

## T2PDK77F24S (Kit)

Access & Power Integration Solution for PDK Red™



Altronix T2PDK77F24S kit consists of Trove2 enclosure, TPD2 Pdk Red™/Altronix backplane with two (2) 24VDC @ 10A power supply/chargers, two (2) twelve (12) fused protected dual input/output access control modules, two (2) eight (8) fuse protected dual input/output power distribution modules and one (1) 12VDC voltage regulator. This kit also accommodates up to six (6) red4 modules for up to twenty-four (24) doors in a single enclosure. Trove simplifies board layout and wire management, reduces installation time and labor costs.



T2PDK77F24S

*PDK boards are not included*



### Key Features

- 24VDC power supply/chargers
- Accommodates Pdk Red™ modules: up to eight (8) red1, red2, or six (6) red4
- Convenient knockout configuration:
  - One (1) single knockout 2.415" (2" Conduit)
  - Sixteen (16) double knockouts 1.362" (1" Conduit) / 1.115" (3/4" Conduit)
- 16 AWG galvanized steel backplane simplifies board layout and wire management
- Supervision:
  - AC Fail
  - Low Battery and Battery Presence
  - Low power shutdown
- Agency Listings:
  - Please refer to the Sub-Assembly Installation Guides for further information
  - CE European Conformity
- Enclosure accommodates up to four (4) 12VDC/12AH batteries
- Lifetime Warranty\*

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

## Specifications

### Two (2) Power Supply/Chargers (eFlow104NB):

#### Input

Voltage	120VAC, 60Hz, 9A
Input Fuse	6.3A/250V

#### Output

Voltage	24VDC @ 10A
Auxiliary	1A (unswitched)
Protection	Overvoltage protection. Filtered and regulated

### Battery Charging

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

### Indicators (LED)

AC Input	120VAC is present
DC Output	Powered.
Battery	Discharged or not connected

### Two (2) Dual Input Access Power Controllers (ACMS12):

#### Input

Voltage	First ACMS12 - 24VDC from first eFlow104NB Second ACMS12 - 24VDC from second eFlow104NB
Input Fuses	15A/32V

#### Outputs

Voltage	12VDC and/or 24VDC
Twelve (12) 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

### Voltage Regulator (VR6):

#### Input

Voltage	24VDC from eFlow104NB
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#### Output

Voltage	12VDC
Current	6A continuous
Other	Surge suppression

### Indicators (LED)

Input	24VDC is present
Output	Powered

### Two (2) Dual Input Power Distribution Modules (PDS8):

#### Input

Voltage	12VDC from VR6 and 24VDC from eFlow104NB
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Input Fuses	10A/32V
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#### 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
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### Indicators (LED)

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

### T2PDK77F24S Kit:

#### Agency Listings

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:  
27.25" x 21.5" x 6.5" (692.2mm x 546.1mm x 165.1mm)

Shipping:  
32.5" x 26.5" x 11.125" (826mm x 673mm x 283mm)

##### Weight (approx.)

Product	49.8 lb. (22.59 kg)
Shipping	53.55 lb. (24.29 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.):	290 BTU/Hr.
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**Accessories** (order separately)



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.

Trove2BWC  
with  
batteries



Trove2BWC  
with  
wires

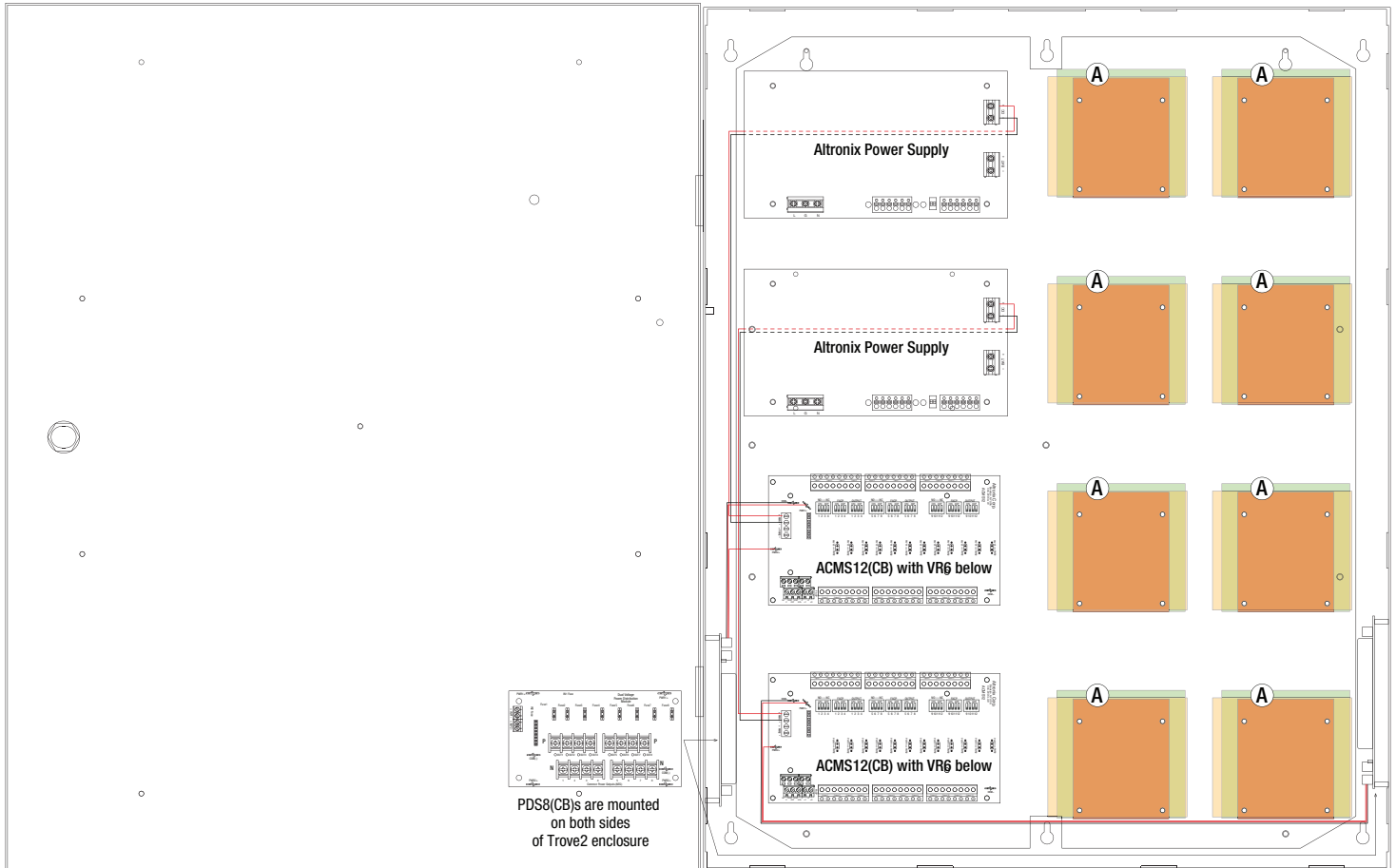


**TROVE2BWC - Battery/Wire Trough Enclosure**

Altronix Trove2BWC is a dual-purpose enclosure that can be used as wiring trough or battery cabinet when mounted above or below of the Trove2 integrated power and access solution. The knockouts on the Trove2BWC have been strategically placed to line up with the Trove2 allowing for easy conduit connections between cabinets. Trove2BWC includes cam locks and 2 tamper switches to ensure access to wiring and batteries is secure.

**Access Controller Position Chart for the Following Models:**

PDK	Pem Mounting
red1, red2, red4	(A)



**Dimensions and Drawing**

Dimensions (H x W x D approximate)

27.25" x 21.5" x 6.5" (692.2mm x 546.1mm x 165.1mm)

