wavestore Readers

## Models: 20, 40, 20K, 40K, 40T

### The signature line of readers

HID Signo™-based Wavestore readers are the signature line of physical access control readers. The versatility, performance and connected capabilities of these readers set a new industry benchmark for the most highly adaptable, interoperable and secure approach to electronic access control.

Offering an unparalleled breadth of functionality, they afford security system installers and administrators a simple and effective approach to secure access control for almost any scenario.

With support for the widest array of credential technologies — past, present and future — these readers are the perfect choice for those looking to make the transition to a secure authentication technology.

This line of readers transcend the traditional approach to security by being designed to be connected and managed remotely without needing to physically touch each device. This functionality empowers access control systems to dynamically respond as new needs, configurations or threats arise.

#### POWERFULLY SECURE

- Multi-Layered security to ensure data authenticity and privacy
- EAL5+ Certified Secure Element Hardware
- Native OSDP secure channel capability
- Trusted secure authentication using the SIO data model

#### MEET EVERY NEED, ADAPT TO ANY SITUATION

- Go mobile with native Bluetooth and NFC support
- Integrated 125 kHz credential read support for easy migration
- Supports over 15 common credential technologies
- Flush mount terminal block and pigtail wiring options
- Robust outdoor performance with an IP65 rating

#### MANAGE, UPGRADE AND CONFIGURE

- Easily and securely managed
- Configure via a mobile device or OSDP
- Update firmware in response to threats
- Personalize by configuring audio visual or keypad settings
- Deactivate legacy credential technology to conclude secure migration



#### KEY BENEFITS:

- Highly Versatile — Support for the widest range of credential technologies via native Bluetooth and Near Field Communication (NFC).
- Enhanced Performance – Storage of cryptographic keys on certified secure element hardware, plus a new surface detection feature that enables the reader to automatically recalibrate and optimize read range performance.
- Connected to the Future — All readers include out-of-the-box support for Open Supervised Device Protocol (OSDP) for secure bidirectional communication.

#### READY FOR THE FUTURE NOW

- Mobile-ready by default, including Apple's Enhanced Contactless Polling (ECP) to support credentials in Apple Wallet
- Sleek, innovative design to suit modern architecture, available in black or white
- Integrated OSDP for secure authentication and configuration post installation
- Built on a hardware platform designed to be adaptable to support future technology
- Designed to seamlessly integrate into the WaveFusion Unified Security Platform

Reader Model	20	20K	40	40K	40T
Regulatory Model	20V2	20KV2	40V2	40KV2	40TV2
2.4 GHz (Bluetooth) Credential Compatibility	Mobile Credentials powered by Seos® (HID Mobile Access)				
13.56 MHz (NFC) Credential Compatibility	Seos®, iCLASS SE®, iCLASS SR®, iCLASS®, MIFARE Classic, MIFARE DESFire EV1/EV2/EV3, FeliCa™ & Contactless e-Purse Application Specification (CEPAS), Mobile Credentials powered by Seos (HID Mobile Access)				
125 kHz Credential Compatibility	HID Proximity®, Indala® Proximity, AWID Proximity, and EM Proximity				
Typical Read Range <sup>1</sup>	Seos, iCLASS® SE™, iCLASS® SR, iCLASS®, MIFARE Classic, MIFARE DESFire EV1/EV2/EV3 & ISO14443A Single Technology Cards – 1.6 to 4 in (4 to 10 cm); HID / AWID Proximity®, Indala Proximity®, EM Proximity & 125 kHz Single Technology Cards – 1.6 to 4 in (4 to 10 cm)				
Mounting	Suited for mullion-mount door installations or any flat surface mounting		Suited to mount and cover single gang switch boxes with a slotted mounting plate for alternate back-box spacing		
Color	Black or white with silver trim baseplate <sup>2</sup>				Black with silver trim baseplate <sup>2</sup>
Keypad	No	Yes (2 x 6 layout)	No	Yes (3 x 4 layout)	
Dimensions (width x length x depth)	1.77 in x 4.78 in x 0.77 in (45 mm x 121.5 mm x 19.5 mm)	1.78 in x 4.79 in x 0.85 in (45 mm x 121.5 mm x 21.5 mm)	3.15 in x 4.78 in x 0.77 in (80 mm x 121.5 mm x 19.5 mm)	3.16 in x 4.79 in x 0.85 in (80 mm x 121.5 mm x 21.5 mm)	3.16 in x 4.82 in x 0.96 in (80mm x 122.5mm x 24.5mm)
Product Weight	Pigtail: 3.35 oz (95 g) Terminal: 2.65 oz (75 g)	Pigtail: 3.88 oz (110 g) Terminal: 3.17 oz (90 g)	Pigtail: 4.94 oz (140 g) Terminal: 4.23 oz (120 g)	Pigtail: 5.64 oz (160 g) Terminal: 4.94 oz (140 g)	5.82 oz (165g) Terminal Only
Operating Voltage <sup>3</sup>	12V DC				
Current Draw <sup>4</sup>	NSC6: 60 mA Peak7: 250 mA Max. Avg: 70 mA IPM8: 30 mA	NSC6: 80 mA Peak7: 250 mA Max. Avg: 90 mA IPM8: 40 mA	NSC6: 60 mA Peak7: 250 mA Max. Avg: 75 mA IPM8: 30 mA	NSC6: 70 mA Peak7: 250 mA Max. Avg: 80 mA IPM8: 50 mA	NSC6: 110mA Peak7: 250mA Max Avg: 120mA IPM8: 80mA
Device Input and Output	Input: Tri-color LED, Buzzer, Hold @ Active Low Output: Tamper Relay 0–60V DC @ 100mA Max (Dry Contact)				
Operating Temperature & Humidity	–40° F to +150° F (–40° C to +66° C) 0% to 95% non-condensing				
Storage Temperature	–40° F to +185° F (–40° C to +85° C)				
Environmental Rating	UL294 Outdoor and Indoor rated, IP65				
Transmit Frequency	125 kHz, 13.56 MHz, and 2.4 GHz				
Communications & Panel Connection	Wiegand, Clock-and-Data and RS-485 Half Duplex (OSDP) via Pigtail (18 in / 0.5 m) or Terminal Strip <sup>8</sup>				
Device Management	HID Reader Manager / OSDP configuration				
Certifications	UL294/cUL (US), FCC (US), IC (Canada), CE (EU), RCM (Australia, New Zealand), SRRC (China), MIC/Giteki (Japan) WPC/BIS (India), KCC (Korea), NCC (Taiwan), iDA (Singapore), MIC (Japan), RoHS, GreenCircle, Bluetooth SIG, and additional regions. <a href="http://www.hidglobal.com/certifications">www.hidglobal.com/certifications</a>				
Security Ratings	EAL 5+ Certified Secure Element Hardware				
Patents	<a href="http://www.hidglobal.com/patents">www.hidglobal.com/patents</a>				
Housing Materials	Polycarbonate – UL94 VO				
Warranty	Limited Lifetime				

- Select models are available without Bluetooth LE functionality via Factory Feature Block
- Read range listed is statistical mean rounded to nearest centimeter increment for ID-1 or clamshell credentials. HID Global testing occurs in open air. Form factor, technology and environmental conditions, including metallic mounting surface, can degrade read range performance; plastic spacers are recommended to improve performance on metallic mounting surfaces.
- Black spacers available as an additional accessory at an additional cost.
- Voltage tolerance +20% / –20% of rated voltage input
- Measured in accordance with UL294 standards; see Installation Guide for details.
- NSC – Normal Standby Current; see Installation Guide for details.
- Peak measures in default installation condition.
- Intelligent Power Management (IPM) – Reduces reader current consumption up to 43%, based on model, compared to standard operating mode.
- 40T orderable only as Terminal Strip connection type.



# wavestore

Visit [wavestore.com/wavefusion](http://wavestore.com/wavefusion) for more information.

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