

T3LMK77F16N (Kit)

Access & Power Integration Solution for LiftMaster

TROVE™

Altronix T3LMK77F16N kit consists of Trove3 enclosure and TM3 Altronix & LiftMaster backplane with two (2) 24VDC @ 10A power supply/chargers, two (2) 12VDC voltage regulators, two (2) eight (8) fuse protected output dual voltage power distribution modules, two (2) eight (8) dual voltage fuse protected output access control modules and two (2) 5-Port Hardened PoE+ Switches. This kit also accommodates up to eight (8) LiftMaster Smart Access 2-Door Controller (CAP2D) for up to sixteen (16) doors in a single enclosure. Four (4) LMBK2 mounting brackets for LiftMaster CAP2D are factory installed. Trove simplifies board layout and wire management, reduces installation time and labor costs.

LiftMaster

POWERED BY myQ



T3LMK77F16N

*LiftMaster boards are not included***Key Features**

- 24VDC power supply/charger
- Accommodates up to eight (8) LiftMaster Smart Access 2-Door Controller (CAP2D)
- Convenient knockout configuration:
 - One (1) single knockout 2.415" (2" Conduit)
 - Sixteen (16) 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
- CE European Conformity
- Lifetime Warranty*

**Altronix Power Supply/Chargers and Sub-Assemblies only*

Specifications

Two (2) Power Supply/Chargers (eFlow104NTB):

Input

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

Output

Voltage	24VDC
Current	10A continuous
Auxiliary	1A (unswitched)
Other	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	

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)

Input	120VAC is present
DC Output	Powered
Battery	Discharged or not connected

Two (2) Dual Input Access Power Controllers (ACMS8):

Input

Voltage	24VDC from eFlow104NTB and 12VDC from VR6
Input Fuses	15A/32V

Outputs

Voltage	12 or 24VDC individually selectable
Eight (8) selectable 12VDC - 24VDC independently controlled outputs or eight (8) independently 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) fuse protected power outputs are selectable to follow power Input 1 or Input 2

Individual outputs may be set to OFF position for servicing

Output Fuses 3A/32V

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 eFlow104NTB
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Output

Voltage	12VDC
Current	6A continuous
Other	Surge suppression

Indicators (LED)

Input	24VDC is present
Output	Powered

Two (2) Dual Input Power Distribution Modules (PDS8):

Input

Voltage	24VDC from eFlow104NTB and 12VDC from VR6
Input Fuses	10A/32V

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 Fuses	3A/32V

Indicators (LED)

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

Two (2) PoE+ Hardened Switches (NetWay5P):

Input Power

24VDC from eFlow104NTB

Power Output

Maximum Power	Four (4) 10/100/1000 Mbps PoE/PoE+ (rated up to 30W) ports 60W (at 12VDC) or 120W (at 24VDC) total power Integral surge protection
Uplink Port	Single data port

Ethernet Ports

Five (5) 10/100/1000 Mbps ports	
Connectivity: RJ45, auto-crossover	
Wire type: 4-pair CAT5e or higher structured cable	
Distance: up to 100m	
Speed: 10/100/1000 Mbps, half/full duplex, auto negotiation	

Indicators (LED)

Individual PoE On LEDs for each port	
Individual IP Link status, 10/100Base-T/active LEDs for each port	

T3LMK77F16N Kit:

Agency Listings

CE	European Conformity
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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	40.1 lb. (18.2 kg)
Shipping	43.85 lb. (19.9 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

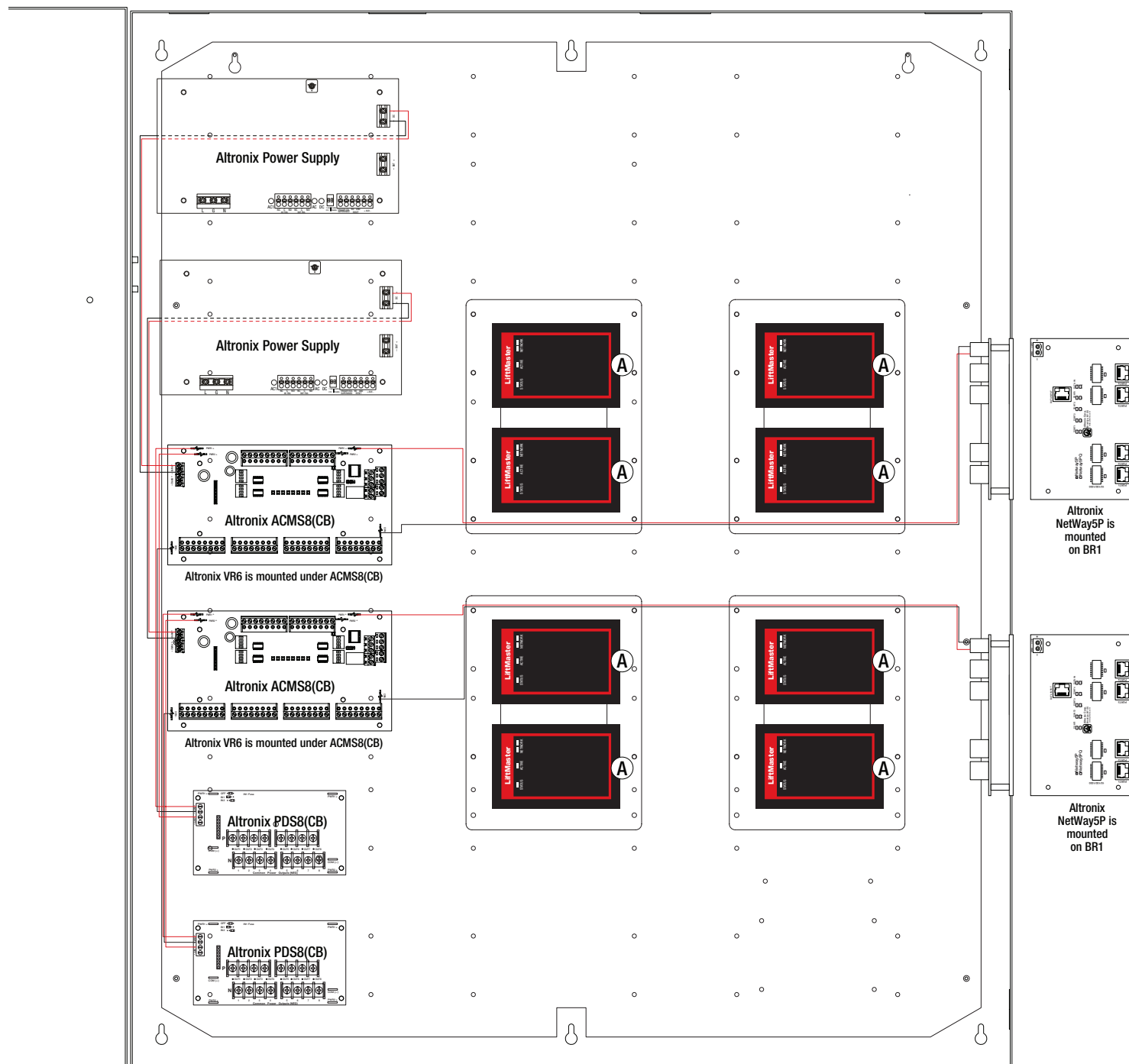
85% +/- 5%

BTU/Hr (approx.):

145 BTU/Hr.

Access Controller Position Chart for the Following Models:

LiftMaster	Pem Mounting
LiftMaster Smart Access 2-Door Controller (CAP2D)	(A)



Accessories (order separately)

LINQ2

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



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

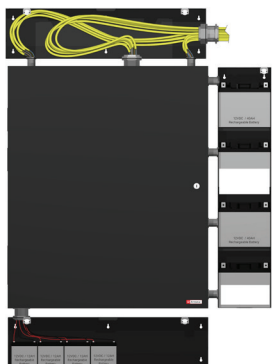
Altronix mounting magnets accommodate screws and nylon standoffs to allow for mounting various boards/ accessories in any metal enclosure or backplane.



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.

**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)

