

**ACCESS CONTROL PROCESSING FOR TWO READERS/  
TWO DOORS • 70100**

- Reports supervised inputs.
- Connects to the V1000 via RS-485.
- Receives and processes real-time commands from the V1000.
- Reports all activity to the V1000.
- Attractive polycarbonate enclosure protects components from damage.
- All connections and indicators are fully identified by silk-screened nomenclature on the cover.
- Processes off-line access control decisions based on facility code.
- UL® 294 and UL® 1076 recognized components.

The HID VertX™ products provide a complete and fully featured hardware/firmware infrastructure for access control software host systems. The V100 Door/Reader interface connects two access control card readers via Wiegand or Clock-and-Data interface, controlling either one or two doors. The V100 features on-board flash memory, enabling program updates to be downloaded via the network. The V100 connects

to the V1000 through a high speed RS-485 network. The V1000, in turn, communicates with the system host via industry-standard TCP/IP protocol over 10/100 Mbps Ethernet or the Internet. This architecture minimizes the impact on corporate LANs by using only one TCP/IP address for every 32 interfaces and by handling low-level transactions on the RS-485 network.

### MOUNTING:

Mount to any wall surface, using four screws. For UL® compliance, one or more interfaces can be mounted inside a locking customer-supplied NEMA-4 rated enclosure with:

- DC supply with battery back-up
- Enclosure tamper switch
- All connections made through conduit

The unit should be installed indoors, inside a secure area, such as in an IT or telecommunications room, utility closet, or on a wall above a suspended ceiling.

### VISUAL INDICATORS

Communications LED flashes green for “transmit to host” and red for “receive from host.” Power LED indicates that sufficient DC voltage is being provided to the unit.

### EASILY INTERFACED

- Quick-disconnect screw terminal connectors
- Rotary address switch (0-15)
- Inputs for:
  - 2 readers
  - 2 door monitor switches,
  - 2 Request-to-Exit switches
  - AC Fail Monitor\*
  - Battery Fail Monitor\*
  - Enclosure Tamper\*

\*Can be configured as a general purpose input

### NON-LATCHING RELAY OUTPUTS (RATED 2A @ 30 VDC):

- 2 door strikes (configurable)
- 2 auxiliary devices: door held/forced alarm, alarm shunt, host off-line (comms down), or general purpose

### LOCAL PROCESSING

- Alarm shunt and strike relay timing and latching functions
- Access control decisions based on facility code (degraded mode)
- Basic input/output linking
- LED/beeper control during card + PIN, scheduled unlock, and other transactions

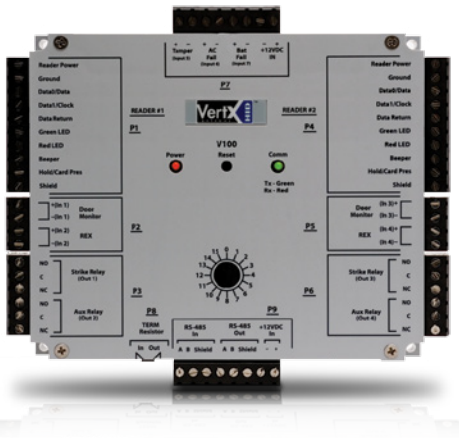
### MICROCONTROLLER

### WARRANTY

Warranted against defects in materials and workmanship for 18 months (see complete warranty policy for details).

### PART NUMBERS

Base Part Number: 70100



## SPECIFICATIONS

<b>Dimensions</b>	5.8" W x 4.825" H x 1.275" D (147.32 mm x 122.55 mm x 32.38 mm)
<b>Weight</b>	12.4 oz (.35 kg)
<b>Enclosure Material</b>	UL94 Polycarbonate
<b>Power Supply Requirements</b>	60 mA @ 9-18 VDC (with no readers connected). Recommended: Supervised linear power supply with battery backup, input surge protection, and AC fail and battery low contact outputs. When Vertx™ is supplying power to readers, the requirements are 600 mA @ 9-18 VDC. The V100 can supply 500 mA to two readers. Separate supervised DC supplies with battery back-up recommended for door locking or relay-activated devices, or for HID MaxiProx® readers.
<b>Operating Environment</b>	Indoors, or customer-supplied NEMA-4 rated enclosure
<b>Operating Temperature</b>	32° to 122° F (0° to 50° C)
<b>Operating Humidity</b>	5% to 95% relative, non-condensing
<b>Communications Ports</b>	RS-485 — two wire. Two SIA standard Wiegand/Clock-and-Data ports
<b>Certifications</b>	UL® 294 and UL® 1076 Recognized Component for the US, CSA 205 for Canada, FCC Class A Verification, EMC for Canada, EU (CE Mark), Australia (C-Tick Mark), New Zealand, Japan, EN 50130-4 Access Control Systems Immunity for the EU (CE Mark)
<b>Cable Distance</b>	RS-485 — 4000 feet (1220 m) to host using Belden 3105A, 22 AWG twisted pair, shielded 100 cable; Wiegand — 500 feet (150 m) to reader using ALPHA 1299C 22 AWG, 9-conductor, stranded, overall shield (fewer conductors needed if all control lines are not used); Input Circuits — 500 feet (150 m), 2-conductor, shielded, using ALPHA 1292C (22 AWG) or Alpha 2421C (18 AWG); Output Circuits — 500 feet (150 m), 2-conductor, using ALPHA 1172C (22 AWG) or Alpha 1897C (18 AWG); minimum wire gauge depends on cable length and current requirements.

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