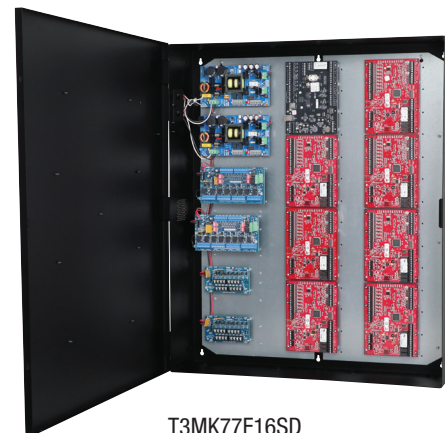# Altronix®

T3MK77F16SD (Kit)
Access and Power Integration Solution for Mercury

TROVE™

Altronix T3MK77F16SD kit consists of Trove3 enclosure and TM3 Altronix & Mercury backplane with two 24VDC @ 10A power supply/chargers, two dual input eight (8) PTC protected output access control modules, two voltage regulators and two dual input eight (8) PTC protected output power distribution modules. This kit also accommodates various combinations of Mercury* boards for up to sixteen (16) doors in a single enclosure. Trove simplifies board layout and wire management, reduces installation time and labor costs.

*Also compatible with these authentic Mercury partners:
AccessNsite, Avigilon, BadgePass, BluBox, Feenics, Genetec, Identicard, IMRON, Johnson Controls, Kastle, Keri Systems, Lenel/S2, LockState, Maxxess, Midpoint Security, NLSS, Open Options, Panasonic i-PRO MonitorCast, Quintron, RS2, S2 Security, Schneider Electric, Vanderbilt

Mercury™

T3MK77F16SD

Mercury boards are not included

Key Features

- 24VDC power supply/chargers
- Accommodates the following Mercury controllers:
  Mercury: LP1501, LP1502, LP2500, LP4502, MR16IN, MR16OUT, MR50, MR52, MR62e, MUX8
- Convenient knockout configuration:
  - One (1) single knockout 2.415" (2" Conduit)
  - Two (2) double knockouts
    1.948" (1.5" Conduit) / 1.701" (1.25" Conduit)
  - Thirteen (13) double knockouts
    1.362" (1" Conduit) / 1.115" (3/4" Conduit)
- 16 AWG galvanized steel backplane simplifies board layout and wire management
- Enclosure accommodates up to four (4) 12VDC/12AH batteries

- 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
- Lifetime Warranty*

*Altronix Power Supply/Chargers and Sub-Assemblies only

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TRⵣVE™

Specifications

Two (2) Power Supplies (eFlow104NB):

Input

Voltage	120VAC, 60Hz, 9A max.
Input Fuse	6.3A/250V

Output

Voltage	24VDC @ 10A
Auxiliary	1A (unswitched)
Protection	Overvoltage protection. Filtered and regulated

Battery Charging

Capacity	12AH/12VDC (4 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 (depending on the power supply). Prevents deep battery discharge

Indicators (LED)

AC Input	120VAC is present
DC Output	24VDC is present
Battery	Discharged or not connected

Two (2) Dual Input Access Power Controllers (ACMS8CB):

Input

Voltage	24VDC from eFlow104NB and 12VDC from VR6
Input PTCs	9A

Outputs

Voltage	12 or 24VDC individually selectable

Eight (8) selectable 12VDC - 24VDC independently controlled outputs or eight (8) indepently controlled Form "C" relay outputs:
    a) Fail-Safe and/or Fail-Secure power outputs
    b) Form "C" Relays. 28VAC or VDC @ 2.5A Rated
    c) Auxiliary power outputs (unswitched)
    d) Any combination of the above
Any of the eight (8) PTC protected power outputs are selectable to follow power Input 1 or Input 2
Individual outputs may be set to OFF position for servicing

Output PTCs	2.5A

Indicators (LED)

Red LEDs	Outputs are triggered (relays energized)
Blue LED	FACP disconnect is triggered
Individual voltage LEDs:	
Green:	12VDC
Red:	24VDC

Two (2) Voltage Regulators (VR6):

Input

Voltage	24VDC from eFlow104NB

Output

Voltage	12VDC
Current	6A continuous
Other	Surge suppression

Indicators (LED)

Input	24VDC is present
Output	Powered

Two (2) Dual Input Power Distribution Modules (PDS8CB):

Input

Voltage	24VDC from eFlow104NB and 12VDC from VR6
Input PTCs	9A

Outputs

Voltage	12VDC and/or 24VDC

Any of the eight (8) power outputs are selectable to follow power Input 1 or Input 2
Individual outputs may be set to OFF position for servicing

Outputs PTCs	2.5A

Indicators (LED)

DC Output	Eight (8) individual output LEDs
Green:	12VDC
Red:	24VDC

T3MK77F16SD Kit:

Agency Listings

CE	European Conformity

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

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.)

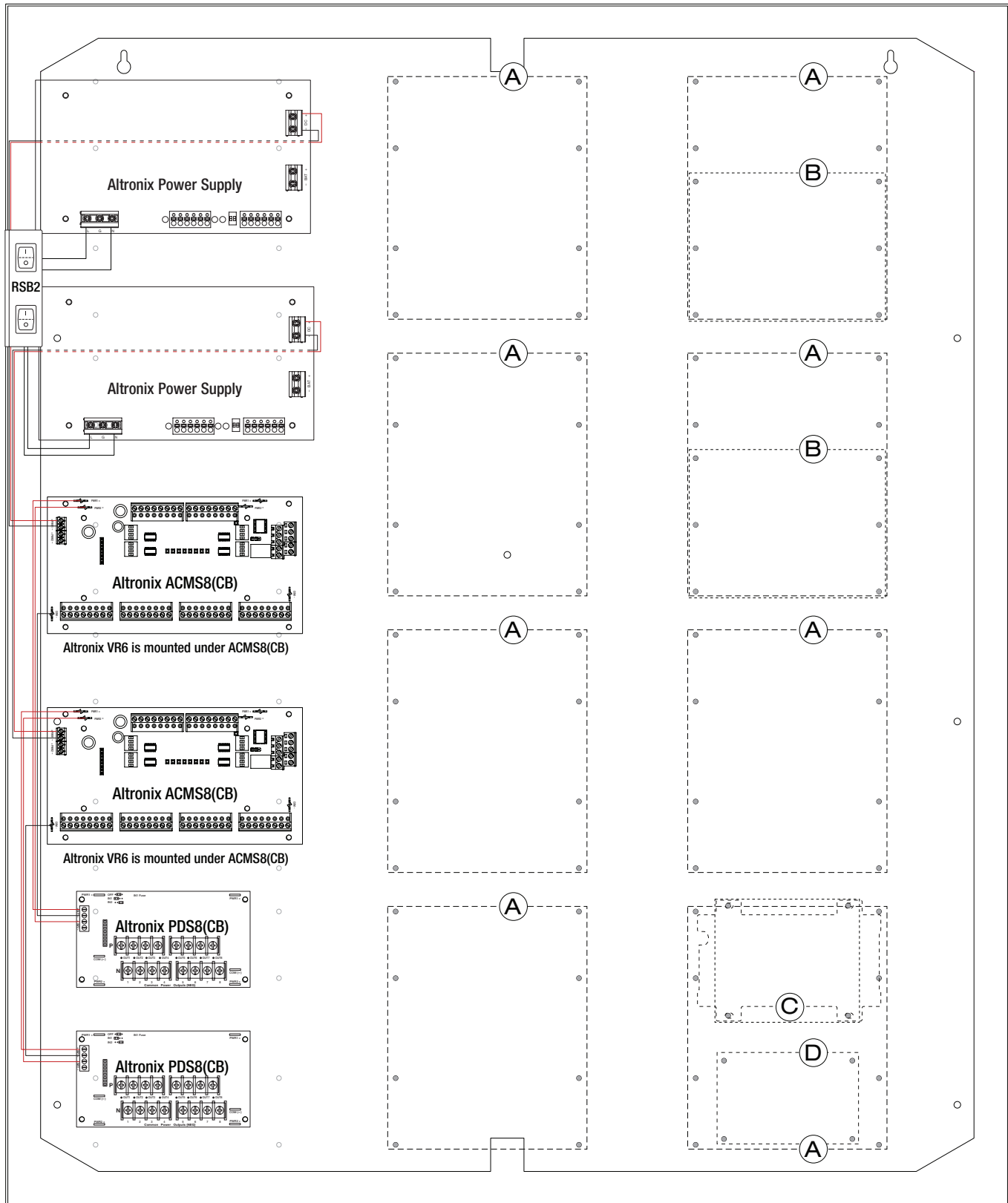|	
Product	85.6 lb. (38.83 kg)
Shipping	98.8 lb. (44.82 kg)

Temperature

Operating	0ºC to 49ºC (32ºF to 120ºF)
Storage	-20ºC to 70ºC (-4ºF to 158ºF)
Relative Humidity	85% +/-5%
BTU/Hr. (approx.):	289 BTU/Hr.

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Altronix Power Supply

RSB2

Altronix Power Supply

Altronix ACMS8(CB)

Altronix VR6 is mounted under ACMS8(CB)

Altronix ACMS8(CB)

Altronix VR6 is mounted under ACMS8(CB)

Altronix PDS8(CB)

Altronix PDS8(CB)

A   A

B

A   A

B

A   A

A   C

D

A

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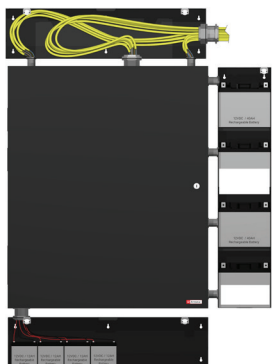Altronix mounting magnets accommodate screws and nylon standoffs to allow for mounting various boards/accessories in any metal enclosure or backplane.

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)

Dimensions and Drawing

Dimensions (H x W x D approximate)

36.12" x 30.125" x 7.06" (917.5mm x 768.1mm x 179.3mm)

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

2.00" (50.8mm)

1.25" (31.8mm)

1.07" (27.2mm)

30.12" (768.1mm)

2" (50.8mm)

14.01" (355.9mm) — 14.01" (355.9mm)

1" Conduit
3/4" Conduit

1.10" (27.9mm)

10.75" (273.1mm)

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10.62" (269.8mm)

33.63" (854.2mm)

1" Conduit
3/4" Conduit

10.75" (273.1mm)

10.62" (269.8mm)

36.12" (917.5mm)

10.75" (273.1mm)

10.75" (273.1mm)

7.06" (179.3mm)
1.25" (31.8mm)

3/4" Conduit
1" Conduit

1.25" (31.8mm)

2" (50.8mm) — 8.75" (222.3mm) — 8.62" (219mm) — 8.75" (222.3mm)