

# CE

# Access & Power Integration

# Altronix/Openpath Kits

# **Models Include:**

#### T1PHK1F4S

4 Door Kit with Fused Outputs Fully assembled kit includes:

- Trove1 enclosure with TC1 Altronix/Openpath backplane
- One (1) eFlow4NB Power Supply/Charger
- One (1) ACM4 Fused Access Power Controller
- One (1) VR6 Voltage Regulator
- One (1) PDS8 Dual Input/Output Fused Power Distribtuion Module

#### T1PHK3F8

8 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove1 enclosure with TC1 Altronix/Openpath backplane
- One (1) eFlow6NB Power Supply/Charger
- One (1) ACM8 Fused Access Control Module

#### **T2PHK33F16**

16 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TCV2 Altronix/Openpath backplane
- Two (2) eFlow6NB Power Supply/Chargers
- Two (2) ACM8 Fused Access Control Modules

#### **T2PHK33F16P8**

16 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TCV2 Altronix/Openpath backplane
- Two (2) eFlow6NB Power Supply/Chargers
- Two (2) ACM8 Fused Access Control Modules
- One (1) PD8UL Fused Power Distribution Module

#### **T2PHK77F24**

24 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TCV2 Altronix/Openpath backplane
- Two (2) eFlow104NB Power Supply/Chargers
- Three (3) ACM8 Fused Access Control Modules

#### T1PHK1F4SD

4 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove1 enclosure with TC1 Altronix/Openpath backplane
- One (1) eFlow4NB Power Supply/Charger
- One (1) ACM4CB PTC Access Power Controller
- One (1) VR6 Voltage Regulator
- One (1) PDS8CB Dual Input/Output PTC Power Distribtuion Module

#### T1PHK3F8D

8 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove1 enclosure with TC1 Altronix/Openpath backplane
- One (1) eFlow6NB Power Supply/Charger
- One (1) ACM8CB PTC Access Control Module

#### **T2PHK33F16D**

16 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TCV2 Altronix/Openpath backplane
- Two (2) eFlow6NB Power Supply/Chargers
- Two (2) ACM8CB PTC Access Control Modules

# **T2PHK33F16P8D**

16 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove2 enclosure with TCV2 Altronix/Openpath backplane
- Two (2) eFlow6NB Power Supply/Chargers
- Two (2) ACM8CB PTC Access Control Modules
- One (1) PD8ULCB PTC Power Distribution Module

#### **T2PHK77F24D**

24 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove2 enclosure with TCV2 Altronix/Openpath backplane

Altronix<sup>®</sup>

More than just power.™

- Two (2) eFlow104NB Power Supply/Chargers
- Three (3) ACM8CB PTC Access Control Modules

# **Installation Guide**

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Rev. TPHK 100124

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nstalling Company:	Service Rep. Name:	
Address:		Phone #

#### Overview:

Altronix Trove Openpath kits are pre-assembled and consist of Trove enclosures/backplanes with factory installed Altronix power supply/chargers and sub-assemblies. These kits also accommodate various combinations of Openpath boards for up to twenty four (24) doors in a single enclosure.

**Configuration Chart:** 

				_	nal DC Voltage	-		Soard	3oard J	se	-nse	Fuse												
				Maximum Supply	Power Supply	e or ts	PTC	CB) E ting	CB) E ating	" 叶 记	put F	rtbut												
	Dower	Dower		Current for Main and	[DC]	[Aux]	Secure of Outputs	or P	) M8((	)M8((	ldul I	1 Out	rd Or											
Altronix Model Number	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	120VAC 60Hz Input Current (A)	Aux. Outputs on Power Supply board, ACM4(CB)/ACM8(CB) Access Power Controllers' or PDS8(CB) outputs	Output Range (VDC)	Output Range (VDC)	Fail-Safe/Fail-Secure or Dry Form "C" Outputs	Additional Fuse or Protected Outputs	ACM4(CB) or ACM8(CB) Board Input Fuse (PTC) Rating	ACM4(CB) or ACM8(CB) Board Output Fuse (PTC) Rating	PDS8(CB) Board Input Fuse (PTC) Rating	PDS8(CB) Board Output Fuse (PTC) Rating	PD8UL(CB) Board Output Fuse (PTC) Rating											
T1PHK1F4S	5A/	15A/	3.5	24VDC @ 3.7A	20.17-	20.28-	4	8	10A/ 32V	3A/ 32V	10A/ 32V	3A/ 32V	_											
T1PHK1F4SD	250V	32V	3.3	24VDO @ 3.7A	26.4	26.4	4	O	9A	2.5A	9A	2.5A	_											
T1PHK3F8	5A/	15A/												3.5	24VDC @ 5.9A	20.17-	20.28-	8	-	10A/	3.5A/ 250V		_	_
T1PHK3F8D	250V	32V	5.5	24VDO & 3.3A	26.4	26.4	0	_	250V	2.5A														
T2PHK33F16	5A/	15A/ 32V 7.0		15A/	15A/	7.0	24VDC @ 5.9A	20.17-	20.28-	16		10A/	3.5A/ 250V											
T2PHK33F16D	250V			7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	32V / 1.0	+ 24VDC @ 5.9A	26.4	26.4	10		250V	2.5A	_	_	_		
T2PHK33F16P8	5A/ 250V	5A/	7.0	12VDC @ 5.6A	20.17-	20.28-	16	8	10A/	3.5A/ 250V			3.5A/ 250V											
T2PHK33F16P8D		250V 250V	7.0	+ 12VDC @ 5.6A	26.4	26.4	10	0	250V	2.5A	_	_	2.5A											
T2PHK77F24	6.3A/ 15A/ 250V 32V	15A/		.0 24VDC @ 9.7A + 24VDC @ 9.7A	20.17- 26.4 26.4	20.28-	0.4		10A/	3.5A/ 250V														
T2PHK77F24D						24	_	2502V	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 two/three upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the two/three upper screws; level and secure. Mark the position of the lower two/three holes. Remove the enclosure. Drill the lower holes and install the fasteners. Place the enclosure's upper keyholes over the upper screws. Install the 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. Mount Openpath boards to backplane, refer to pages 3-7.
- 5. Refer to the *eFlow Power Supply/Charger Installation Guide* (eFlow4NB, eFlow6NB, eFlow104NB) and corresponding *Sub-Assembly Installation Guide* (ACM4(CB), ACM8(CB), PDS8(CB), PD8UL(CB) and VR6) for further installation instructions.

Enclosure
Edge of Enclosure
Tamper Switch (included)
To Access Control Panel or UL Listed Reporting Device

- 2 - Trove Openpath Kits

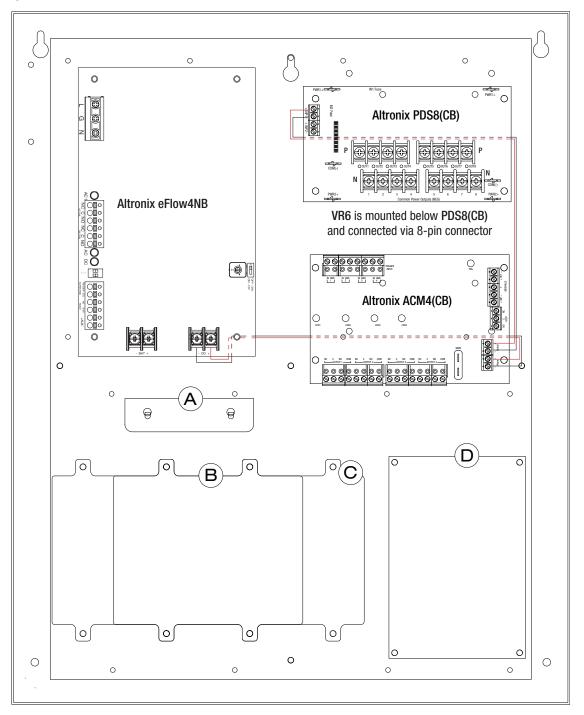
# T1PHK1F4S(D): Configuration of Openpath Boards

- 1. Mount appropriate Openpath boards into the correct positions by postioning pre-mounted spacers over appropriate holes on the backplane and depressing down on board to secure spacer to the backplane (Fig. 2, pg. 3).
- 2. Fasten TC1 backplane to Trove1 enclosure utilizing pan head screws (provided).

# **Access Controller Position Chart for the Following Openpath Modules:**

Openpath	Mounting Position
OP-ACC	A
OP-EX-4E	B
OP-EX-8E	(C)
OP-16EM	D

Fig. 2



Trove Openpath Kits - 3 -

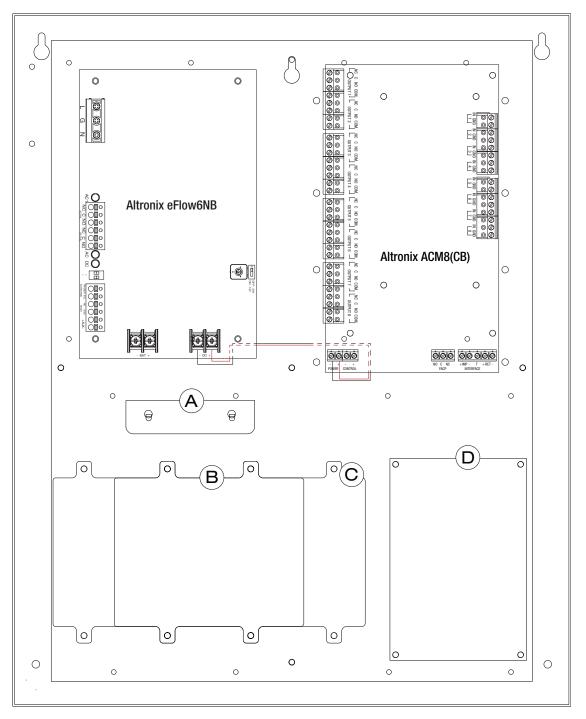
# T1PHK3F8(D): Configuration of Openpath Boards

- 1. Mount appropriate Openpath boards into the correct positions by postioning pre-mounted spacers over appropriate holes on the backplane and depressing down on board to secure spacer to the backplane (Fig. 3, pg. 4).
- 2. Fasten TC1 backplane to Trove1 enclosure utilizing pan head screws (provided).

### **Access Controller Position Chart for the Following Openpath Modules:**

Openpath	Mounting Position
OP-ACC	A
OP-EX-4E	B
OP-EX-8E	<u>C</u>
OP-16EM	D

Fig. 3



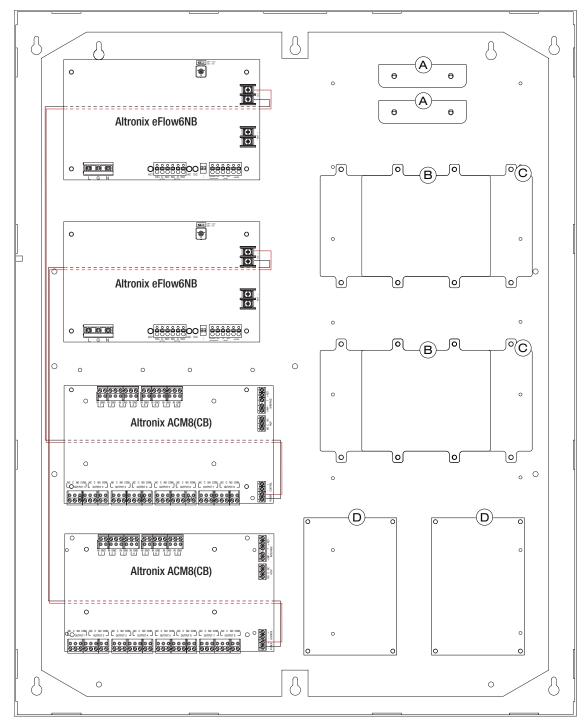
# T2PHK33F16(D): Configuration of Openpath Boards

- 1. Mount appropriate Openpath boards into the correct positions by postioning pre-mounted spacers over appropriate holes on the backplane and depressing down on board to secure spacer to the backplane (Fig. 4, pg. 5).
- 2. Fasten TC2 backplane to Trove2 enclosure utilizing pan head screws (provided).

# **Access Controller Position Chart for the Following Openpath Modules:**

Openpath	Mounting Position
OP-ACC	A
OP-EX-4E	B
OP-EX-8E	(C)
OP-16EM	(D)

Fig. 4



Trove Openpath Kits - 5 -

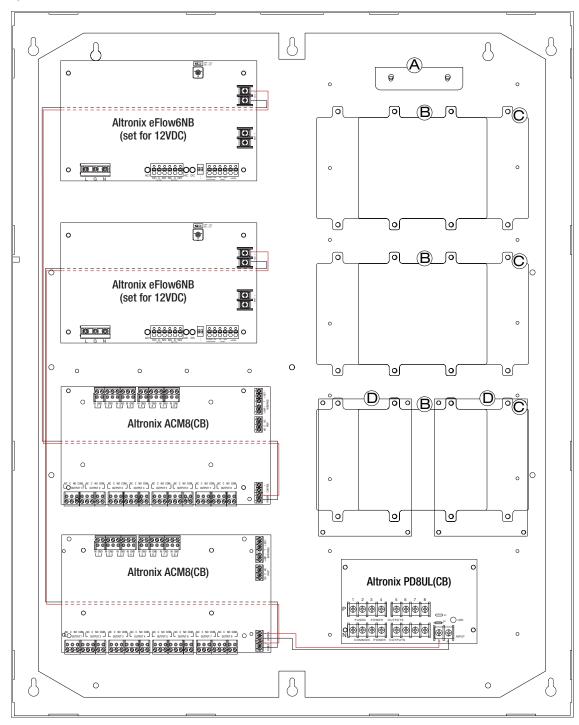
# T2PHK33F16P8(D): Configuration of Openpath Boards

- 1. Mount appropriate Openpath boards into the correct positions by postioning pre-mounted spacers over appropriate holes on the backplane and depressing down on board to secure spacer to the backplane (Fig. 4, pg. 5).
- 2. Fasten TC2 backplane to Trove2 enclosure utilizing pan head screws (provided).

#### **Access Controller Position Chart for the Following Openpath Modules:**

Openpath	Mounting Position
OP-ACC	A
OP-EX-4E	B
OP-EX-8E	(C)
OP-16EM	(D)

Fig. 4



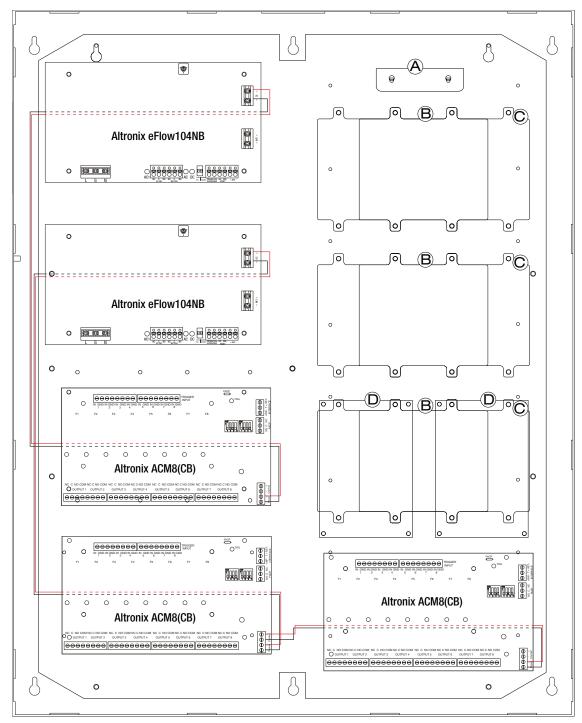
# T2PHK77F24(D): Configuration of Openpath Boards

- 1. Mount appropriate Openpath boards into the correct positions by postioning pre-mounted spacers over appropriate holes on the backplane and depressing down on board to secure spacer to the backplane (Fig. 5, pg. 6).
- 2. Fasten TC2 backplane to Trove2 enclosure utilizing pan head screws (provided).

### **Access Controller Position Chart for the Following Openpath Modules:**

Openpath	Mounting Position
OP-ACC	A
OP-EX-4E	B
OP-EX-8E	<u>C</u>
OP-16EM	D

Fig. 5



Trove Openpath Kits - 7 -

## **Notes:**

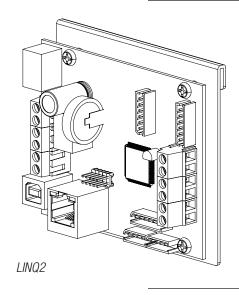
- 8 - Trove Openpath Kits

#### **Notes:**

Trove Openpath Kits - 9 -



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



# LINQ

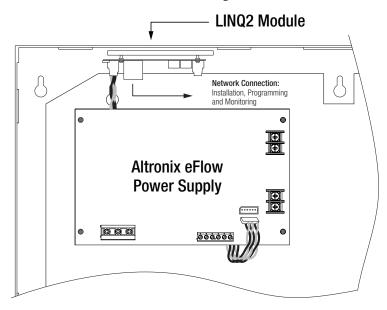
#### **LINQ2 - Network Communication Module**

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.

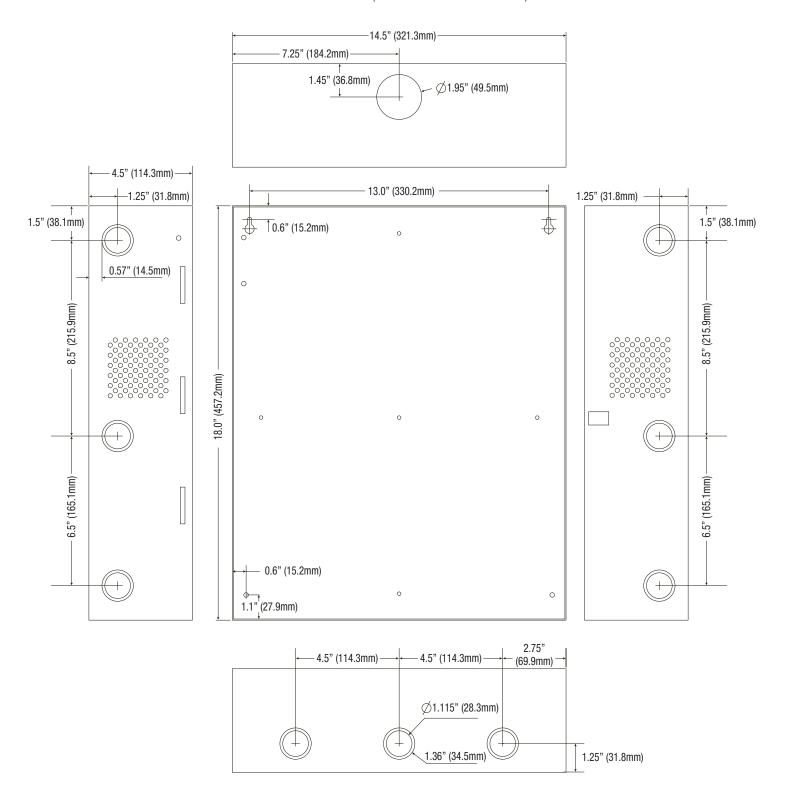
# **LINQ2 Mounts Inside any Trove Enclosure**



- 10 - Trove Openpath Kits

# T1PHK1F4S(D) and T1PHK3F8(D) (Trove1) Enclosure Dimensions (H x W x D approximate):

18" x 14.5" x 4.625" (457mm x 368mm x 118mm)



Trove Openpath Kits - 11 -

# T2PHK33F16(D) and T2PHK77F24(D) (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)

