HID Aero™ Controllers

The robust controller platform for everyday applications

"The freedom to choose from a wide range of HID-approved system manufacturers."

Robust Controller Platform Designed to Enable Mainstream Access Control

The HID Aero™ Controller platform offers software providers an efficient, powerful path to a world-class access control system through a holistic infrastructure that includes fully functional hardware, firmware, software libraries and tools. HID Aero Controllers are ideal for access control providers building solutions for small to medium-size customers that do not want to incur the ongoing costs of designing, manufacturing and maintaining panel hardware.

- **Flexible —** The HID Aero Controller platform is highly configurable to enhance situational awareness. These include the ability to change reader modes based on time thresholds, pre-alarm signals, and global lockdown.
- **Secure —** Protect against costly exploits, vulnerabilities and downtime with end-to-end security from credential to host, reducing attack vectors for system-level protection. HID Aero safeguards identities from the moment information is sent from the reader with OSDP Secure Channel, plus it offers TLS running within a FIPS 140-2 operating environment for secure communication with host software.
- **Trusted —** Based on trusted HID Mercury™ technology, HID Aero leverages knowledge and expertise gained from 4+ million panels installed globally. HID Aero is also backwards compatible with VertX® IO modules to protect your current investment with HID.

HID Aero Controllers serve as the successor to HID's VertX Controllers.

Future Proof and Highly Adaptable

HID AERO CONTROLLERS ARE BUILT WITH OPENNESS AND FLEXIBILITY AT THEIR CORE.

This open approach gives users unmatched freedom to choose from a wide range of HID-approved system manufacturers, as HID Aero is supported by a trusted network of software providers. This ecosystem reduces total cost of ownership by enabling users to migrate their existing systems over the entire deployment lifecycle.

To enable our ecosystem of partners, HID Aero comes with a powerful API toolkit and full access to the developer environment.

Beyond the freedom of choice, HID Aero is a future-proof controller plat-form that can adapt to the growing needs of small and medium-size organizations. Because HID Aero is IP-based, the controllers can connect to on-premise or cloud-based systems to perform access control configuration, command and control, and monitor system status. This also enables interoperability with parallel security systems. Furthermore, HID Aero Controllers run on Linux, an open source and standardized operating system that allows for quicker patch management as compared to proprietary systems.

WITH HID AERO, USERS CAN:

- Create unique alerts using highly detailed transaction information recorded by the controller.
- Leverage advanced configuration options, such as enabling access rights or alerts for specific groups or individuals and toggling reader modes based on time thresholds.
- Remotely manage HID readers, saving both installation and maintenance costs.

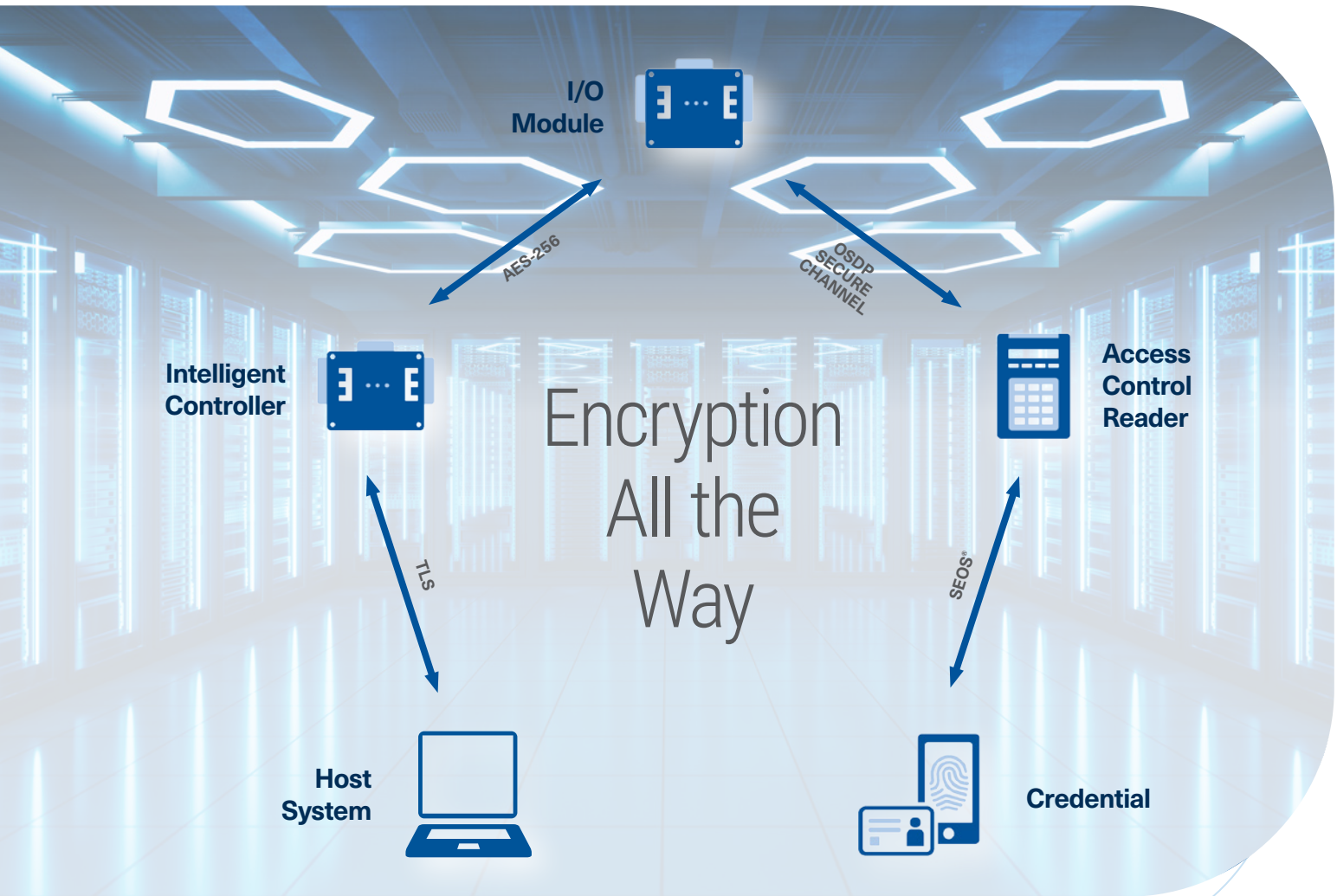
"The controllers can connect to on-premise or cloud-based systems to perform access control configuration."

End-to-End Security, Simplified

Creating a secure environment is the top priority for any access control system. Unforeseen security exploits and vulnerabilities cost organizations millions every year in downtime, precious time spent dealing with technical support and replacement of ineffective solutions. HID Aero Controllers are designed to meet the needs of today's security landscape and to address future threats as they emerge.

Unlike other controllers, HID Aero offers end-to-end security from the credential to the host to reduce attack vectors for system level protection. This is achieved by protecting the entire security chain as an identity travels from a credential upstream through the system. During this journey, credential data is first protected between card and reader by using a secure technology like Seos®. Next, the information needs to be shared by the reader with the rest of the access control system. With HID Aero, the communication between reader and IO module reader ports can be safeguarded using an OSDP secure channel. Then, the data sent from the reader port on an IO module to the intelligent controller is also encrypted with Advanced Encryption Standard (AES-256). Finally, TLS running within a FIPS 140-2 operating environment within the intelligent controller encrypts and authenticates the same card data as it is sent from intelligent controller to host software.

HID Aero also helps organizations to defend against high profile and costly data breaches, utilizing crypto chips designed to protect against malicious attacks by keeping keys and passwords safe. The controllers also offer mandatory enforcement of requirements to create unique and strong passwords that lock down installer webpages. Moreover, card data, access level and other access control configurations can be encrypted at rest, providing additional data privacy on the intelligent controller.



SOPHISTICATED THREAT DETECTION CAPABILITIES ALLOW HID AERO CONTROLLERS TO THWART COMMON ATTACKS. THESE CAPABILITIES INCLUDE:

- Ability to define up to seven different threat levels to instantaneously adjust user access during lockdowns and/or lockouts
- Duress signaled from keypad readers will notify host for immediate action in emergency situations
- Offline protection against improper card usage via local anti-passback
- Ability to monitor supervised input wiring to identify system faults or malicious attacks

Finally, HID Aero offers advanced network security capabilities to effortlessly meet the demands of enterprise IT teams and achieve corporate compliance.

"The hardware behind HID Aero Controllers is built to be highly durable and reliable."

Trusted Performance from the Leader in Access Control Technology

Access control providers and end users both demand high-performing, reliable controller technology from a manufacturer they can trust. That's why HID Aero is built on the tried and tested technology of HID Mercury Controllers, a leading controller technology with over 4 million panels installed globally.

The hardware behind HID Aero Controllers is built to be highly durable and reliable, which saves maintenance costs in the short and long term. For example, high amp relays ensure protection of the controller from power-hungry locks while enabling a wider choice of egress hardware. The durability of the hardware also allows for installations in harsher environments, while a structured approach to scheduling ensures high performance, even when operating close to maximum capacity. Also, a convenient mounting bracket paired with a mounting accessory allows for simplified mounting on DIN rails (accessory sold separately).

Beyond the dependability of the hardware itself, HID Aero provides backwards compatibility with VertX IO Modules providing investment protection with existing HID equipment. To start, legacy VertX IO Modules do not need to be replaced thanks to compatibility with HID Aero X1100 Intelligent Controllers. Moreover, all HID Aero Controllers match the form and fit of legacy VertX Controllers, ensuring reduced costs for users when installing replacements within the same footprint and using the same wiring terminations and connectors.

Thanks to its highly dependable, powerful hardware design, this controller line meets the needs of a wide range of use cases, simplifies installation and reduces the complexities of project planning and inventory management for partners.

"Fully backwards compatible with legacy VertX IO modules to offer smooth migration."

HID Aero Controller Line

THE HID AERO CONTROLLER PORTFOLIO CONSISTS OF THE FOLLOWING:

X1100 Intelligent Controller: Controlling up to 2 doors, 4 readers, 7 inputs and 4 relays (5A/3A NO/NC @ 30Vdc, non-latching) using on-board IO. Connected to downstream IO modules, supports up to 64 doors, 615 inputs and 388 outputs. Supports OSDP and Wiegand readers. Use OSDP to support 4 readers. Inputs are 2 or 4 state.

- **X100 Door/Reader Interface Module:** Supporting up 2 doors, 4 readers, 7 inputs and 4 relays (5A/3A NO/NC @ 30Vdc, non-latching). Supports OSDP and Wiegand readers. Use OSDP to support 4 readers. Inputs are 2 or 4 state.
- **X200 Input Monitor Module:** Supporting up to 19 inputs and 2 relays (2A @ 30Vdc, non-latching). Inputs are 2 or 4 state.
- **X300 Output Control Module:** Supporting up to 12 outputs (2A @ 30Vdc, non-latching) and 5 inputs. Inputs are 2 or 4 state.

HID Aero is designed as a replacement to VertX Controllers in the overall HID controller portfolio, offering a wide range of upgrades and new features as compared to the legacy products. Unlike HID Mercury controllers, which are crafted to be more robust and customizable to meet the large-scale needs of enterprise organizations, HID Aero is designed specifically for small to medium-sized organizations.

A New Choice in Controllers for Everyday Applications

HID Aero Controllers are built to meet the unique, growing needs of small and medium-sized businesses and institutions. This line of controllers is open and flexible by design, provides end-to-end security and is durably built to offer trusted, reliable performance.

Based on the key principles of proven HID Mercury technology, HID Aero is an excellent option for organizations looking to install new controllers for greenfield projects or to upgrade from legacy VertX technology.

Developed to be open, yet with a secure foundation, HID Aero helps both end-users and access control providers meet their unique needs for both today and tomorrow's ever-evolving security landscape.

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