TROVE™
Access & Power Integration

Altronix/Kantech Kits

Models Include:

T2KHK3F12
12 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TKH2 Altronix/Kantech backplane
- One (1) eFlow6NB - Power Supply/Charger
- One (1) T1618300K - Transformer
- One (1) ACM4 - Fused Access Power Controller
- One (1) ACM8 - Fused Access Power Controller

T2KHK7F12
12 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TKH2 Altronix/Kantech backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACM4 - Fused Access Power Controller
- One (1) ACM8 - Fused Access Power Controller

T2KHK7F12S
12 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TKH2 Altronix/Kantech backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACMS12 - Dual Input Fused Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8 - Dual Input Fused Access Power Controller

T2KHK3F12D
12 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TKH2 Altronix/Kantech backplane
- One (1) eFlow6NB - Power Supply/Charger
- One (1) T1618300K - Transformer
- One (1) ACM4CB - PTC Access Power Controller
- One (1) ACM8CB - PTC Access Power Controller

T2KHK7F12D
12 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TKH2 Altronix/Kantech backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACM4CB - PTC Access Power Controller
- One (1) ACM8CB - PTC Access Power Controller

T2KHK7F12SD
12 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TKH2 Altronix/Kantech backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACMS12CB - Dual Input PTC Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8CB - Dual Input PTC Access Power Controller

Please refer to the included corresponding Sub-Assembly Installation Guides for further information.

Installation Guide

CE

Altronix®
More than just power.™

Rev. 042924

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix Trove Kantech kits are pre-assembled and consist of Trove2KH2 enclosure/backplane with factory installed Altronix power supply/charger and sub-assemblies. These kits also accommodate various combinations of Kantech boards for up to twelve (12) doors in a single enclosure.

TKH2 accommodates a combination of the following Kantech boards:

- Up to three (3) KT-MOD-INP16 or KT-MOD-OUTP16.
- Up to two (2) KT-1.
- Up to three (3) KT-400, KT-4.

Configuration Chart:

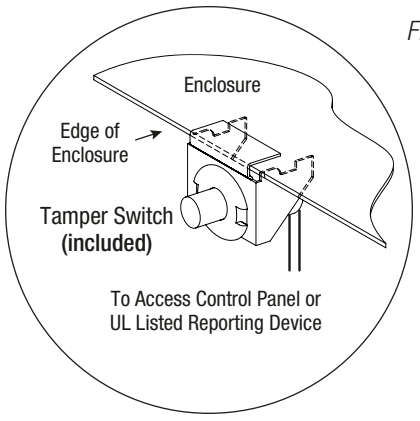
Altronix Model Number	120VAC 60Hz Input Current (A)	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACM4(CB)/ ACM8(CB)/ ACMS12(CB) Access Power Controllers'outputs	Nominal DC Output Voltage [DC] Output Range (VDC)	Nominal DC Output Voltage [Aux] Output Range (VDC)	Fail-Safe/Fail-Secure or Dry Form "C" Outputs	ACM4(CB) Board Input Fuse (PTC) Rating	ACM4(CB) Board Output Fuse (PTC) Rating	ACM8(CB) Board Input Fuse Rating	ACM8(CB) Board Output Fuse (PTC) Rating	ACMS12(CB) Board Input Fuse (PTC) Rating	ACMS12(CB) Board Output Fuse (PTC) Rating
T2KHK3F12	3.5	5A/ 250V	10A/ 32V	24VDC @ 5.4A	20.17-26.4	20.28-26.4	12	10A/ 32V	3A/ 32V	10A/ 250V	3.5A/ 250V	–	–
T2KHK3F12D								9A	2.5A		2.5A		–
T2KHK7F12	4.5	6.3A/ 250V	15A/ 32V	24VDC @ 9.4A	20.17-26.4	20.28-26.4	12	10A/ 32V	3A/ 32V	10A/ 250V	3.5A/ 250V	–	–
T2KHK7F12D								9A	2.5A		2.5A	–	–
T2KHK7F12S							12	–	–	–	–	15A/ 32V	3A/ 32V
T2KHK7F12SD								–	–	–	–	9A	2.5A

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 terminals marked [L, N].
   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.
5. Measure voltage before connecting devices. This helps avoiding potential damage.
6. Mount Kantech boards to TKH2 backplane, refer to *pages 3-5*.
7. Refer to the *eFlow Power Supply/Charger Installation Guide* for eFlow6NB and eFlow104NB and corresponding *Sub-Assembly Installation Guides* for the following models: ACM8(CB), ACM4(CB), ACMS12(CB), VR6, PDS8(CB) and T1618300K for further installation instructions.

Fig. 1



T2KHK3F12 and T2KHK3F12(D): Configuration of Kantech Boards:

1. Align Kantech boards on the backplane to match the boards' mounting holes with corresponding holes in backplane.
   a. Position spacer over appropriate hole on the rear of backplane and depress it until it locks in place *(Fig. 2a, pg. 3, Step 1)*.
   b. Depress down on board to secure it to the spacer *(Fig. 2a, pg. 3, Step 2)*.
2. Fasten backplane to Trove2 enclosure utilizing pan head screws (provided).

Kantech Access Controller Position Chart for the Following Models:

Kantech Board	Pem Mounting
KT-400 Door Controller	(A)
KT-1 Door Controller	(B)
KT-MOD-INP16 or KT-MOD-OUTP16 Expansion Boards	(C)

Fig. 2

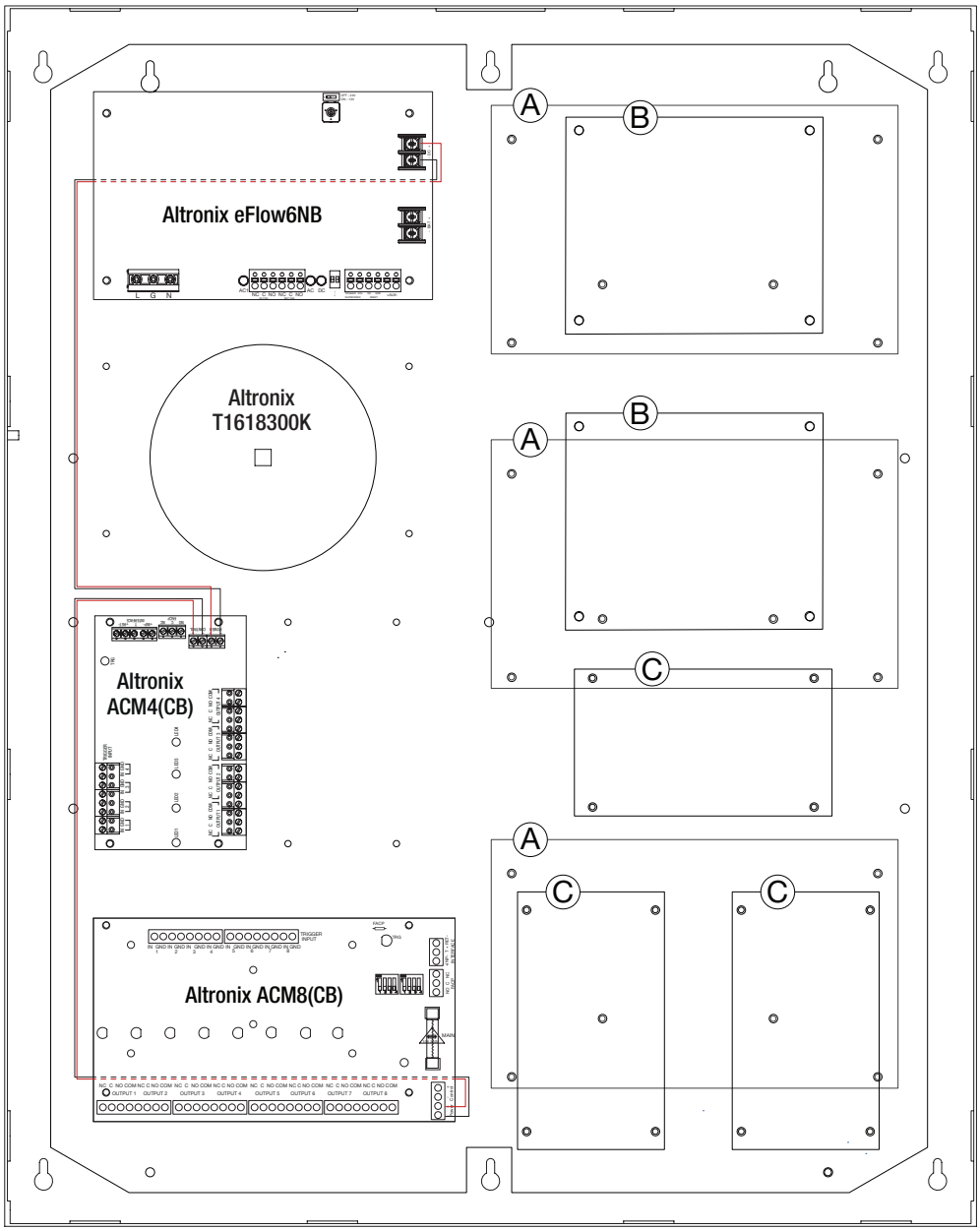
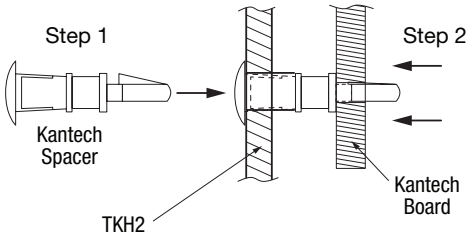


Fig. 2a



T2KHK7F12 and T2KHK7F12(D): Configuration of Kantech Boards:

1. Align Kantech boards on the backplane to match the boards' mounting holes with corresponding holes in backplane.
   a. Position spacer over appropriate hole on the rear of backplane and depress it until it locks in place *(Fig. 3a, pg. 4, Step 1)*.
   b. Depress down on board to secure it to the spacer *(Fig. 3a, pg. 4 Step 2)*.
2. Fasten backplane to Trove2 enclosure utilizing pan head screws (provided).

Kantech Access Controller Position Chart for the Following Models:

Kantech Board	Pem Mounting
KT-400 Door Controller	(A)
KT-1 Door Controller	(B)
KT-MOD-INP16 or KT-MOD-OUTP16 Expansion Boards	(C)

Fig. 3

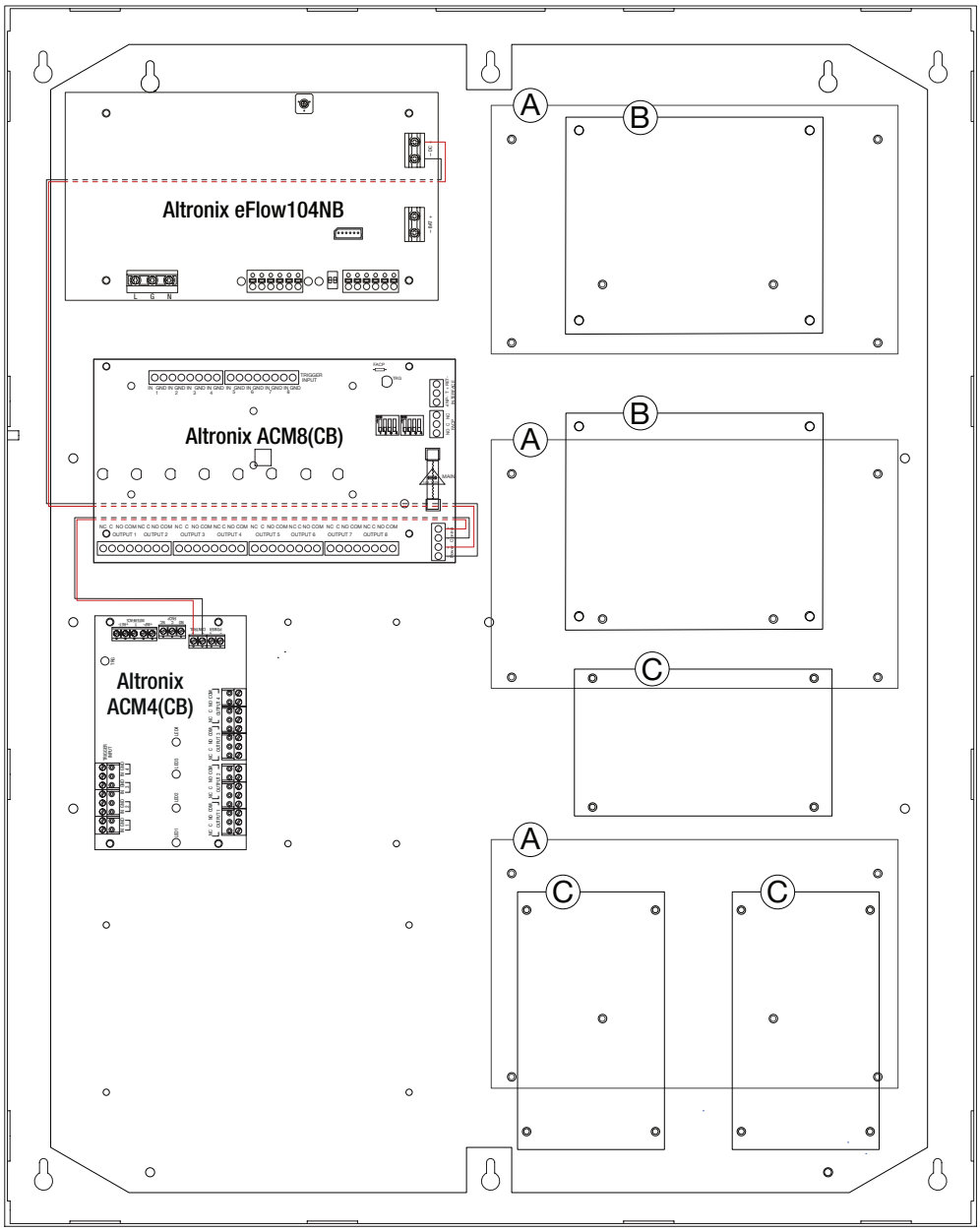
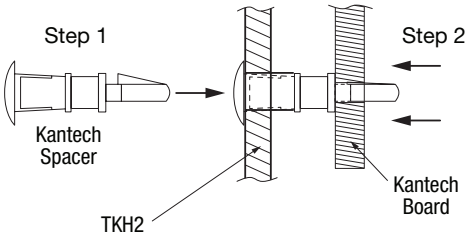


Fig. 3a



T2KHK7F12S and T2KHK7F12S(D): Configuration of Kantech Boards:

1. Align Kantech boards on the backplane to match the boards' mounting holes with corresponding holes in backplane.
   a. Position spacer over appropriate hole on the rear of backplane and depress it until it locks in place *(Fig. 4a, pg. 5, Step 1)*.
   b. Depress down on board to secure it to the spacer *(Fig. 4a, pg. 5, Step 2)*.
2. Fasten backplane to Trove2 enclosure utilizing pan head screws (provided).

Kantech Access Controller Position Chart for the Following Models:

Kantech Board	Pem Mounting
KT-400 Door Controller	(A)
KT-1 Door Controller	(B)
KT-MOD-INP16 or KT-MOD-OUTP16 Expansion Boards	(C)

Fig. 4

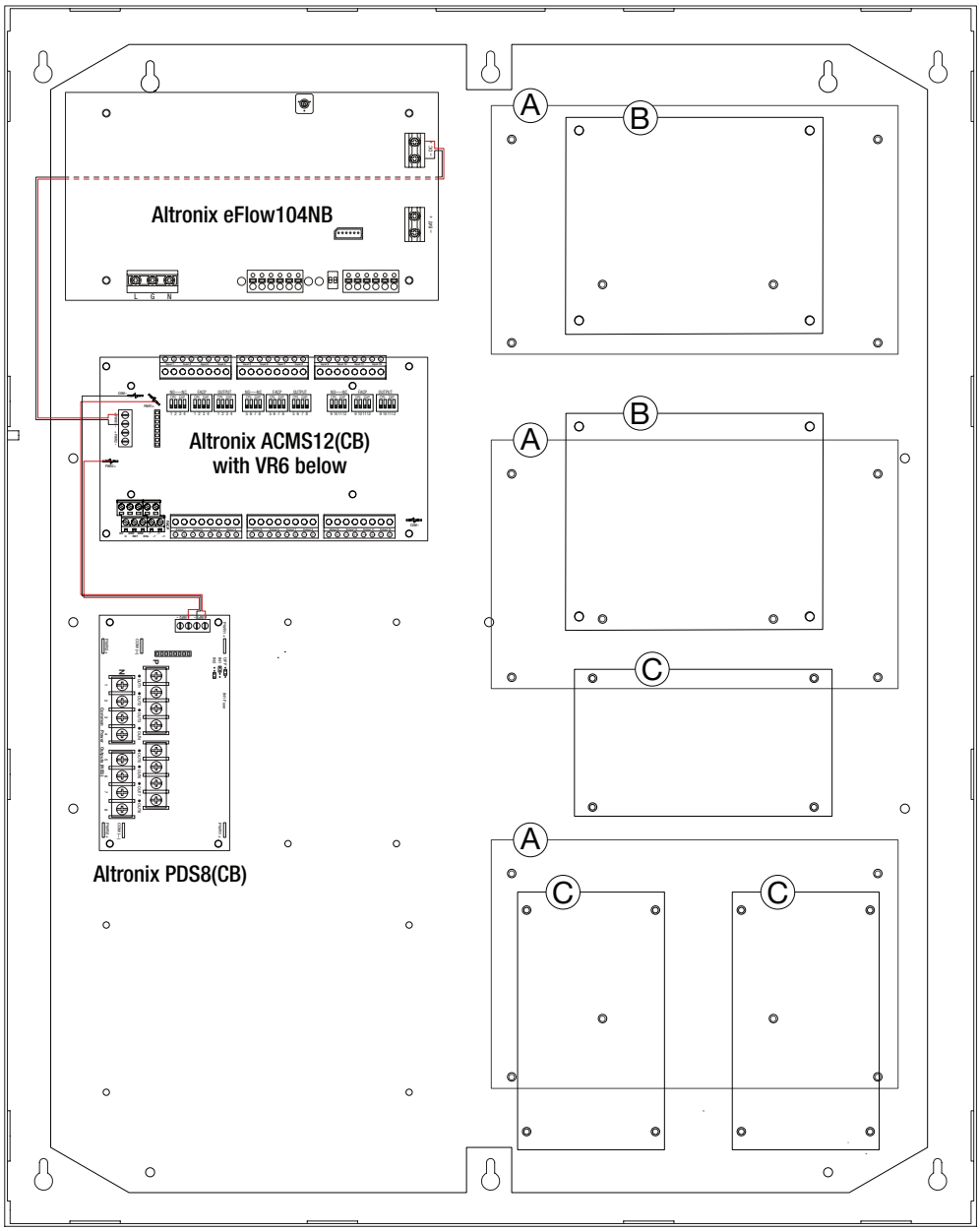
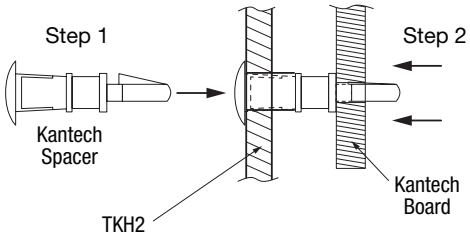
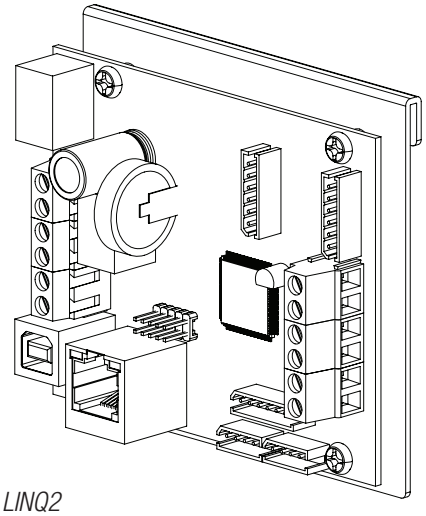


Fig. 4a



eFlow Power Supply/Chargers can be Controlled and Monitored while Reporting Power/Diagnostics from Anywhere over the Network...



LINQ2

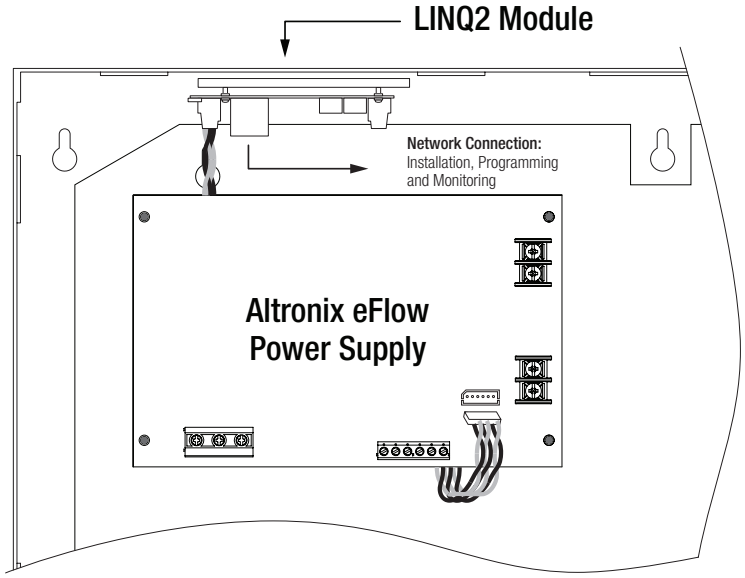
LINQ2 - Network Communication Module

LINQ2 provides remote IP access to real-time data from eFlow power supply/chargers to help keep systems up and running at optimal levels. It facilitates fast and easy installation and set-up, minimizes system downtime, and eliminates unnecessary service calls, which helps reduce Total Cost of Ownership (TCO) - as well as creating a new source of Recurring Monthly Revenue (RMR).

Features:

- UL Listed in the U.S. and Canada.
- Local or remote control of up to (2) two Altronix eFlow power output(s) via LAN and/or WAN.
- Monitor real time diagnostics: DC output voltage, output current, AC & battery status/service, input trigger state change, output state change and unit temperature.
- Access control and user managment: Restrict read/write, Restrict users to specific resources
- Two (2) integral network controlled Form “C” Relays.
- Three (3) programmable input triggers: Control relays and power supplies via external hardware sources.
- Email and Windows Dashboard notifications
- Event log tracks history.
- Secure Socket Layer (SSL).
- Programmable via USB or web browser - includes operating software and 6 ft. USB cable.

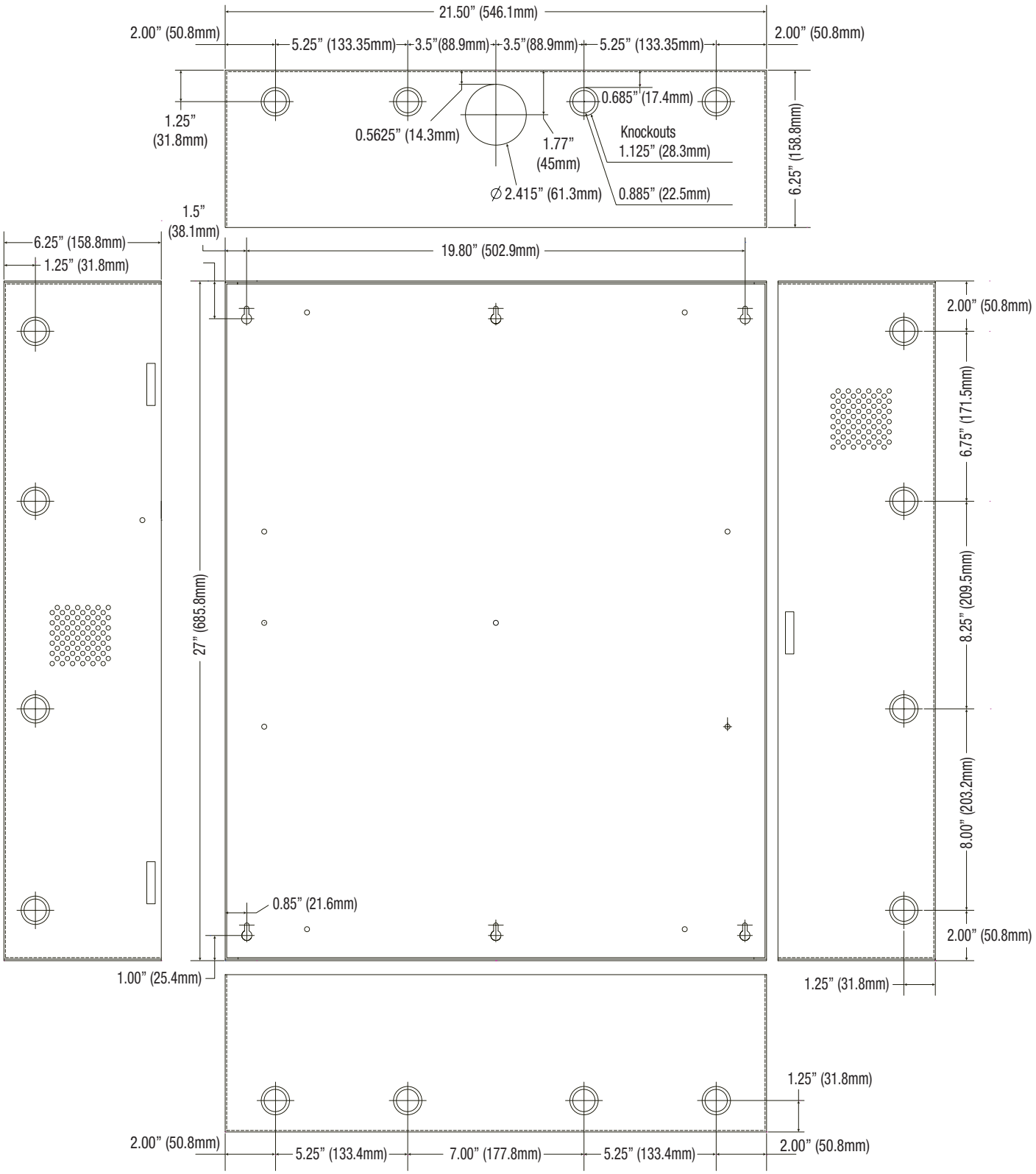
LINQ2 Mounts Inside any Trove Enclosure



Notes:

Enclosure Dimensions (H x W x D)**:**

27.25” x 21.75” x 6.5” (692.2mm x 552.5mm x 165.1mm)



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