TROVE™ PLUS

Access & Power Integration

# Altronix/Mercury Wired Kits

## Models Include:

### T2M7CK1

8 Door Kit with Fused Outputs

Accommodates one (1) Intelligent Dual Reader Controller and three (3) Dual Reader Interface Modules.

### T2M7CK2

6 Door Kit with Fused Outputs

Accommodates one (1) Intelligent Controller and three (3) Dual Reader Interface Module.

### T2M7CK3

8 Door Kit with Fused Outputs

Accommodates up to four (4) Dual Reader Interface Modules.

Each fully assembled kit includes:

- Trove2 enclosure with TM2 Altronix/Mercury backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACMS8 - Dual Input/Output Fuse Protected Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8 - Dual Input/Output Fuse Protected Power Distribution Module
- One (1) RSB1 - Rocker Switch Bracket with One (1) Rocker Switch (Not evaluated by UL)
- Wire harnesses and management

### T2M7CK1D

8 Door Kit with PTC Outputs

Accommodates one (1) Intelligent Dual Reader Controller and three (3) Dual Reader Interface Modules.

### T2M7CK2D

6 Door Kit with PTC Outputs

Accommodates one (1) Intelligent Controller and three (3) Dual Reader Interface Module.

### T2M7CK3D

8 Door Kit with PTC Outputs

Accommodates up to four (4) Dual Reader Interface Modules.

Each fully assembled kit includes:

- Trove2 enclosure with TM2 Altronix/Mercury backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACMS8CB - Dual Input/Output PTC Protected Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8CB - Dual Input/Output PTC Protected Power Distribution Module
- One (1) RSB1 - Rocker Switch Bracket with One (1) Rocker Switch (Not evaluated by UL)
- Wire harnesses and management

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

# Installation Guide

CE

Altronix®

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**Rev. T2M7CK_071023**

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

## Overview:

Altronix Trove Plus kits are pre-wired, pre-assembled and consist of Trove2M2 enclosure/backplane with factory installed Altronix power supply/charger and sub-assemblies, wire harnesses and management.

## Configuration Chart:

| Altronix Model Number | 120VAC 60Hz Input Current (A) | Power Supply Board Input Fuse Rating | Power Supply Board Battery Fuse Rating | Nominal DC Output Voltage | | Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACMS8(CB) Access Power Controller's outputs | Fail-Safe/Fail-Secure or Dry Form "C" Outputs | Current Per ACMS8(CB) and PDS8(CB) Output (A) | ACMS8(CB) Board Input Fuse (PTC) Rating | ACMS8(CB) Board Output Fuse (PTC) Rating | PDS8(CB) Board Input Fuse (PTC) Rating | PDS8(CB) Board Output Fuse (PTC) Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | [DC] | [Aux] | | | | | | | |
| | | | | Output Range (VDC) | Output Range (VDC) | | | | | | | |
| T2M7CK1 | 4.5 | 6.3A/ 250V | 15A/ 32V | 20.17-26.4 | 20.28-26.4 | 24VDC @ 9.4A | 8 | 2.5 | 15A/ 32V | 3A/ 32V | 10A/ 32V | 3A/ 32V |
| T2M7CK2 | | | | | | | | | | | | |
| T2M7CK3 | | | | | | | | | | | | |
| T2M7CK1D | | | | | | | | 2.0 | 9A | 2.5A | 9A | 2.5A |
| T2M7CK2D | | | | | | | | | | | | |
| T2M7CK3D | | | | | | | | | | | | |

## Mechanical:

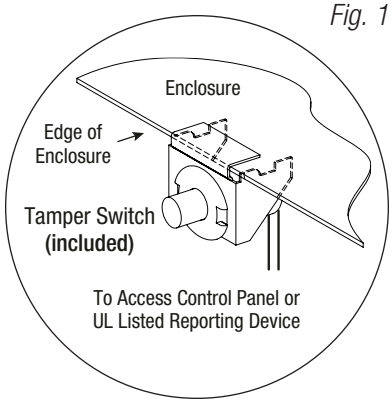
- 16 Gauge enclosure with ample knockouts for convenient access.
- Enclosure Dimensions (H x W x D): 27.25" x 21.75" x 6.5" (692.2mm x 552.5mm x 165.1mm).

## Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

1. Remove backplane from enclosure. Do not discard hardware.
2. Mark and predrill holes in the wall to line up with the top three keyholes in the enclosure. Install three upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the three upper screws, level and secure. Mark the position of the lower three holes. Remove the enclosure. Drill the lower holes and install the three fasteners. Place the enclosure's upper keyholes over the three upper screws. Install the three lower screws and make sure to tighten all screws.
3. Mount included UL Listed tamper switch (Altronix Model TS112 or equivalent) in desired location, opposite hinge. Slide the tamper switch bracket onto the edge of the enclosure approximately 2" from the right side *(Fig. 1, pg. 2)*. Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device.
   To activate alarm signal open the door of the enclosure.
4. Connect unswitched AC power (120VAC 60Hz) to RSB1. Use 14 AWG or larger for all power connections. Secure green wire lead to earth ground.
   Green "AC" LED on power supply board will turn on.
   This light can be seen through the LED lens on the door of the enclosure.
   **Keep power-limited wiring separate from non power-limited wiring (120VAC 60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided. CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.**

*Fig. 1*




5. Measure voltage before connecting devices. This helps avoiding potential damage
6. Position Mercury access controller modules over corresponding spacers and depress onto snap on spacers *(Fig. 2-4, pg. 3-5)*.
7. Connect wire harnesses to Mercury access controller modules *(Fig. 2-4, pg. 3-5)*.
8. Refer to the *eFlow Power Supply/Charger Installation Guide* for eFlow104NB and corresponding *Sub-Assembly Installation Guides* for PDS8(CB) and ACMS8(CB) for further installation instructions.
9. Mount backplane to enclosure with hardware.

## Hardware:

Snap On Spacer | 5/16" Pan Head Screw | Lock Nut

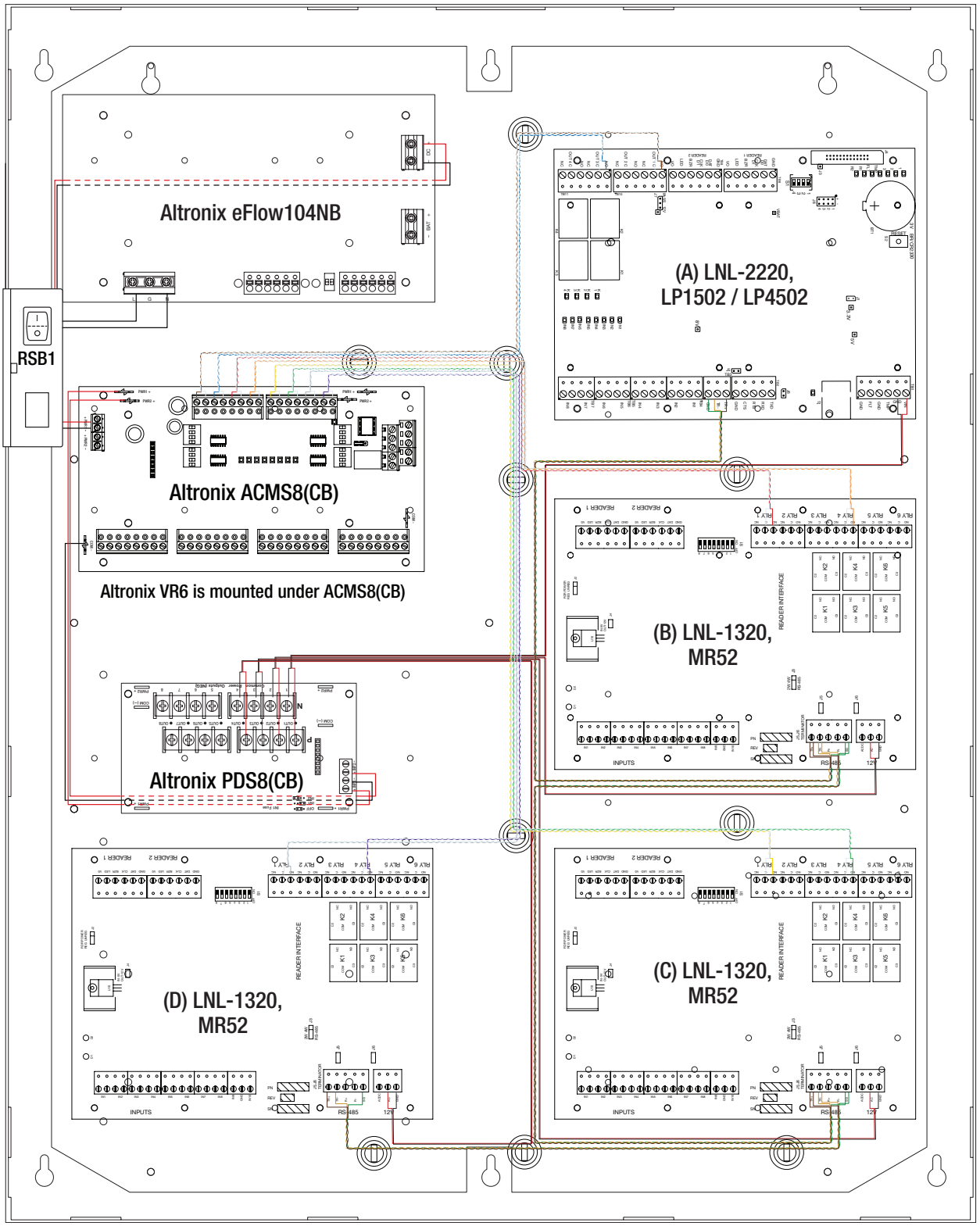
## T2M7CK1(D) Configuration:

1. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 2, pg. 3)*.
2. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| LenelS2 / Mercury Access Controller | Pem Mounting |
|---|---|
| LNL-2220 / LP1502 | Ⓐ |
| LNL-1320 / MR52 | Ⓑ |

*Fig. 2*



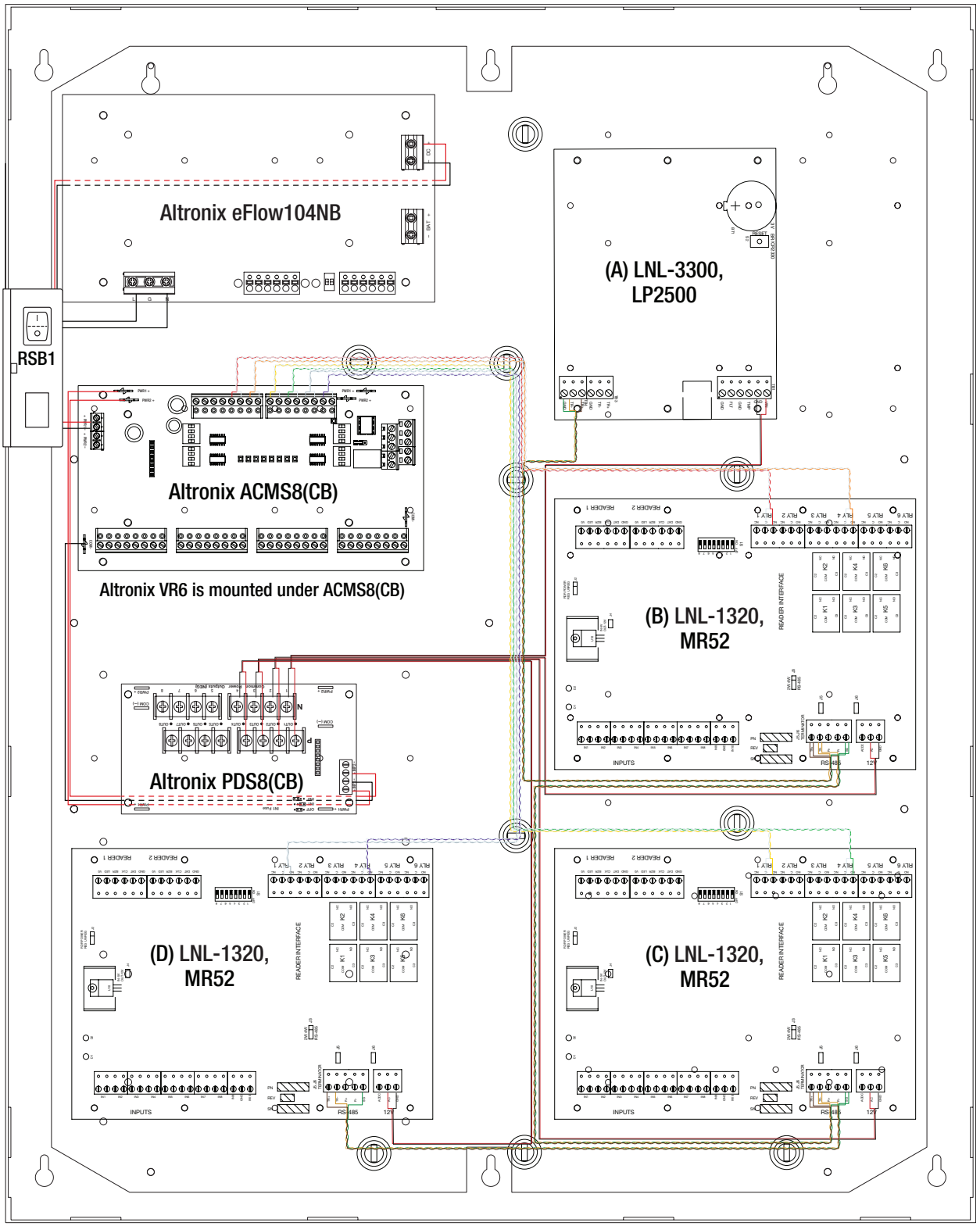
## T2M7CK2(D) Configuration:

1. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 3, pg. 4)*.
2. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| LenelS2 / Mercury Access Controller | Pem Mounting |
|---|---|
| LNL-3300 / LP2500 | Ⓐ |
| LNL-1320 / MR52 | Ⓑ Ⓒ Ⓓ |

*Fig. 3*



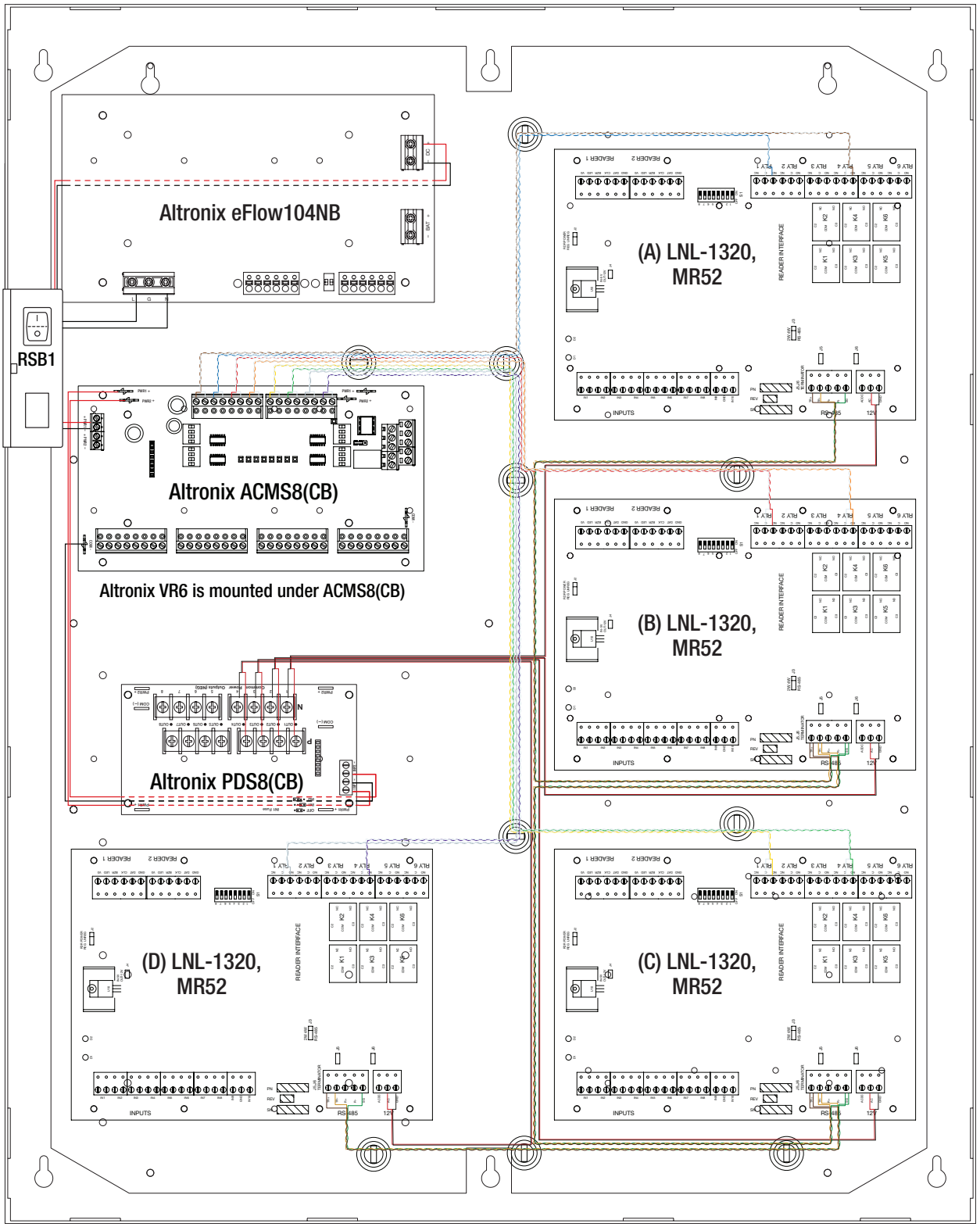
## T2M7CK3(D) Configuration:

1. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 4, pg. 5)*.
2. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| LenelS2 / Mercury Access Controller | Pem Mounting |
|---|---|
| LNL-1320 / MR52 | (A) (B) (C) (D) |

*Fig. 4*

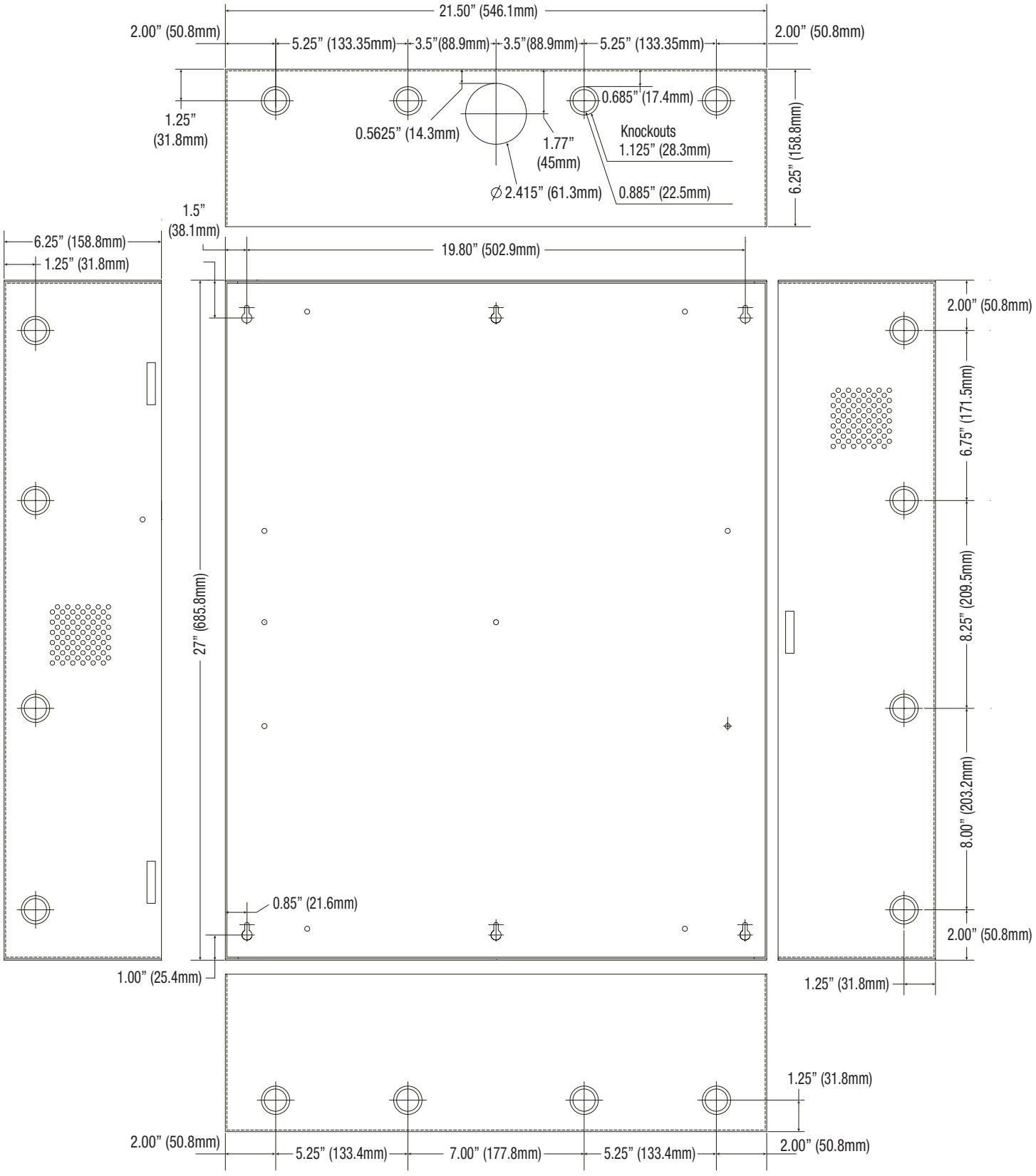


## Notes:

## Notes:

## **Trove2 Enclosure Dimensions** (H x W x D approximate)**:**

27.25” x 21.5” x 6.5” (692.2mm x 552.5mm x 165.1mm)




Altronix is not responsible for any typographical errors. Product specifications are subject to change without notice.

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