

**T1PHK1F4S (Kit)**

## Access &amp; Power Integration Solution for Openpath

Altronix T1PHK1F4S kit consists of Trove1 enclosure, TC1 Openpath/Altronix backplane with one (1) 12VDC or 24VDC @ 4A power supply/charger, one (1) fused access power controller, one dual input fused power distribution module and one (1) voltage regulator. This kit also accommodates up to one (1) Openpath Core, Elevator Board, 4-Port or 8-Port modules for up to eight (8) doors in a single enclosure. Trove simplifies board layout and wire management, reduces installation time and labor costs.



T1PHK1F4S

*Openpath boards are not included***Key Features**

- 12VDC or 24VDC power supply/charger
- Accommodates up to one (1) Openpath OP-ACC, OP16EM, and one (1) OP-EX-4E or OP-X-8E modules
- Convenient knockout configuration:
  - One (1) double knockout  
1.948" (1-1/2" Conduit) / 1.701" (1-1/4" Conduit)
  - Nine (9) double knockouts  
1.362" (1" Conduit) / 1.115" (3/4" Conduit)
- Supervision
  - AC Fail
  - Low Battery and Battery Presence
  - Low power shutdown
- Agency Listings:
  - All Altronix components of this Trove kit are UL Listed sub-assemblies. Please refer to the Sub-Assembly Installation Guides for further information
    - UL: UL294 - Access Control System
    - cUL: CAN/ULC - s319-05 - Electronic Access Control Systems
  - CE European Conformity
- 16 AWG galvanized steel backplane simplifies board layout and wire management
- Enclosure accommodates up to two (2) 12VDC/7AH batteries
- Lifetime Warranty\*

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

## Specifications

### Power Supply/Charger (eFlow4NB):

#### Input

Voltage	120VAC, 60Hz, 3.5A max.
Input Fuse	5A/250V

#### Outputs

Voltage	12VDC or 24VDC selectable
Current	4A continuous max.
Auxiliary	Power-limited @ 1A (unswitched)
Other	Overvoltage protection. Filtered and regulated

### Battery Charging

Capacity	12VDC/7AH (2 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 71-73% for 12V units and 70-75% for 24V units (depending on the power supply) Prevents deep battery discharge

### Indicators (LED)

Input	120VAC is present
DC Output	Powered

### Dual Input Power Distribution Module (PDS8)

#### Input

Voltage	24VDC from eFlow4NB 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

### Voltage Regulator (VR6):

#### Input

Voltage	24VDC from eFlow4NB
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#### Output

Voltage	12VDC
Current	6A continuous
Other	Surge suppression

### Indicators (LED)

Input	24VDC is present
Output	Powered

### Access Power Controller (ACM4):

#### Input

Voltage	24VDC from eFlow4NB
Input Fuse	10A/32V

#### Outputs

Voltage	24VDC
Four (4) independently controlled fused outputs:	
a) Fail-Safe and/or Fail-Secure power outputs	
Form "C" Relays rated 28VAC or VDC @ 2.5A	
b) Auxiliary power outputs (unswitched)	
c) Any combination of the above	

Output Fuses	3A/32V
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### Indicators (LED)

Red LEDs	Outputs are triggered (relays energized)
Green LED	FACP disconnect is triggered

### T1PHK1F4S Kit:

#### Agency Listings

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

CE	European Conformity
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### Physical and Environmental

#### Dimensions (H x W x D)

Enclosure:	18" x 14.5" x 4.62" (457.2mm x 368.3mm x 118.0mm)
Shipping:	21.75" x 18.25" x 5.75" (552.5mm x 463.6mm x 146.1mm)

#### Weight (approx.)

Product	15.5 lb. (7.0 kg)
Shipping	19.5 lb. (8.9 kg)

#### Temperature

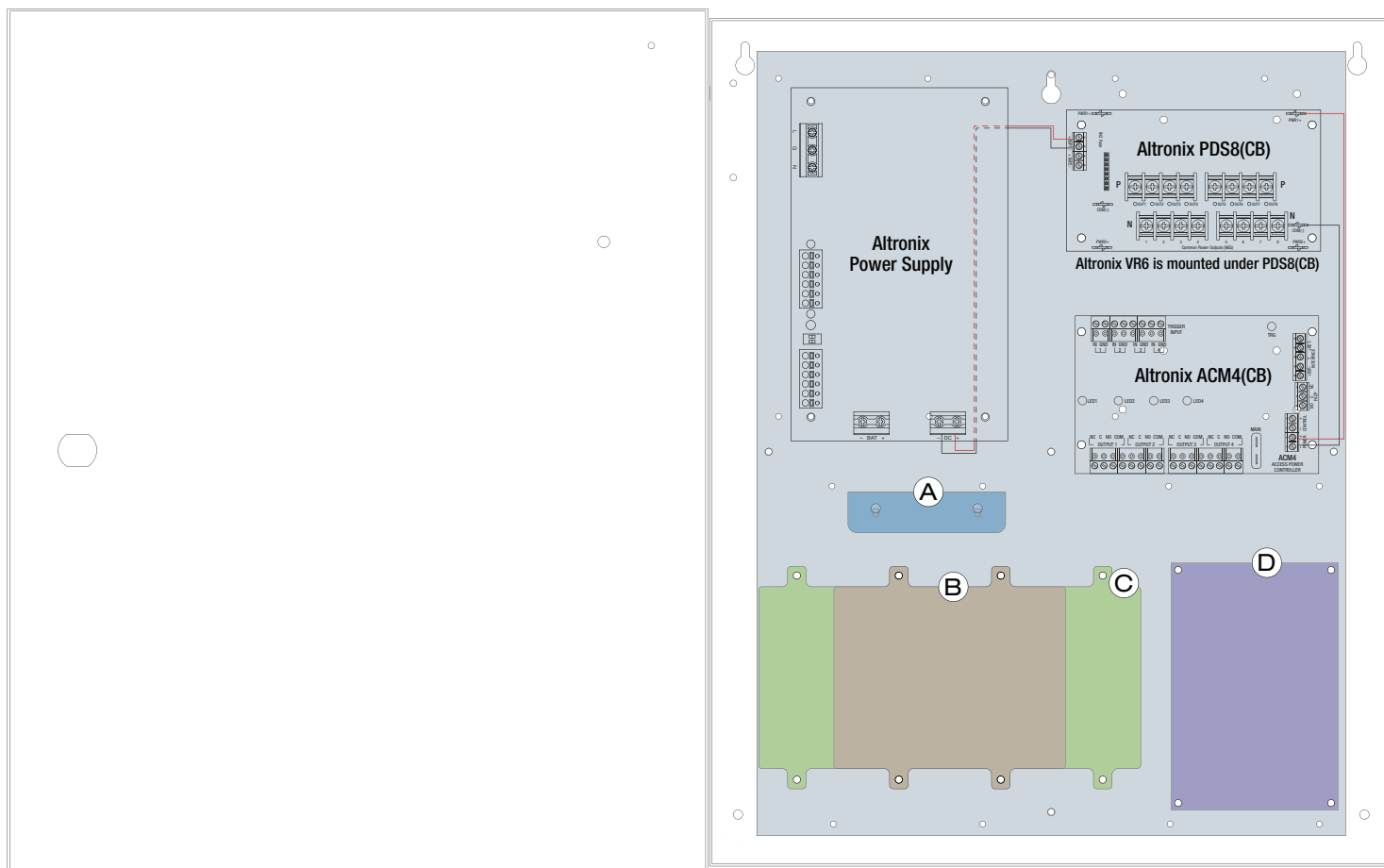
Operating	0°C to 49°C (32°F to 120°F)
Storage	-20°C to 70°C (-4°F to 158°F)

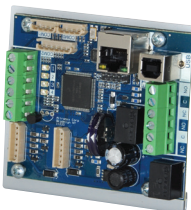
Relative Humidity	85% +/- 5%
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BTU/Hr (approx.):	12VDC: 28 BTU/Hr. 24VDC: 51 BTU/Hr.
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**Access Controller Position Chart for the Following Models:**

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



**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.

## Dimensions and Drawing

Dimensions (H x W x D approximate)

18" x 14.5" x 4.62" (457.2mm x 368.3mm x 118.0mm)

