# Altronix®

## T3M77CK1D (Pre-wired Kit)
## Access and Power Integration Solution for Mercury

**TROVE PLUS**

Altronix T3M77CK1D is a 16-door access and power integration kit which includes Altronix power and sub-assemblies along with factory installed wire management and wire assemblies that are pre-configured with terminal blocks for Mercury* hardware. This unit provides ample power and dual voltage outputs to support Mercury platform controllers and locking devices. The T3M77CK1D accommodates one (1) Intelligent Dual Reader Controller and seven (7) Dual Reader Interface Modules. Trove Plus simplifies field installations and provides reliable, robust critical power and control for the most demanding applications.

**\*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
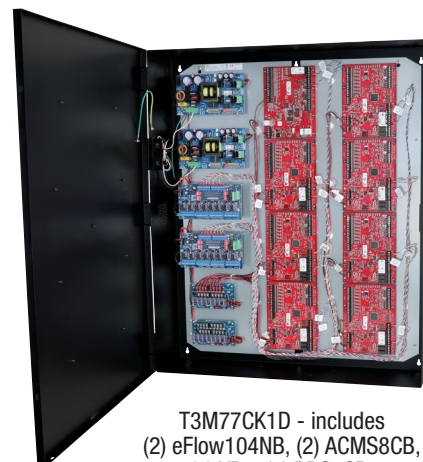
**Mercury**

T3M77CK1D - includes
(2) eFlow104NB, (2) ACMS8CB,
(2) VR6, (2) PDS8CB,
wire harnesses and management

*Mercury boards are not included*

## Key Features

- Accommodates the following Mercury controllers:
  1 - LP1502 / LP4502 and 7 - MR52

- 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)
- Unit includes:
  - Removable backplane
  - Wire management
  - Custom Wire Harnesses for power distribution
    and controller connections

- AC input and DC output LED indicators
- Supervision
  - AC Fail
  - Low Battery and Battery Presence
  - Low power shutdown
- Built-in charger for sealed lead acid or gel type batteries
- Instantaneous transfer to stand-by batteries
- 16 AWG galvanized steel backplane simplifies board layout and wire management
- Enclosure accommodates up to four (4) 12VDC/12AH batteries
- CE European Conformity
- Lifetime Warranty

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

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TR☐VE™ PLUS

## 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 | 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 | 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

| | |
|---|---|
| Output PTCs | 2.5A |

**Indicators (LED)**

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

### T3M77CK1D 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. |

Altronix Power Supply/Charger

Altronix Power Supply/Charger

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) LNL-2220, LP1502 / LP4502

(B) LNL-1320, MR52

(C) LNL-1320, MR52

(D) LNL-1320, MR52

(E) LNL-1320, MR52

(F) LNL-1320, MR52

(G) LNL-1320, MR52

(H) LNL-1320, MR52
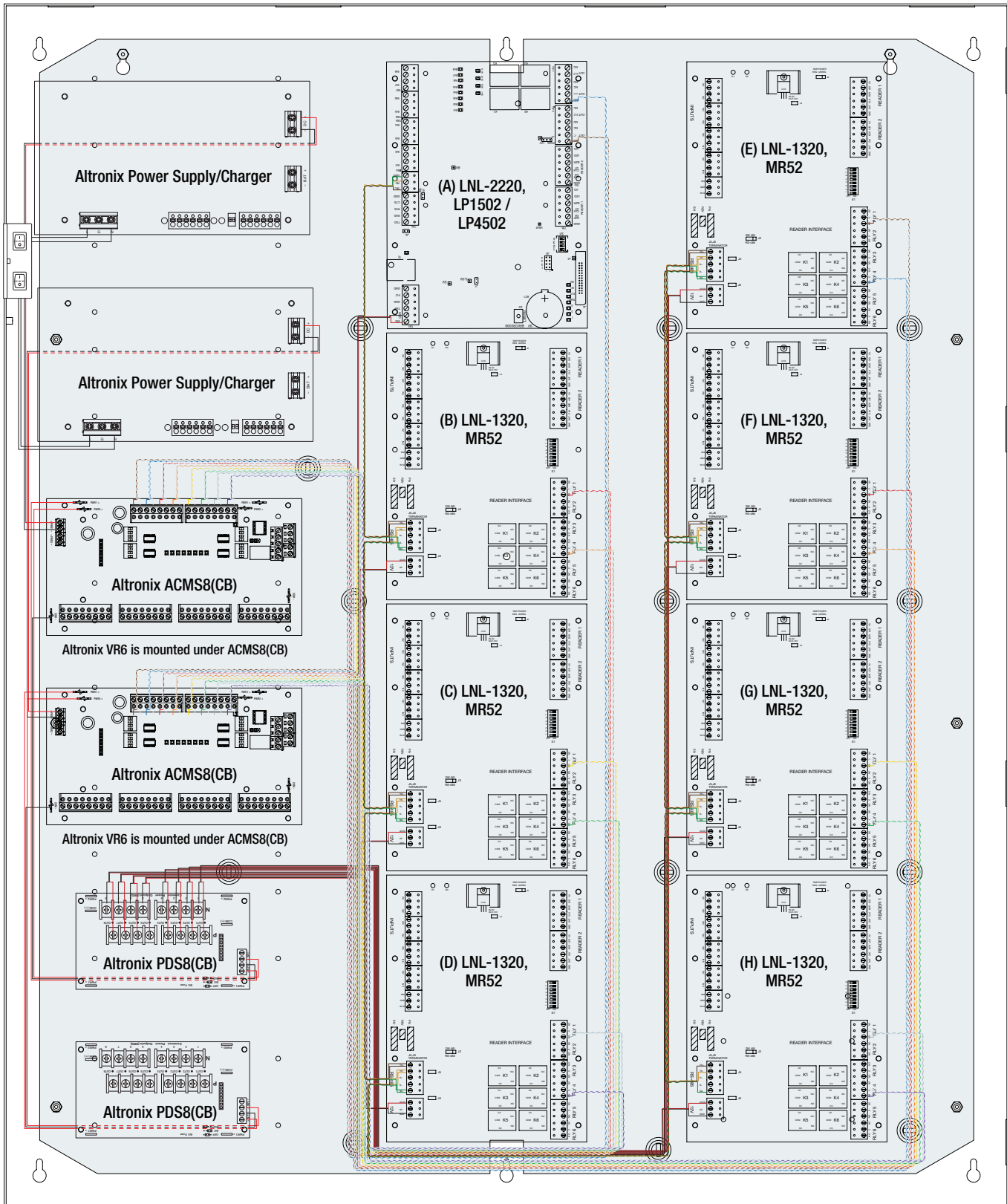
## Accessories (order separately)



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)



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" Conduit
3/4" Conduit
10.75" (273.1mm)
10.62" (269.8mm)
10.75" (273.1mm)

1.07" (27.2mm)
30.12" (768.1mm)
14.01" (355.9mm) — 14.01" (355.9mm)
1.10" (27.9mm)
33.63" (854.2mm)

2" (50.8mm)
1" Conduit
3/4" Conduit
10.75" (273.1mm)
10.62" (269.8mm)
10.75" (273.1mm)
36.12" (917.5mm)

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)