



Supports up to 2 doors, 4 readers, 7 inputs, and 4 outputs

HID Aero Controllers provide a complete and fully functional hardware, firmware, software library and tool infrastructure for access control software providers.

This product line is ideal for access control providers who do not want to incur the ongoing costs of designing, manufacturing and maintaining panel hardware along with the critical access control logic that commonly resides locally in access control panels. The HID Aero Controller product line is the successor to HID's VertX® and EDGE® Controllers, and is based on HID Mercury technology, a panel technology supporting 4 million+ panels installed globally since the early 1990s.

The HID Aero X100 provides on-board IO support for up to two access points and two (Wiegand) or four

(OSDP) readers. Four robust relays provide door lock and auxiliary output control while seven supervised inputs are used to monitor door status, REX, power supply, battery, tamper and general-purpose inputs status, all supporting analog-to-digital conversion.

Attach the X100 to an X1100 intelligent controller to perform full access control processing or attach multiple X100s to control more doors.

The X100 serves as a form and fit replacement for the VertX V100.

Features and Benefits

- Senstar certified – Works out of the box with Senstar Symphony Access Control software
- Based on HID Mercury Technology – Built on a tried and tested platform, operating in the most demanding access control enterprises for 25+ years
- DIN Rail Mountable – Use mounting accessory (sold separately) to easily attach housing to mechanical DIN rails
- Easy to Understand LED Status Lights – Status lights representing power, heartbeat, online/offline status, reader status, input status and relay status
- OSDP Reader Support - Increases security and functionality with secure channel and bi-directional communications
- IO Module Encryption - Enhance security between intelligent controller and IO modules with AES encryption
- Crypto Chips - Protect against malicious attacks to keep keys and passwords safe
- Threat Levels - Define up to 7 different threat levels that are used to instantaneously adjust user access during lockdowns and lockouts
- High Amp Relays - Ensure controller protection from power hungry locks and enables wider choice of egress hardware
- Mounting - Physically mount to DIN rails using accessory (sold separately)

INTELLIGENT CONTROLLER & IO MODULE SYSTEM FEATURES

Highly Configurable

- Change reader modes based on time thresholds, pre-alarm signals, for the benefits of functionality like a global lockdown
- Enable access rights or alerts for specific groups of users
- Create unique situational emergency alerts using highly detailed transaction information and data correlation features

Sophisticated Threat Detection

- Duress signaled from keypad readers will notify the host for immediate action and quick response in emergency situations
- Offline protection against improper card usage via local anti-passback capability
- Ability to monitor supervised input wiring to help identify system faults or malicious attacks

Platform Security

- Encryption of data at rest provides privacy for data on the intelligent controller
- Monitor the health of the intelligent controller on the network by utilizing SNMPv3
- Ensure rogue devices cannot be plugged into the network by using 802.1X to implement port based network access control

Hardware Design

- The Aero X1100 combines the capability of the legacy V1000 and V2000 enabling a simpler approach to installation - one SKU covers both use cases
- Market leading maximum operating temperature allows for installation in harsh environments

SPECIFICATIONS	
Input Voltage	12 to 24 Vdc +/- 10%
Maximum Input Current	1.5 A (340 mA excluding readers and USB)
Intelligent Controller Communication	2-wire RS-485, 2400 to 115K BPS, asynchronous
Inputs	7 supervised/unsupervised, standard EOL: 1k/1kΩ 1%, 1/4 watt
Outputs	4 Relays, Form-C with dry contacts
Normally Open Contact Rating	5 A @ 30 Vdc resistive
Normally Closed Contact Rating	3 A @ 30 Vdc resistive
Reader Power	12 Vdc +/- 10% regulated, 500 mA maximum each reader
Data Input Power	TTL compatible or 2-wire RS-485
OSDP Mode	9,600 to 230,400 bps, asynchronous, half-duplex, max cable 2000 ft (609.6 m)
LED Output (Wiegand)	Open Collector, 12 Vdc open circuit maximum, 40 mA sink maximum
Beeper Output (Wiegand)	Open Collector, 12 Vdc open circuit maximum, 40 mA sink maximum
Operating Temperature	32 to 158 °F (0 to 70 °C)
Humidity	5 to 85% RHNC
Storage Temperature	-67 to +185 °F (-55 to +85 °C)
Dimension	6.46" x 5.51" x 1.02" (164 mm x 140 mm x 26 mm)
Weight	342g
Certifications	Certification: FCC Part 15 Subpart B, CE, BSMI, IC, AS/NZS, TCVN, KCC, VCCI Safety: UL-294, IEC 62368-1, CB Scheme Hazardous Substances: RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65
HS Code	8537.10.9
ECCN	EAR99

PART	DESCRIPTION
K3KT0101	HID Aero X100 Door/Reader Interface Module