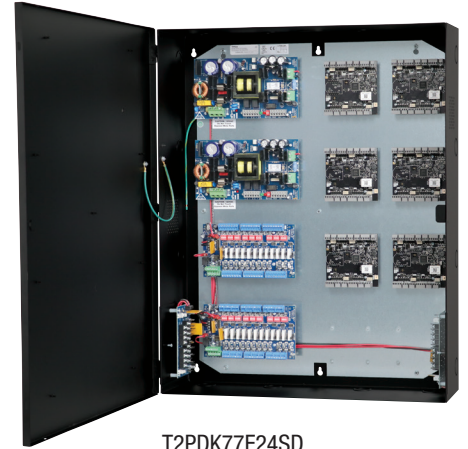# T2PDK77F24SD (Kit)

Access & Power Integration Solution for PDK Red™

TR☐VE™

Altronix T2PDK77F24SD kit consists of Trove2 enclosure, TPD2 Pdk Red™/Altronix backplane with two (2) 24VDC @ 10A power supply/chargers, two (2) twelve (12) PTC protected dual input/output access control modules, two (2) eight (8) PTC protected dual input/output power distribution modules and two (2) 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.

pdk™
prodatakey.com

T2PDK77F24SD

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

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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 (4 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 (ACMS12CB):

Input
Voltage	24VDC from eFlow104NB and 12VDC from VR6
Input PTCs	9A

Outputs
Voltage	12 or 24VDC individually selectable

Twelve (12) selectable 12VDC - 24VDC independently controlled outputs or twelve (12) indepently controlled Form "C" relay outputs:
a) Fail-Safe and/or Fail-Secure power outputs
b) Form "C" Relays. 28VAC or VDC @ 2.5A Rated
c) Auxiliary power outputs (unswitched)
d) Any combination of the above
Any of the twelve (12) PTC protected power outputs are selectable to follow power Input 1 or Input 2
Individual outputs may be set to OFF position for servicing
Output PTCs	3A/32V

Indicators (LED)
Red LEDs	Outputs are triggered (relays energized)
Blue LED	FACP disconnect is triggered
Individual voltage LEDs:	
Green:	12VDC
Red:	24VDC

Two (2) Voltage Regulator (VR6):

Input
Voltage	24VDC from eFlow104NB

Output
Voltage	12VDC
Current	6A continuous
Other	Surge suppression

Indicators (LED)
Input	24VDC is present
Output	Powered

Two (2) Dual Input Power Distribution Modules (PDS8CB):

Input
Voltage	24VDC from eFlow104NB and 12VDC from VR6
Input PTCs	9A

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 PTCs	3A/32V

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

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	0ºC to 49ºC (32ºF to 120ºF)
Storage	– 20ºC to 70ºC (– 4ºF to 158ºF)
Relative Humidity	85% +/– 5%
BTU/Hr (approx.):	290 BTU/Hr.

Accessories (order separately)

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

LINQ2

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.

WM5

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.

Mounting Magnet

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.
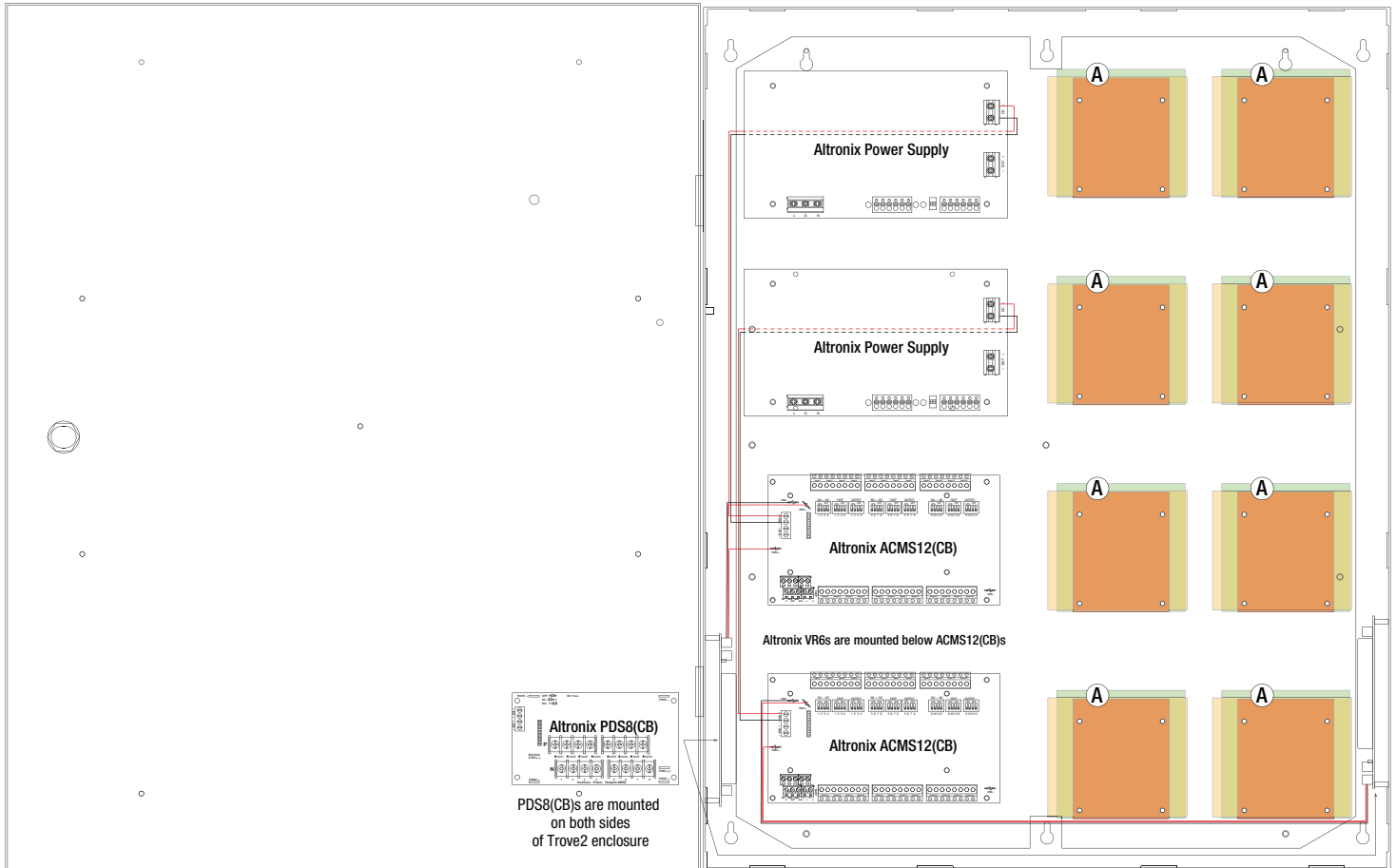
BR1

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.

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Access Controller Position Chart for the Following Models:

PDK	Pem Mounting
red1, red2, red4	Ⓐ

Altronix Power Supply

Altronix Power Supply

Altronix ACMS12(CB)

Altronix VR6s are mounted below ACMS12(CB)s

Altronix ACMS12(CB)

Altronix PDS8(CB)

PDS8(CB)s are mounted
on both sides
of Trove2 enclosure

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)