

# T3MK77F16SDQ (Kit)

Access & Power Integration Solution for Mercury



Altronix T3MK77F16SDQ kit consists of Trove3 enclosure and TM3 Altronix & Mercury backplane with two 24VDC @ 10A power supply/chargers, network communication module, two eight (8) PTC protected output access control modules and two eight (8) PTC protected dual 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, Identocard, IMRON, Johnson Controls, Kastle, Keri Systems, Lenel/S2, LockState, Maxxess, Midpoint Security, NLSS, Open Options, Panasonic Video Insight, Quintron, RS2, Schneider Electric, Vanderbilt



T3MK77F16SDQ

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

## Specifications

### Two (2) 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 (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	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
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### Voltage Regulator (VR6):

#### Input

Voltage	24VDC from eFlow104NB
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#### Output

Voltage	12VDC
Current	6A continuous
Other	Surge suppression

### Indicators (LED)

Input	24VDC is present
Output	Powered

### 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
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### Indicators (LED)

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

### 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	
Output PTCs	2.5A

### Indicators (LED)

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

### T3MK77F16SDQ 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	85.6 lb. (38.83 kg)
Shipping	98.8 lb. (44.82 kg)

##### Temperature

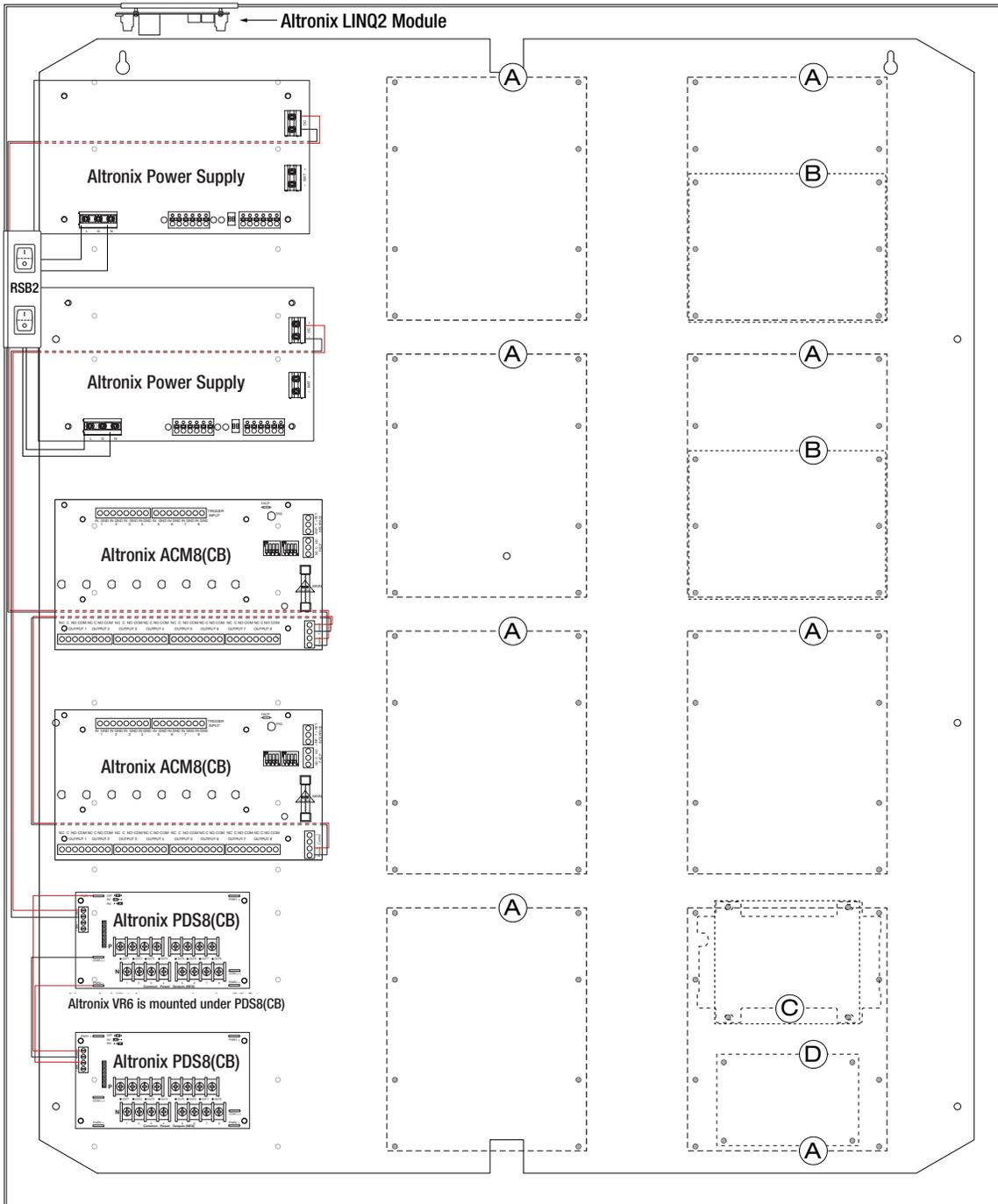
Operating	0°C to 49°C (32°F to 120°F)
Storage	- 20°C to 70°C (- 4°F to 158°F)

Relative Humidity 85% +/- 5%

BTU/Hr (approx.): 289 BTU/Hr.

**Access Controller Position Chart for the Following Models:**

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



**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**

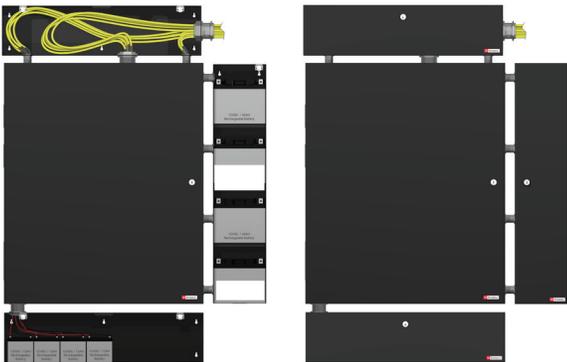
Altronix mounting magnets accommodate screws and nylon standoffs to allow for mounting various boards/accessories in any metal enclosure or backplane.



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.



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

**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.

**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)

