# Altronix®

T3VK75F20 (Kit)
Access & Power Integration Solution for HID Aero/VertX

TROVE™

Altronix T3VK75F20 kit consists of Trove3 enclosure, TV3 HID Aero/VertX/Altronix backplane with one (1) 24VDC @ 10A and one (1) 12VDC @ 10A power supply/chargers, two (2) 8-output fused access power controllers, one (1) 4-output fused access power controller and one (1) 8-output fused power distribution module.

This kit also accommodate up to ten (10) HID Aero/VertX modules for up to twenty (20) doors in a single enclosure. Trove simplifies board layout and wire management, reduces installation time and labor costs.

HID®

T3VK75F20 with Aero
boards no cases
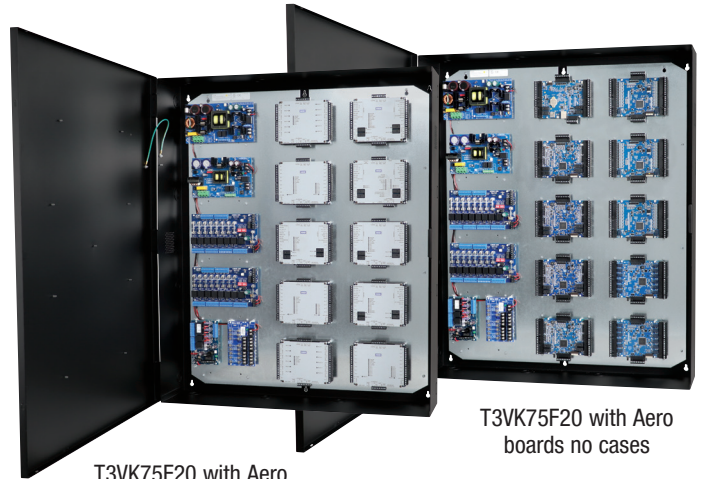
T3VK75F20 with Aero
boards in cases

*VertX/Aero modules are not included

Key Features

- One (1) 24VDC and one (1) 12VDC power supply/chargers
- Accommodates up to ten (10) VertX® V100, V200, V300, V1000, V2000 or Aero X100, X200, X300, X1100 modules
- Convenient knockout configuration:
  - One (1) single knockout 2.415" (2" Conduit)
  - One (1) double knockout
    1.948" (1.5" Conduit) / 1.701" (1.25" Conduit)
  - Sixteen (16) double knockouts
    1.362" (1" Conduit) / 1.115" (3/4" Conduit)
- Supervision
  - AC Fail
  - Low Battery and Battery Presence
  - Low power shutdown

- Agency Listings:
  - All Altronix components of this Trove kit are UL Listed sub-assemblies. Please refer to the Sub-Assembly Installation Guides for further information
    - UL: UL294 - Access Control System
    - cUL: CAN/ULC - s319-05 - Electronic Access Control Systems
  - CE European Conformity
- 16 AWG galvanized steel backplane simplifies board layout and wire management
- Enclosure accommodates up to four (4) 12VDC/12AH batteries
- Lifetime Warranty*

*Altronix Power Supply/Chargers and Sub-Assemblies only

Specifications

Power Supply 1 (eFlow104NB):

Input
Voltage	120VAC, 60Hz, 4.5A max.
Input Fuse	6.3A/250V

Output
Voltage	24VDC
Current	10A continuous

Power Supply 2 (eFlow102NB):

Input
Voltage	120VAC, 60Hz, 3.5A max.
Input Fuse	5A/250V

Output
Voltage	12VDC
Current	10A continuous

Both Power Supplies:

Outputs
Auxiliary	Class 2 power-limited @ 1A (unswitched)
Other	Overvoltage protection. Filtered and regulated

Battery Charging
Capacity	12VDC/12AH (2 within enclosure)
	40AH/65AH (requires separate enclosure)
Type	Sealed lead acid or gel type
Failover	Upon AC loss, instantaneous

Batteries are sold separately

Fire Alarm Disconnect
Supervised	Latching or non-latching
EOL	10K Resistor

Supervision
AC Failure	Form "C" contacts
Battery	Form "C" contacts

Low DC Power Shutdown
Shuts down DC output terminals if battery voltage drops below 70-75% for 24V units or 71-73% for 12V units. Prevents deep battery discharge

Indicators (LED)
AC Input	120VAC is present
DC Output	Powered

Two (2) Access Power Controllers (ACM8):

Input
Voltage	24VDC from eFlow104NB
Input Fuse	10A/250V

Outputs
Voltage	24VDC

Eight (8) independently controlled fused outputs:
   a) Fail-Safe and/or Fail-Secure power outputs.
      Form "C" Relays rated 28VAC or VDC @ 2.5A
   b) Auxiliary power outputs (unswitched)
   c) Any combination of the above

Output Fuses	3.5A/250V

Indicators (LED)
Red LEDs	Outputs are triggered (relays energized)
Green LED	FACP disconnect is triggered

Access Power Controller (ACM4):

Input
Voltage	24VDC from eFlow104NB
Input Fuse	10A/32V

Outputs
Voltage	24VDC

Four (4) independently controlled fused outputs:
   a) Fail-Safe and/or Fail-Secure power outputs.
      Form "C" Relays rated 28VAC or VDC @ 2.5A
   b) Auxiliary power outputs (unswitched)
   c) Any combination of the above

Output Fuses	3A/32V

Indicators (LED)
Red LEDs	Outputs are triggered (relays energized)
Green LED	FACP disconnect is triggered

Power Distribution Module (PD8UL):

Input
Voltage	12VDC from eFlow102NB

Outputs
Voltage	12VDC

Eight (8) fuse protected outputs
3.5A per output max

Output Fuses	3.5A/250V

Indicators (LED)
Green LED	DC Output

T3VK75F20 Kit:

Agency Listings
All components of this Trove kit are UL Listed sub-assemblies
Please refer to the corresponding Sub-Assembly Installation Guides for further information
CE	European Conformity

Physical and Environmental

Dimensions (H x W x D)
   Enclosure: 36.12" x 30.125" x 7.06" (917.5mm x 768.1mm x 179.3mm)
   Shipping: 40.75" x 35.25" x 12" (1035.1mm x 895.4mm x 304.8mm)

Weight (approx.)
Product:	85 lb. (38.6 kg)
Shipping:	92 lb. (41.73 kg)

Temperature
Operating:	0ºC to 49ºC (32ºF to 120ºF)
Storage:	− 20ºC to 70ºC (− 4ºF to 158ºF)
Relative Humidity	85% +/− 5%
BTU/Hr. (approx.):	177 BTU/Hr.

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Access Controller Position Chart for the Following Models:

Altronix / HID Aero/VertX	Pem Mounting
Aero™: X100, X200, X300, X1100	Ⓐ
Aero™: X100, X200, X300, X1100 (without case on TV3 only)	Ⓑ
ACM4, ACM4CB, ACM8, ACM8CB, ACMS8, ACMS8CB, ACMS12, ACMS12CB, LINQ8ACM, LINQ8ACMCB, LINQ8PD, LINQ8PDCB, MOM5, PD4UL, PD4ULCB, PD8UL, PD8ULCB, PDS8, PDS8CB, PDS16, PDS16CB, VR6, GB1 (accommodates Genetec Synergis Cloud Link)	Ⓒ

TMV2 Door Backplane (Order Separately)
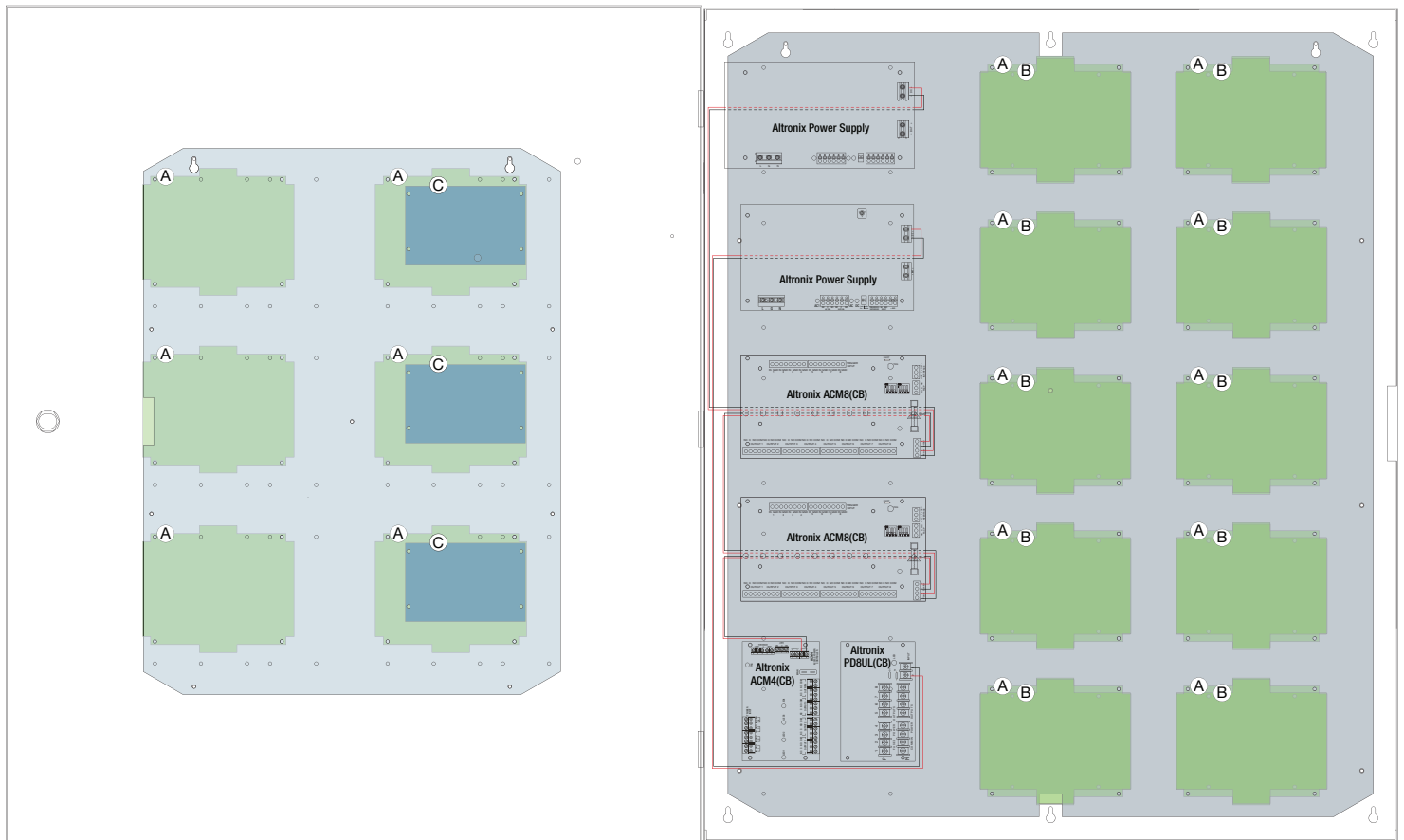
Accessories (order separately)

LINQ2 - Network Supervision

Altronix LINQ2 Network Communication Module provides remote supervision, control and monitoring over LAN/WAN
- Remotely reports accurate power diagnostics
- Controls power and resets devices
- Reports system diagnostics via Email

LINQ2

WM5, WM25, WM100 - Magnetic Cable Tie Mounts

Altronix WM5, WM25, and WM100 are packs of 5, 25 or 100 magnetic cable tie mounts respectively.
They accommodate standard zip ties or velcro straps.
These are ideal for wire management in our Trove series.

WM5

MM4, MM8, MM12, MM24 - Magnetic Mounting Solution

Altronix mounting magnets accommodate screws and nylon standoffs to allow for mounting various boards/accessories in any metal enclosure or backplane.

Mounting Magnet

BR1 - Sub-Assembly Mounting Bracket

Altronix BR1 mounting bracket is compatible with Altronix Maximal and Trove enclosures. It allows to mount one (1) PD4UL(CB), PD8UL(CB), ACM4(CB), MOM5, VR6, PDS8, NetWay5B or LINQ8PD(CB) sub-assembly on the enclosure's inside wall, saving valuable space.

BR1
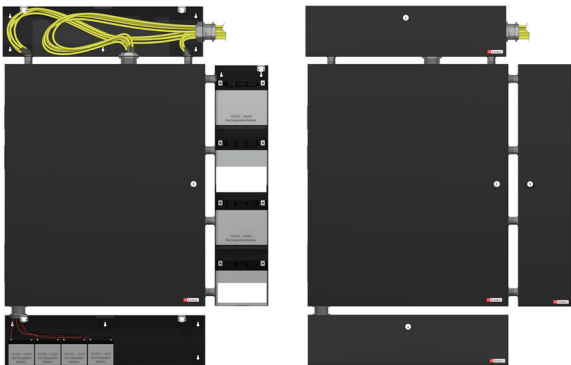
TROVE3BWC / TROVE3SWC - Battery/Wire Trough Enclosure

Altronix Trove3BWC and Trove3SWC are dual-purpose enclosures that can be used as wiring troughs or battery cabinets when mounted above or below (Trove3BWC) or on either side (Trove3SWC) of the Trove integrated power and access solution. The knockouts on the Trove3BWC and Trove3SWC have been strategically placed to line up with the Trove3 allowing for easy conduit connections between cabinets.Trove3BWC and Trove3SWC include cam locks and 2 tamper switches each to ensure access to wiring and batteries is secure.

Typical battery/wiring setup with Trove3 Enclosure (not included)

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Dimensions and Drawing

Dimensions (H x W x D approximate)
36.12" x 30.12" x 7.06" (917.5mm x 768.1mm x 179.3mm)

Top view dimensions:
- 2.00" (50.8mm)
- 7.12" (222.3mm)
- 9.5" (241.3mm)
- 9.5" (241.3mm)
- 1.25" (31.8mm)
- 1.78" (45.2mm)
- 1.55" (39.4mm)
- 1" Conduit
- 3/4" Conduit
- 1.25" Conduit
- 1.5" Conduit
- 2" Conduit
- 1.5" Conduit
- 1.25" Conduit

Left side view:
- 2.00" (50.8mm)
- 1.25" (31.8mm)
- 1" Conduit
- 3/4" Conduit
- 10.75" (273.1mm)
- 10.62" (269.8mm)
- 10.75" (273.1mm)
- G
- G

Main panel:
- 1.07" (27.2mm)
- 30.12" (768.1mm)
- 14.01" (355.9mm)
- 14.01" (355.9mm)
- 1.10" (27.9mm)
- 33.63" (854.2mm)

Right side view:
- 2" (50.8mm)
- 1" Conduit
- 3/4" Conduit
- 10.75" (273.1mm)
- 10.62" (269.8mm)
- 10.75" (273.1mm)
- 36.12" (917.5mm)
- 1.25" (31.8mm)
- 7.06" (179.3mm)

Bottom view:
- 3/4" Conduit
- 1" Conduit
- 1.25" (31.8mm)
- 2" (50.8mm)
- 8.75" (222.3mm)
- 8.62" (219mm)
- 8.75" (222.3mm)