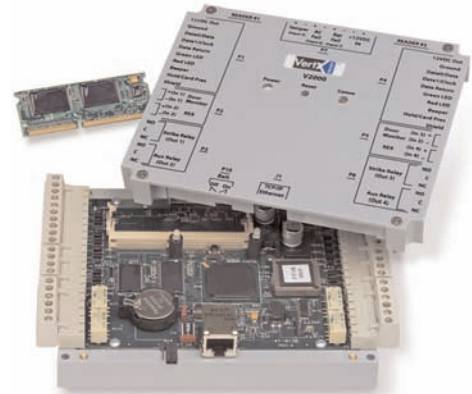


VertX™ V2000 Reader/Network Controller



Overview

The VertX products provide a complete and fully featured hardware/firmware infrastructure for access control software host systems. The V2000 can communicate via industry standard TCP/IP protocol, over 10/100 Mbps Ethernet or the Internet and has a 32-bit RISC processor. On-board flash memory allows program updates to be downloaded via the network. The V2000 connects to two access control card readers via Wiegand or Clock-and-Data interface controlling either one or two doors. This architecture takes advantage of the existing corporate LAN and the existing CAT-5 cable.

Features

- Connects with and stores a complete access control and configuration database for one or two controlled doors and 20,000 cardholders with expansion capability to 250,000 cardholders.
- Processes access control decisions.
- Reports supervised inputs/alarms with 255 priorities.
- Allows local connection of a laptop computer for diagnostics and configuration.
- Connects to the host and to other devices on the TCP/IP network.
- Receives and processes real time commands from the host software application.
- Reports all activity to the host.
- Controls and communicates with all connected devices.
- Buffers offline transactions and uploads to the host when communication is restored.
- UL 294 and UL 1076 recognized components.

Configuration

Attractive polycarbonate enclosure protects components from damage and provides identification of all indicators on the cover.

Mounting

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

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

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Features

Visual Indicators

Power LED indicates that sufficient DC voltage is being provided to the unit. RS-485 communications LED: solid green indicates successful communications to downstream devices, red flash indicates a failed communications attempt, solid red indicates no communications.

Easily Interfaced

- RJ-45 connector for Ethernet TCP/IP
- Quick-disconnect screw terminal connectors
- 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 2 A @ 30 VDC

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

Hardware

- 32-bit RISC CPU, 100 MHz
- Microcontroller

Memory

- 8 MB onboard Flash memory
- 16 MB / 32 MB memory expansions available
- 32 MB SDRAM
- 256K SRAM

Specifications

Dimensions

5.8" W x 4.825" H x 1.275" D
(147.32 mm x 122.55 mm x 32.38 mm)

Weight: 13.6 oz (.38 kg)

Enclosure Material: UL94 Polycarbonate

Power Supply Requirements

160 mA @ 12-18 VDC (with no readers connected)

Recommended: Supervised linear power supply with battery backup, input surge protection, and AC Fail and battery low contact outputs. V2000 can supply 350 mA @ 12 VDC to two connected readers.

Separate supervised DC supply with battery back-up recommended for door locking or relay activated devices or for HID MaxiProx readers.

Operating Environment

Indoors or customer supplied NEMA-4 rated enclosure

Temperature

32° to 122° F (0° to 50° C)

Humidity

5% to 95% relative, non-condensing

Communication Ports

TCP/IP – 10 or 100 Mbps

SIA standard Wiegand/clock and data – two ports

Certifications

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

Cable Distance

TCP/IP – 300 feet (100 m) to next device using Category 5 cable, Alpha 9504C or 9405F

Wiegand – 500 feet (150 m) to reader using ALPHA 1299C, 22AWG, 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 22AWG) or Alpha 2421C (18AWG)

Output Circuits – 500 feet (150 m), 2-conductor, using ALPHA 1172C (22AWG) or Alpha 1897C (18AWG)
Minimum wire gauge depends on cable length and current requirements.

