



DIRECT™ FLEX

Liftgate Charging System with Nosebox

The DIRECT™ nosebox line combines all the best features of our original liftgate charging systems into a space-saving nosebox.

It also includes an interior light controller (harness sold separately) designed to turn the lights on inside a trailer and automatically shut them off either:

- via a timer
- if the liftgate batteries drop to a low state of charge.



Electrical Specifications:

| | Min | Max |
|-----------------------|-------|---------|
| Operating Voltage | 7 V | 16 V |
| Operating Temperature | -40°C | 85°C |
| Quiescent current | | < 30 mA |

Product Weights:

Nosebox/plate: approx. 6 lbs

Nosebox/plate/cables: approx. 18 lbs

See the following pages for drawings and diagrams.

Features:

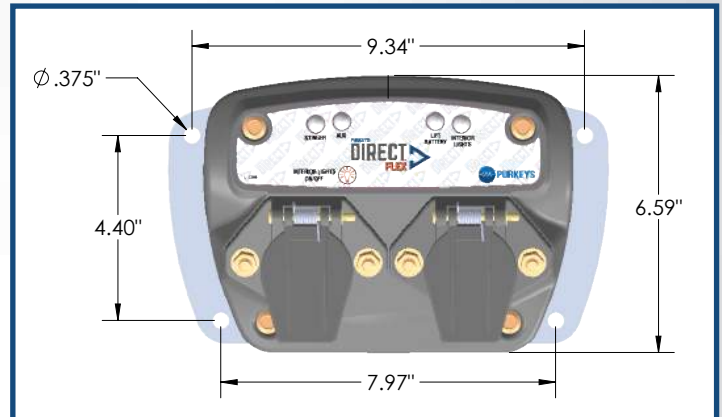
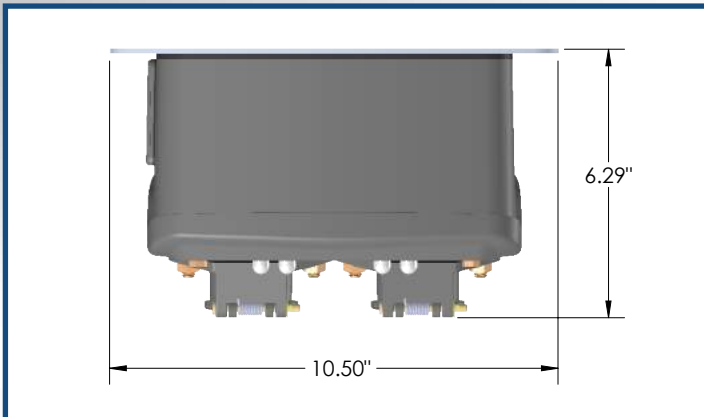
- Saves space on front of trailer
- Combines liftgate charging system into nosebox
- Maintains and protects batteries
- Maximizes battery life and reduces downtime
- Utilizes dual pole connection and voltage drop compensation to provide faster recharge
- Continues to charge for up to 1 hour after truck engine shuts off or until truck battery goes below 12.4 V
- Automatically chooses best charge source: aux, dual pole, or reefer (with optional reefer harness)
- Gives priority to the ABS by turning off within 1/20th of a second if the source voltage drops below 9.5 V
- Outputs a signal that can be connected to a telematics system (will alert if liftgate battery gets critically low)
- Replaceable receptacles in case of damage
- Easy to read LED indication
- Powers interior dome lights from the liftgate battery (optional harness required)
- Designed to meet SAE J1455
- Patented (patent #s 8,004,242 and 9,725,000)
- 3-year warranty



DIRECT™ FLEX

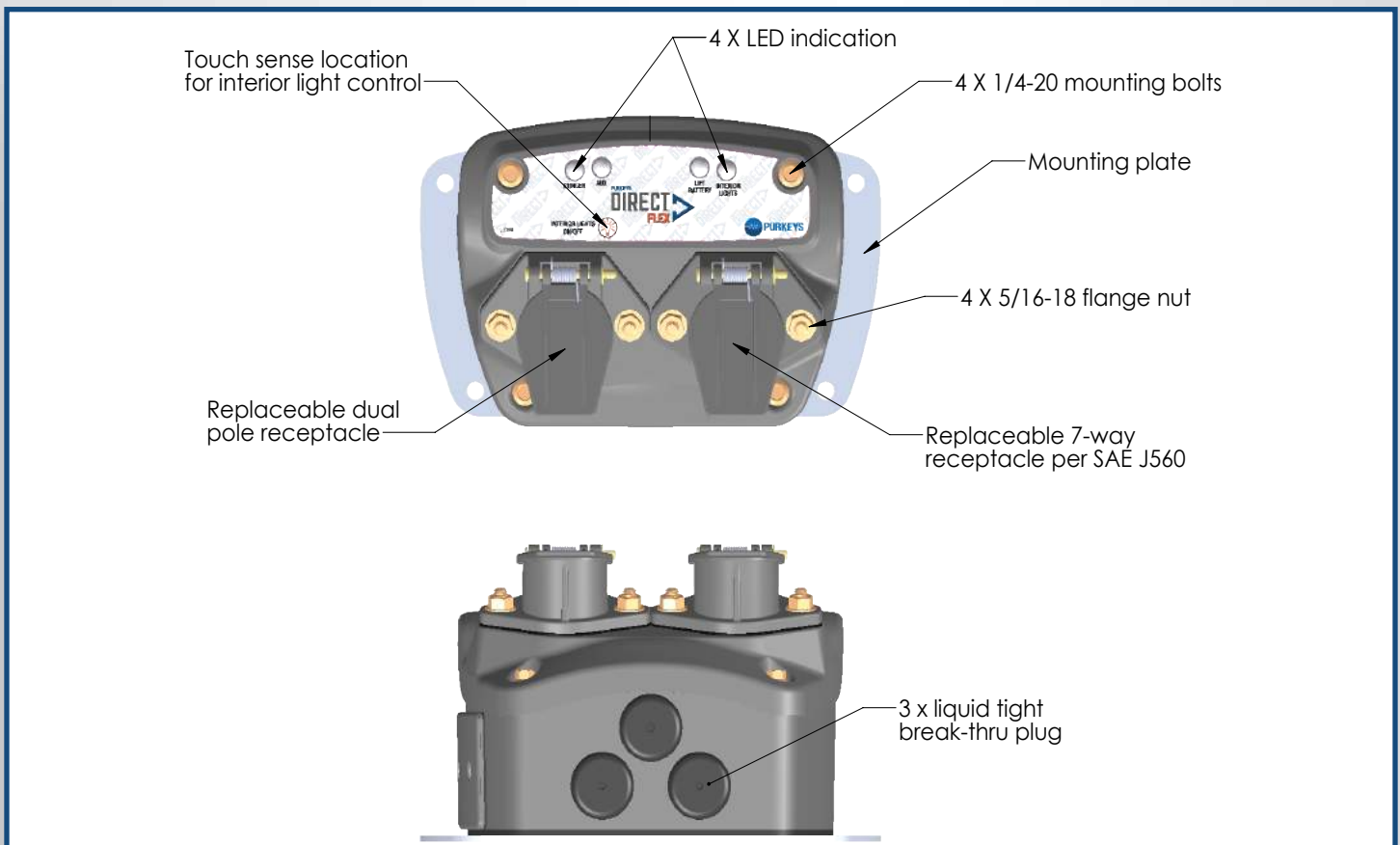
Drawings and Diagrams

Dimensions:



Note: nosebox without plate uses an industry standard bolt pattern.

Exterior Call-outs:

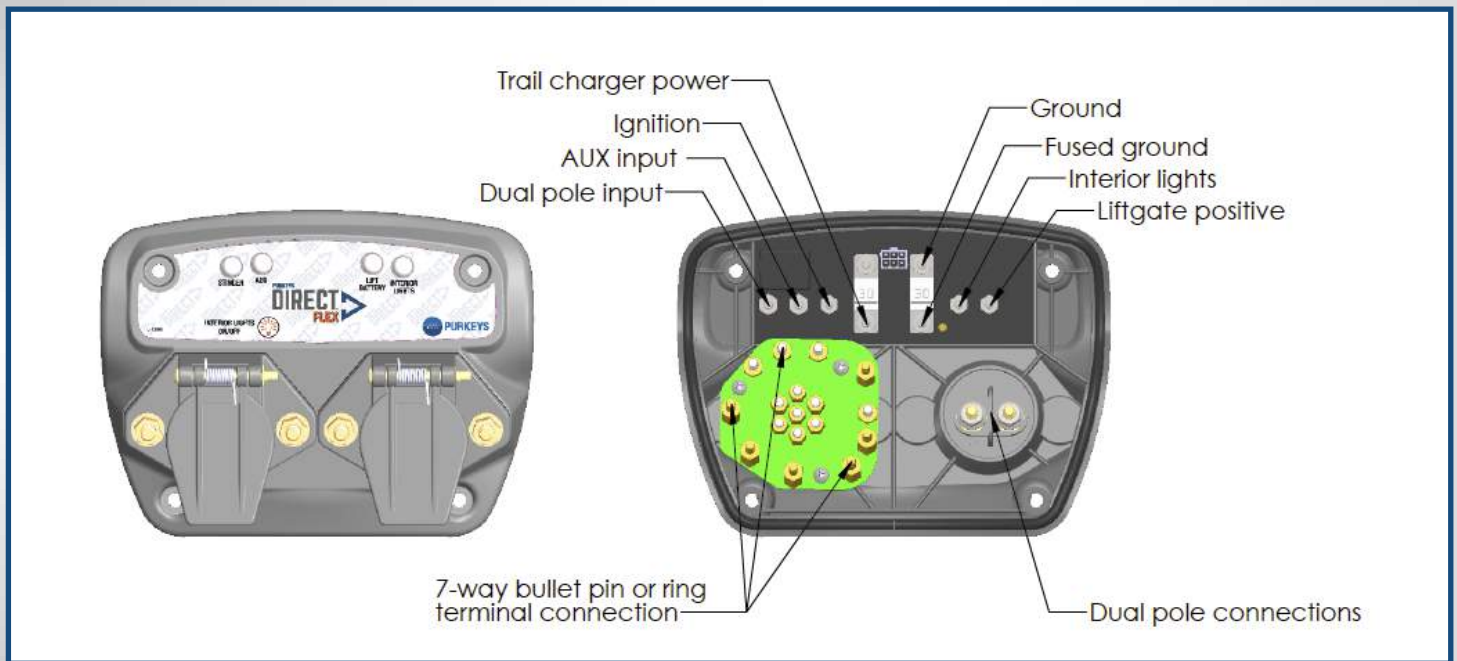




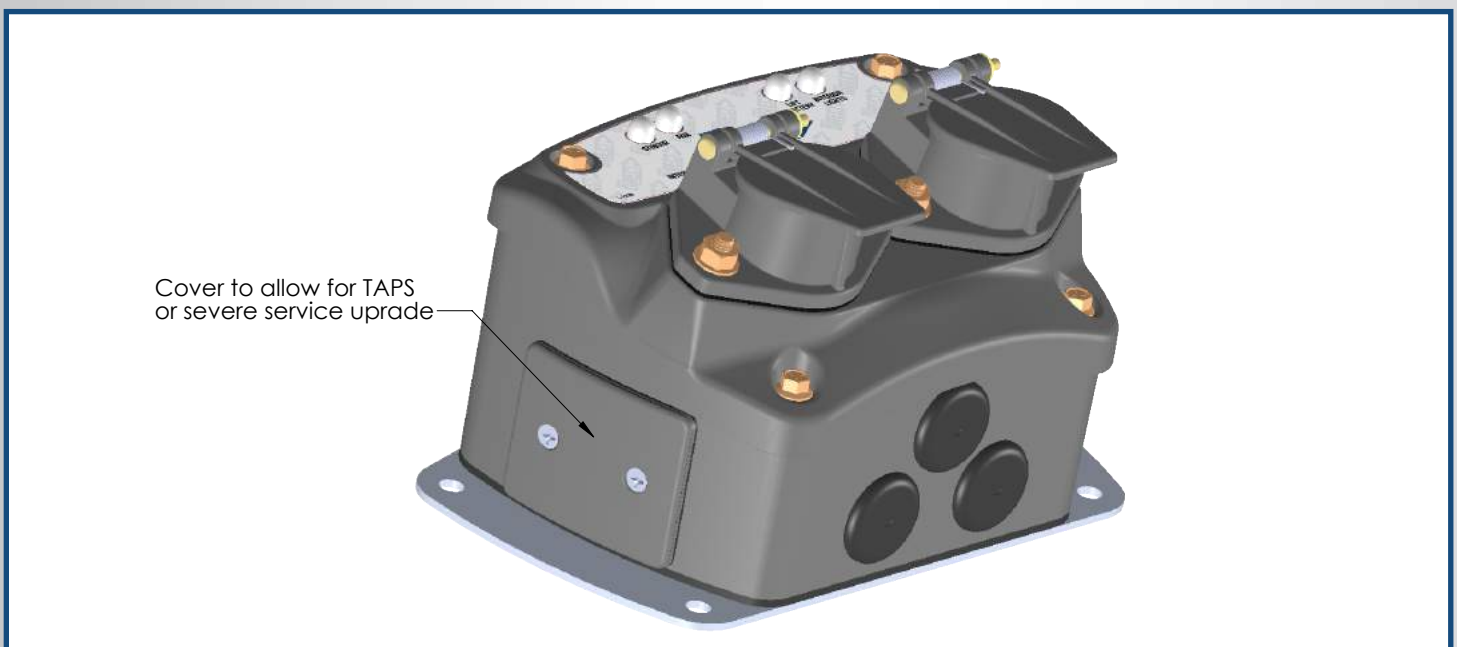
DIRECT™ FLEX

Drawings and Diagrams

Lid:



Upgradeable:

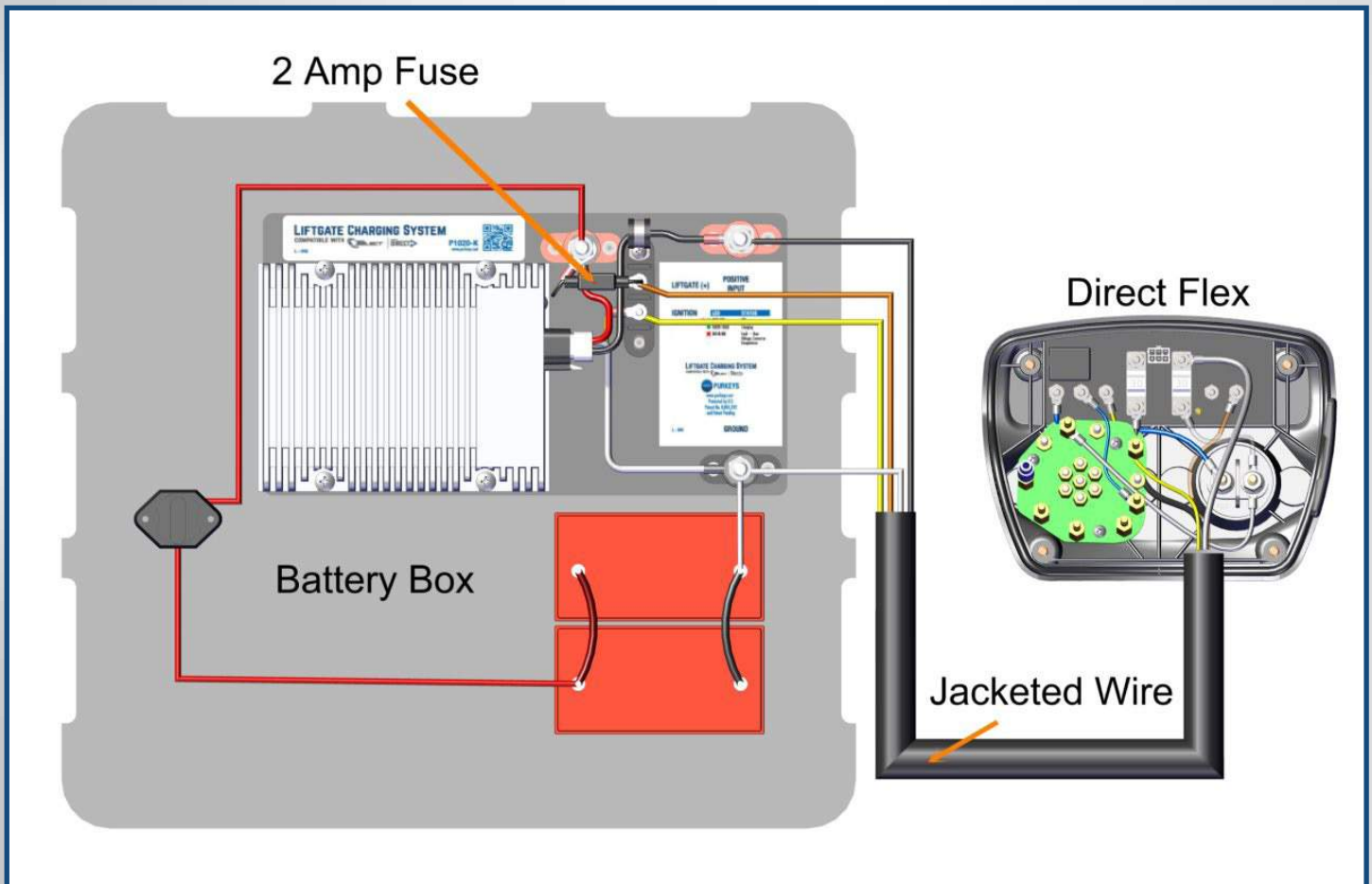




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Drawings and Diagrams

Electrical Diagram:



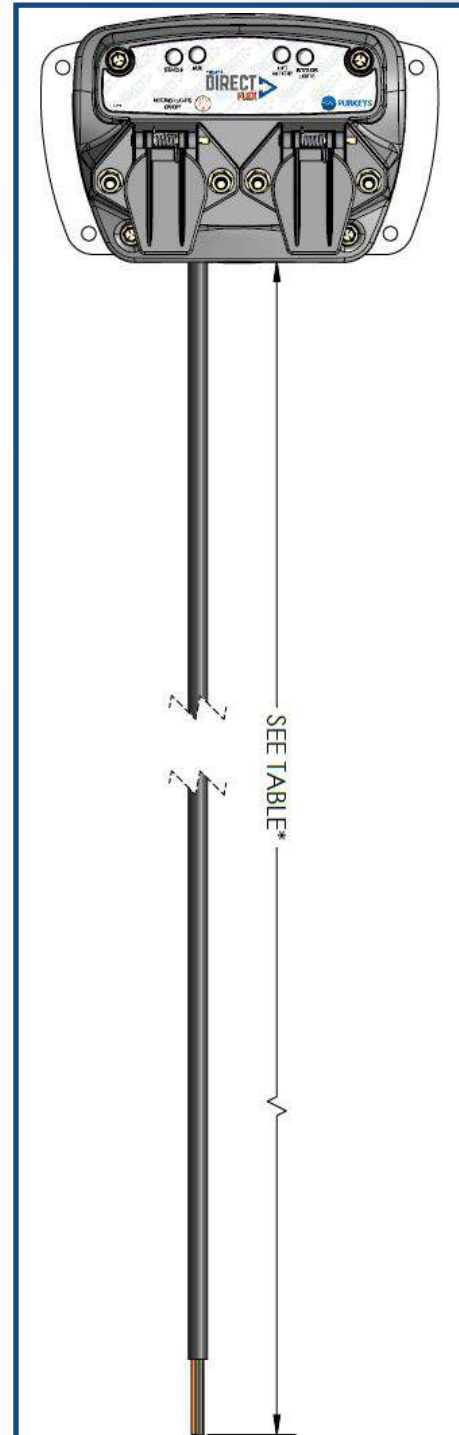


DIRECT™ FLEX

Part Numbers and Cable Specifications

Part Numbers

| Part # | Output Harness Length | Includes DC/DC Converter? |
|-------------|-----------------------|---------------------------|
| FLEX-25-A | 25' ± 6" | NO |
| FLEX-25-KIT | 25' ± 6" | YES |
| FLEX-50-A | 50' ± 6" | NO |
| FLEX-50-KIT | 50' ± 6" | YES |
| FLEX-70-A | 70' ± 6" | NO |
| FLEX-70-KIT | 70' ± 6" | YES |



Cable Specifications (H-00286)

| | |
|------------------|--|
| Gauge wire: | 14 GA Orange 16 GA Yellow 8 GA Black 8 GA White |
| Overall O.D: | .490" O.D |
| Wall: | .030" ± .05 |
| Stranding: | 14 GA-19/27 16 GA 7/24 8 GA 19/21 |
| Jacket Type: | +80° C and -30° C Black PVC |
| Wire insulation: | GXL |



DIRECT™ FLEX

Interior Light Controller and LED Logic

Interior Light Controller

- Turn on/off from nosebox or from switch in trailer
- Turn off after timeout (includes settings for 15, 30, 60, and 90 minutes)
- Turn off after aux power goes from low to high
- Turn off if liftgate battery gets low (LVD)
- Blinks lights three times three minutes before turning off, two times two minutes before turning off, and once one minute before turning off



LED Logic

| LED | STATUS |
|--------------------|--------------|
| Green solid | Charging |
| Green blink | Good voltage |
| Orange blink | Low voltage |
| Orange rapid-blink | Fault |