# Altronix®

T2MK77F16DQ (Kit)

Access & Power Integration Solution for Mercury

TROVE™

Altronix T2MK77F16DQ kit consists of Trove2 enclosure, TM2 Altronix & Mercury backplane and TMV2 door backplane with two 24VDC @ 10A power supply/chargers, Network communication module, 12VDC voltage regulator, eight (8) PTC protected output dual voltage power distribution module and two eight (8) PTC protected output access control 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 Video Insight, Quintron, RS2, Schneider Electric, Vanderbilt
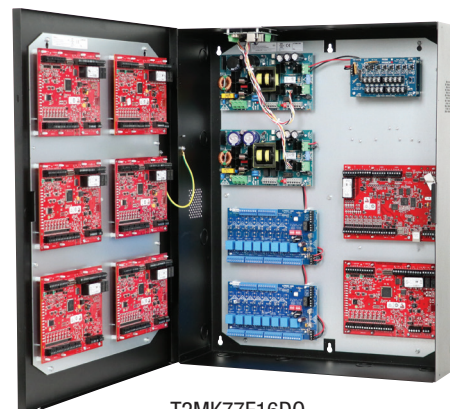
T2MK77F16DQ

Mercury boards are not included

MERCURY™
SECURITY

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)
  - Sixteen (16) double knockouts
    1.362" (1" Conduit) / 1.115" (3/4" Conduit)
- Supervision
  - AC Fail
  - Low Battery and Battery Presence
  - Low power shutdown

- Management interface for up to two (2) eFlow power supply/chargers
- 16 AWG galvanized steel backplane simplifies board layout and wire management
- 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
- Enclosure accommodates up to four (4) 12VDC/12AH batteries
- Lifetime Warranty*

*Altronix Power Supply/Chargers and Sub-Assemblies only

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Specifications

Two (2) Power Power Supply/Chargers (eFlow104NB):

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

Output
Voltage	24VDC @ 10A
Auxiliary	1A (unswitched)
Protection	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 (depending on the power supply).
Prevents deep battery discharge

Indicators (LED)
AC Input	120VAC is present
DC Output	Powered
Battery	Discharged or not connected

Network Communication Module (LINQ2):

Status Monitoring
AC status; Output current draw; Unit's temperature;
DC output voltage; Low Battery/Battery presence detection.
Input trigger state change; Output (relay and power supply) state change

Programming
Battery service date indication
Programmable via USB or web browser
Automated timed events:
- Control output relays and power supply via flexible timing parameter

Reporting
Programmable dashboard notifications
E-mail notification selectable by event
Event log tracks history (100+ events)

Indicators (LED)
Blue LED: Power ON.

Voltage Regulator (VR6):

Input
Voltage	24VDC from eFlow104NB

Output
Voltage	12VDC
Current	6A continuous
Other	Surge suppression

Indicators (LED)
Input	24VDC is present
Output	Powered

Dual Input Power Distribution Module (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
Output PTCs	2.5A

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

Two (2) Access Power Controllers (ACM8CB):

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

Outputs
Voltage	24VDC

Eight (8) 24VDC independently controlled PTC 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 PTCs	2.5A

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

T2MK77F16DQ 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: 27.25" x 21.5" x 6.5" (692.2mm x 546.1mm x 165.1mm)
  Shipping: 32.5" x 26.5" x 11.125" (825.5mm x 673.1mm x 282.6mm)

Weight (approx.)
Product	49.8 lb. (22.59 kg)
Shipping	53.55 lb. (24.29 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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Access Controller Position Chart for the Following Models:

Altronix/Mercury	Pem Mounting
LP2500, MUX8	Ⓐ
LP1502, LP4502, MR52, MR16IN, MR16OUT	Ⓑ
LP1501, MR62e	Ⓒ
MR50	Ⓓ

Altronix LINQ2

Altronix PDS8(CB)

Altronix Power Supply

Altronix VR6 is mounted under PDS8(CB)

Altronix Power Supply

Altronix ACM8(CB)

Altronix ACM8(CB)
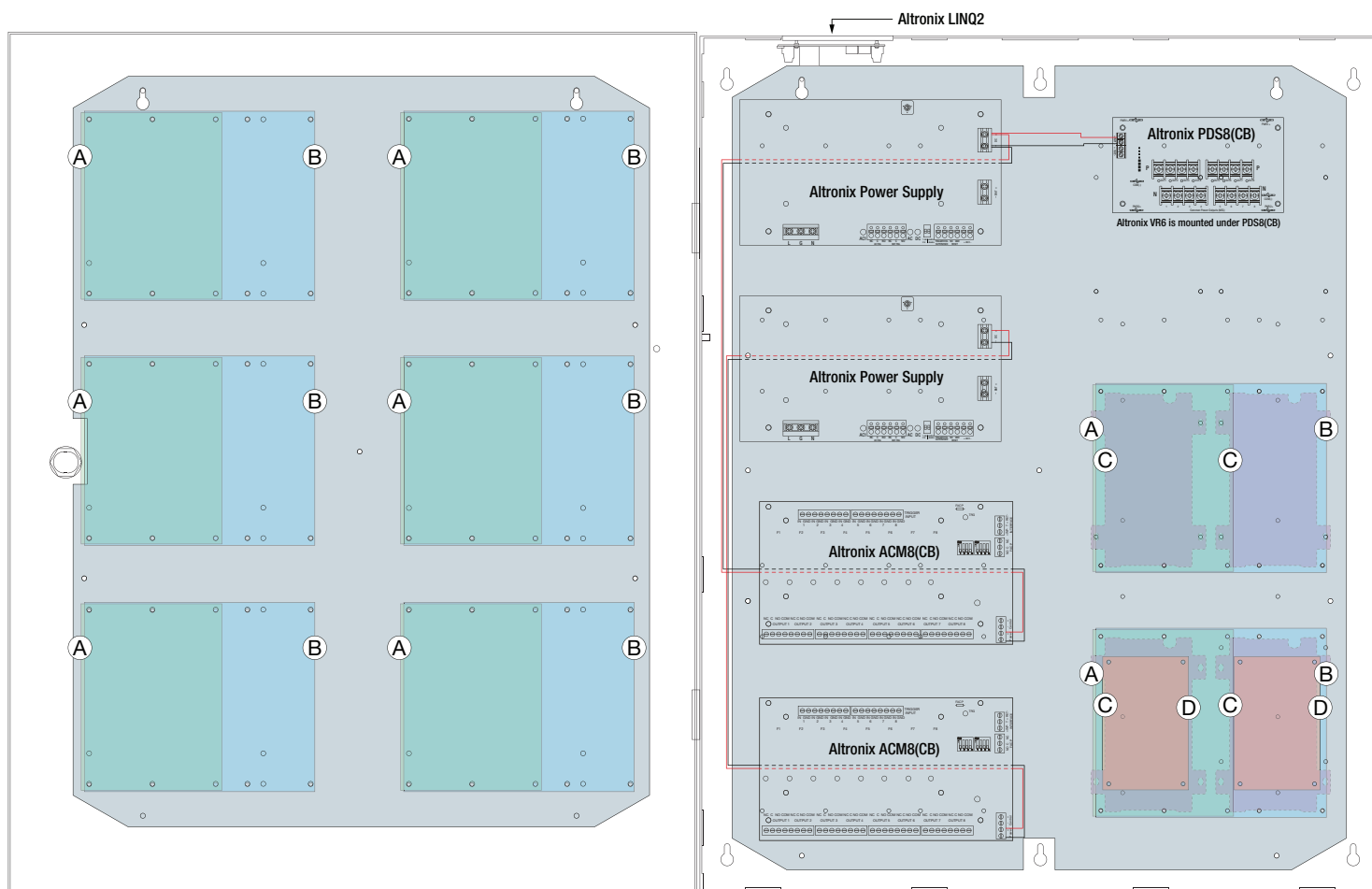
Accessories (order separately)

WM5

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.

Mounting Magnet

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.

BR1

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.

Trove2BWC with batteries

Trove2BWC with wires

TROVE2BWC - Battery/Wire Trough Enclosure

Altronix Trove2BWC is a dual-purpose enclosure that can be used as wiring trough or battery cabinet when mounted above or below of the Trove2 integrated power and access solution.The knockouts on the Trove2BWC have been strategically placed to line up with the Trove2 allowing for easy conduit connections between cabinets.Trove2BWC includes cam locks and 2 tamper switches to ensure access to wiring and batteries is secure.

Dimensions and Drawing

Dimensions (H x W x D approximate)

27.25" x 21.5" x 6.5" (692.2mm x 546.1mm x 165.1mm)