Type(s)

Project

Date

Notes

## GENERAL INFORMATION

The ArcSystem Pro D4 CV Driver is an ideal product for driving a wide range of constant voltage LED loads. The versatile feature set includes optional emergency variants as well as ArcMesh wireless control for easy retrofit applications. Designed to simplify and centralize your driver systems the ArcSystem Pro D4 Driver line is the perfect tool for new design installations and retrofit projects alike.

The D4 CV line is available in 150, 350, and 700 variants with maximum load capabilities reaching up to 528 W. The compact 150 version is wall-mounted, while the 350 and 700 versions include both wall-mounting and rack-mounting options.

D4 CV Drivers are compatible with 24 VDC constant voltage LED loads, making them ideal for applications such as linear tape installation. Like all ArcSytem Pro drivers, the D4 CV family is available in a wired-only DMX version with RDM or an ArcMesh wireless version for hassle-free installation.

## GENERAL INFORMATION

### APPLICATIONS
- Auditoriums
- Worklights
- Lobbies
- Houses of worship
- Museums
- Studio
- Retail

### FEATURES
- Constant voltage designed for use with third party fixtures and tape light
- Smooth dimming to zero
- Silent operation
- Rack- and Wall-mounted options

## ORDERING INFORMATION

### ArcSystem D4 Driver

| PRODUCT | CONTROL | TYPE | MODEL | CONNECTION | MATERIAL | MOUNTING | REGULATORY |
|---|---|---|---|---|---|---|---|
| **ARCPD4D -** D4 Standard<br>**ARCPED4D -** D4 Emergency | **(Blank) -** DMX/ArcMesh<br>**RDM -** DMX/RDM | **CV24 -** Constant Voltage | **(Blank) -** 150 Driver<br>**350 -** 350 Driver<br>**700 -** 700 Driver | **T -** Terminal | **M -** Metal | **R -** Rack-mount<br>**W -** Wall-mount<br><br>**Note:** 150 model is wall-mount only | **(Blank) -** UL compliant<br>**-CE -** CE Rated |
|  |  |  |  |  |  |  |  |

Example: ARCPD4DCV24350TMR - ArcSystem D4 Driver, 24VDC Constant Voltage, 350 Driver, Terminal Connection, Metal Rack-mounted, UL compliant

## SPECIFICATION

### Control

|  | ARCMESH MODEL | RDM MODEL |
|---|---|---|
| Protocols | DMX and ArcMesh wireless | DMX and RDM without wireless |
| RDM configuration | No | Yes |
| UI type | ArcSystem PC configuration app | None |
| DMX footprint | 4 channels | |
| Local control | No | |
| Input method | DMX-512 via RJ45 etherCON connector | |
| Notes | ArcMesh wireless control requires optional TX1 transmitter | |

### Electrical

| Voltage Input | 150  - 100–277 VAC 50/60 Hz<br>350  - 100–240 VAC 50/60 Hz<br>700  - 100–240 VAC 50/60 Hz |
|---|---|
| Output | Four 24 VDC Constant Voltage outputs with PWM dimming |
| Inrush | 150  - 15 A at all rated voltages<br>350  - 15 A at all rated voltages<br>700  - 15 A at all rated voltages |
| Wattage (max / standby) | 150  max 150 W / standby 11 W<br>350  max 264 W / standby 10 W<br>700  max 528 W / standby 15 W |
| Current draw at 120 VAC | 150  - 3.7 A<br>350  - 11 A<br>700  - 22 A |
| Power factor | > 0.9 |
| Maximum cable length from driver to luminaire | 100 m (328 ft) |

### Thermal

| Ambient operating temp | 0°–40°C (32°–104°F) |
|---|---|
| Fan (controllable) | 150  - N/A (convection cooled)<br>350/700  - thermally regulated integral cooling fans |
| BTUs/hour (120 V/240 V) | 150  - 511 BTU/hr<br>350  - 900 BTU/hr<br>700  - 1801 BTU/hr |

### Physical

| Materials | Galvanized steel construction |
|---|---|
| Color options | Black |
| Mounting options | Wall-mount - four screw holes in rear plate<br>Rack-mount - 1U Standard rack mounting |
| IP rating | IP-20 (dry locations only) |
| Weight | See table on page 5 |

### Warranty

| Driver | 5 years |
|---|---|
| Website | etcconnect.com/Support/Warranty.aspx |

### Regulatory and Compliance

| Approved regulatory standards | Standard version<br>cULus - UL8750 and CSA C22.2 No. 250.13<br>CE Compliant<br><br>Emergency version<br>cULus – UL924 and CSA C22.2 No. 141<br>CE Compliant<br><br>Wall mount version<br>Suitable for use in air handling spaces by NEC 300.22(C)(3) |
|---|---|

## EMERGENCY CONNECTION

A dual-input emergency version of this driver is available. Emergency drivers have two line-voltage leads that are wired to the product and have the following functions:

- Normal power/emergency power
- Normal power sense input
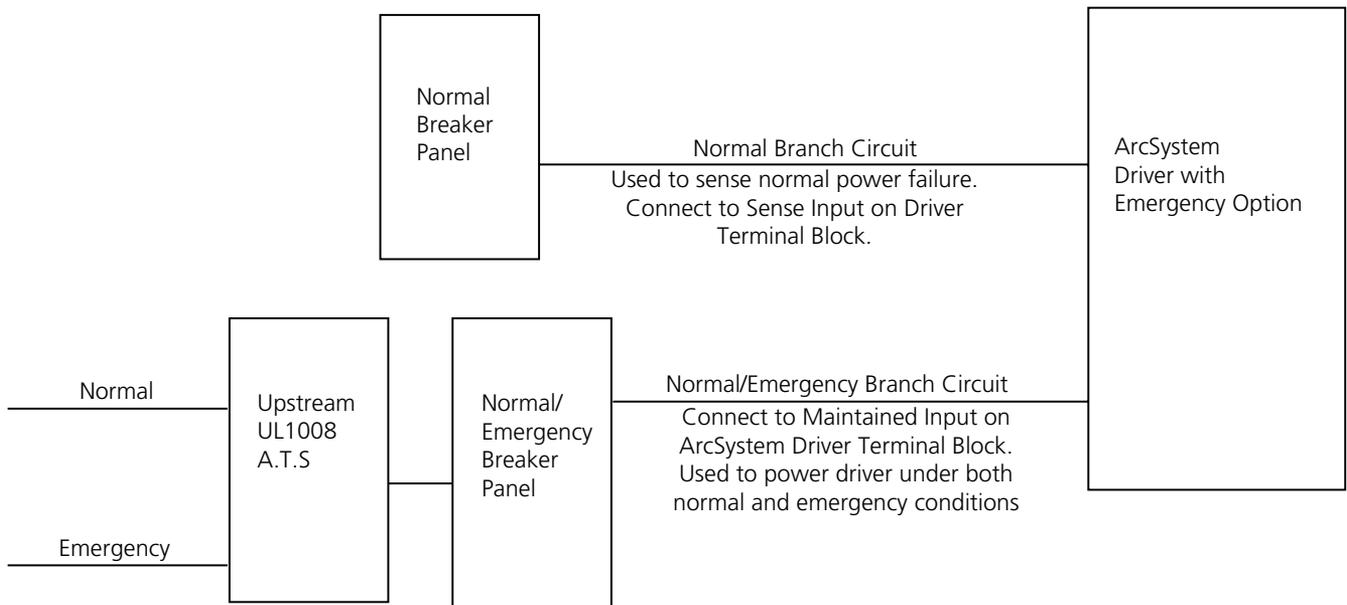


If normal power to the sense input is lost, the driver will force the luminaires on at 100% overriding all other control signals. There is no control of the driver/luminaires via wireless ArcMesh or wired DMX until normal power is restored at the sense input.

## LUMINAIRE CONNECTION
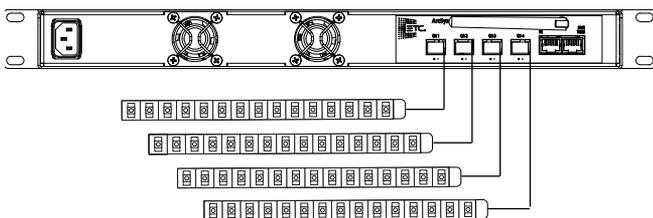


ArcSystem Pro D4 CV Drivers can be used within system limits to provide power to a wide range of third party constant voltage loads. Use with LED tape to provide four channels of control, or bridge channels together to provide more power for longer runs
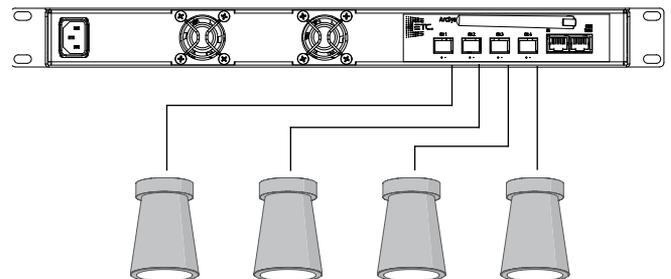
ArcSystem Pro D4 CV Drivers are used with 3rd party constant voltage luminaires to control multiple fixtures from a single driver, reducing system costs, offering easy retrofit, and improving system integration opportunities.

## D4 Driver Maximum System Limits

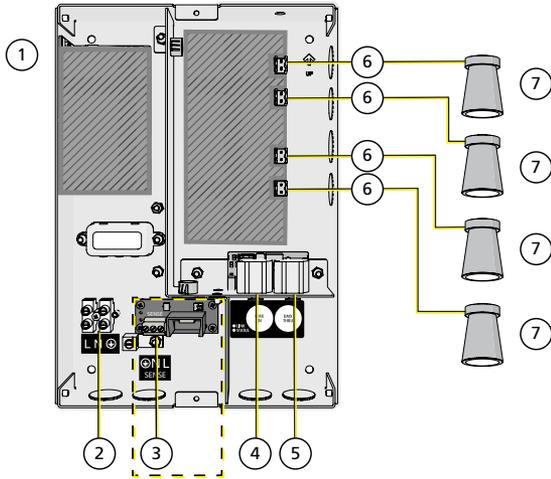|  | **150 CV DRIVER** | **350 CV DRIVER** | **700 CV DRIVER** |
|---|---|---|---|
| Output Type | 24 VDC constant voltage | 24 VDC constant voltage | 24 VDC constant voltage |
| Channels per unit | 4 | 4 | 4 |
| Max current per channel | 2 A | 3 A | 6.1 A |
| Max power per channel | 50 W | 72 W | 146 W |
| Max power for driver | 150 W | 264 W | 528 W |
| For use with | Compatible 3rd party luminaires | Compatible 3rd party luminaires | Compatible 3rd party luminaires |

**Notes**
- Kits to bridge driver outputs are provided with each driver. See installation manual for more details
- For output wiring size refer to the driver installation manual.
- Visit etcconnect.com/compatibility for more information on 3rd party luminaire integration
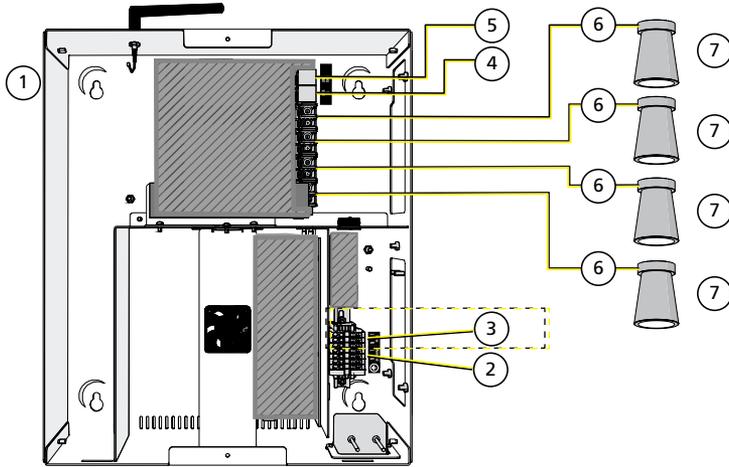
## D4 CV Driver Bridge Specifications

| **D4 CV DRIVER MODEL** | **BRIDGE CONFIGURATION** | **MAX CURRENT PER CHANNEL** | **MAX POWER PER BRIDGED CHANNEL** |
|---|---|---|---|
| D4 Driver 150 CV | 2 channels bridged into 1 | 2.9 A | 53 W |
|  | 3 channels bridged into 1 | 3.4 A | 79 W |
|  | 4 channels bridged into 1 | 4.4 A | 110 W |
| D4 Driver 350 CV Wall-mount | 2 channels bridged into 1 | 5.8 A | 140 W |
|  | 3 channels bridged into 1 | 8.25 A | 198 W |
|  | 4 channels bridged into 1 | 11 A | 264 W |
| D4 Driver 350 CV Rack-mount | 2 channels bridged into 1 | 5.6 A | 134 W |
|  | 3 channels bridged into 1 | 8.6 A | 206 W |
|  | 4 channels bridged into 1 | 11 A | 264 W |
| D4 Driver 700 CV Wall-mount | 2 channels bridged into 1 | 12 A | 288 W |
|  | 3 channels bridged into 1 | Not supported | |
|  | 4 channels bridged into 1 | | |
| D4 Driver 700 CV Rack-mount | 2 channels bridged into 1 | 11 A | 264 W |
|  | 3 channels bridged into 1 | Not supported | |
|  | 4 channels bridged into 1 | | |

## WALL-MOUNT D4 CV 150 DRIVER WIRING DIAGRAM
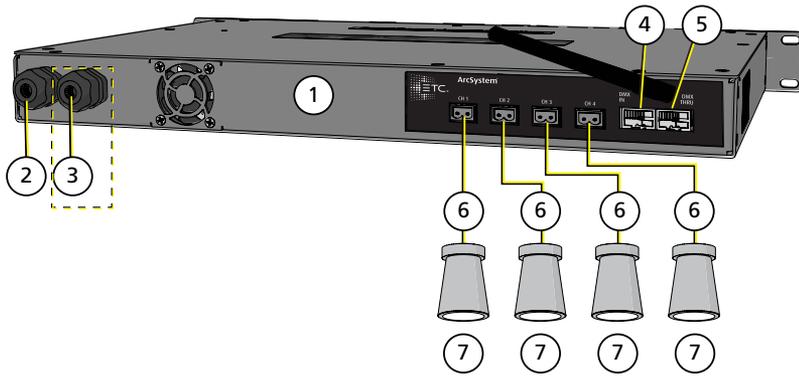


| | DESCRIPTION | NOTES |
|---|---|---|
| 1 | ArcSystem Pro D4 CV 150 Driver | ARCPD4DCV24TMW<br>ARCPED4DCV24TMW (Emergency) |
| 2 | Input power | 0.5–10 mm² (22–6 AWG) line/neutral,<br>2.5–10 mm² (14–6 AWG) ground<br>100–277 VAC, 50/60 Hz<br>ARCPD4DCV24TMW: normal branch circuit<br>ARCPED4DCV24TMW: normal/emergency branch circcuit from UL1008 automatic transfer switch (ATS) by others |
| 3 | Sense input power (emergency models only) | 0.2–2.5 mm² (24–14 AWG) line/neutral/ground<br>100–277 VAC, 50/60 Hz, normal branch circuit (ARCPED4DCV24TMW only) |
| 4 | DMX input from external DMX source | RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard |
| 5 | DMX thru to another ArcSystem Pro Driver or other device | RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard |
| 6 | Class 1 wiring | 0.2–2.5 mm² (26–14 AWG) |
| 7 | 24 VDC constant voltage load | For use with third-party constant voltage loads only. Not for use with ArcSystem Pro One-Cell or ArcSystem Navis luminaires. |

## WALL-MOUNT D4 CV 350/700 DRIVER WIRING DIAGRAM



|   | DESCRIPTION | NOTES |
|---|---|---|
| 1 | Wall-Mount ArcSystem Pro D4 CV 350 Driver or ArcSystem Pro D4 CV 700 Driver | ARCPD4DCV24350TMW<br>ARCPED4DCV24350TMW (Emergency)<br>ARCPD4DCV243700TMW<br>ARCPED4DCV24700TMW (Emergency) |
| 2 | Maintained input power | 0.5–1.5 mm² (22–16 AWG) line/neutral/ground<br>100–240 VAC, 50/60 Hz, normal/emergency branch circuit,<br>ARCPD4DCV24350TMW or ARCPD4DCV24700TMW: normal branch circuit<br>ARCPED4DCV24350TMW or ARCPED4DCV24700TMW: normal/emergency branch circuit<br>from UL1008 automatic transfer switch (ATS) by others |
| 3 | Sense input power<br>(emergency models only) | 0.5–1.5 mm² (22–16 AWG) line/neutral/ground<br>100–240 VAC, 50/60 Hz, normal branch circuit<br>(ARCPED4DCV24350TMW or ARCPED4DCV24700TMW only) |
| 4 | DMX input from external DMX source | Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated<br>to T568B standard on RJ45 connectors or<br>Belden 9729 on eight-pin connectors (not shown) |
| 5 | DMX thru to another ArcSystem Pro Driver or other device | Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated<br>to T568B standard on RJ45 connectors or<br>Belden 9729 on eight-pin connectors (not shown) |
| 6 | Class 1 wiring | 0.5–6 mm² (22–10 AWG) |
| 7 | 24 VDC constant voltage load | For use with third-party constant voltage loads only. Not for use with ArcSystem Pro One-Cell or ArcSystem Navis luminaires. |

## RACK-MOUNT D4 CV 350/700 DRIVER WIRING DIAGRAM



| | DESCRIPTION | NOTES |
|---|---|---|
| 1 | Rack-Mount ArcSystem Pro D4 CV 350 Driver or ArcSystem Pro D4 CV 700 Driver | ARCD4DCV24350TMR<br>ARCD4DECV24350TMR (Emergency)<br>ARCD4DCV24700TMR<br>ARCD4DECV24700TMR (Emergency) |
| 2 | Maintained input power | Use provided power cable†. 100–240 VAC, 50/60 Hz<br>ARCPD4DCV24350TMW or ARCPD4DCV24700TMW: normal branch circuit<br>ARCPED4DCV24350TMW or ARCPED4DCV24700TMW: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others |
| 3 | Sense input power (emergency models only) | Use provided power cable†. 100–240 VAC, 50/60 Hz, normal branch circuit (ARCPED4DCV24350TMW or ARCPED4DCV24700TMW only) |
| 4 | DMX input from external DMX source | RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard |
| 5 | DMX thru to another ArcSystem Pro Driver or other device | RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard |
| 6 | Class 1 wiring | 0.2–4 mm² (24–12 AWG) |
| 7 | 24 VDC constant voltage load | For use with third-party constant voltage loads only. Not for use with ArcSystem Pro One-Cell or ArcSystem Navis luminaires. |

†Note: The driver in the illustration is an emergency driver. Rack-mount D4 Emergency Drivers sold in North America have hard-wired power input cables with plugs. Rack-mount D4 Emergency Drivers sold outside of North America have hard-wired power input cables with bare ends for direct connection to your maintained/emergency and normal sense power supplies. Non-emergency models have a single, maintained input power socket and compatible cable.
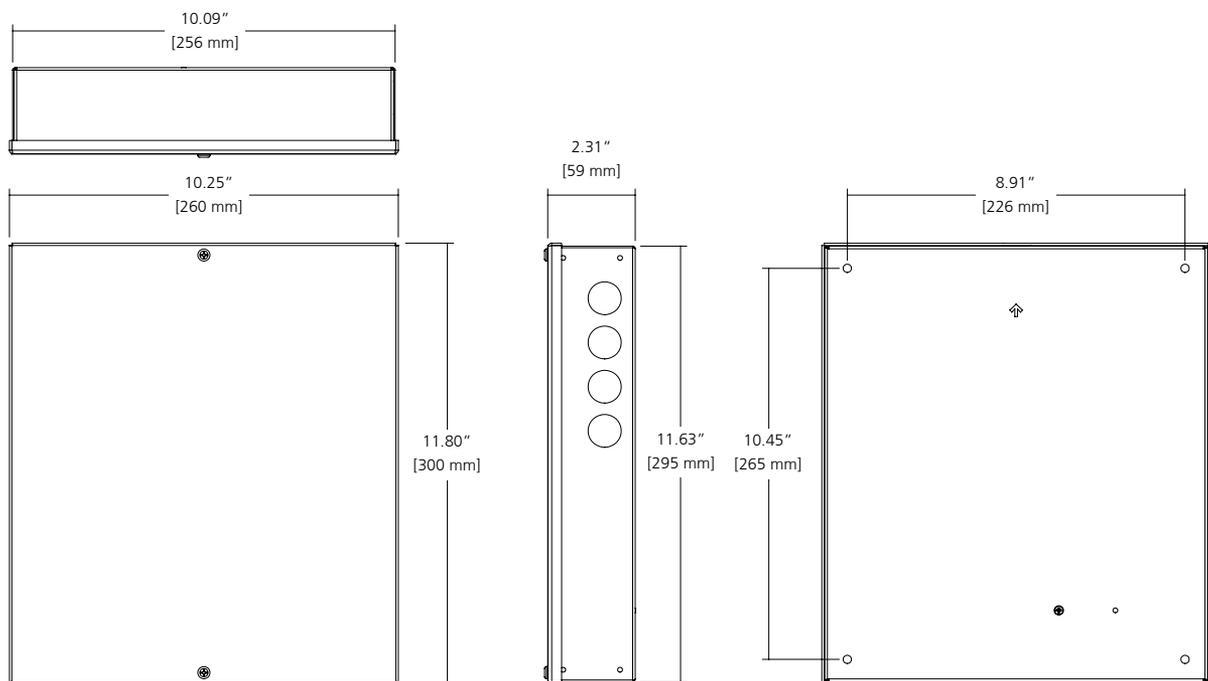
## PHYSICAL

### Product Dimensions

| MODEL | HEIGHT | | WIDTH | | DEPTH | |
|---|---|---|---|---|---|---|
| | in | mm | in | mm | in | mm |
| D4 Driver 150 Wall | 11.09 | 282 | 8.20 | 209 | 2.28 | 58 |
| D4 Driver 350/700 Wall | 15.26 | 388 | 12.76 | 324 | 3.08 | 78 |
| D4 Driver 350/700 Rack | 1.74 | 44 | 19.00 | 483 | 9.63 | 245 |

### Product Weight

| MODEL | WEIGHT | | SHIPPING WEIGHT | |
|---|---|---|---|---|
| | lb | kg | lb | kg |
| D4 Driver 150 - Wall | 4.2 | 1.9 | 5.2 | 2.3 |
| D4 Driver 350 - Wall | 9.4 | 4.3 | 10.6 | 4.8 |
| D4 Driver 350 - Rack | 12.0 | 5.5 | 14.3 | 6.5 |
| D4 Driver 700 - Wall | 11.1 | 5 | 12.3 | 5.6 |
| D4 Driver 700 - Rack | 14.8 | 6.7 | 17.1 | 7.8 |

### D4 Driver 150 CV - Wall Mount

PHYSICAL

### ArcSystem Pro D4 Driver 350 CV - Wall Mount

12.76"
[324 mm]

3.08"
[78 mm]

10.29"
[261 mm]

15.26"
[388 mm]

12.34"
[313 mm]
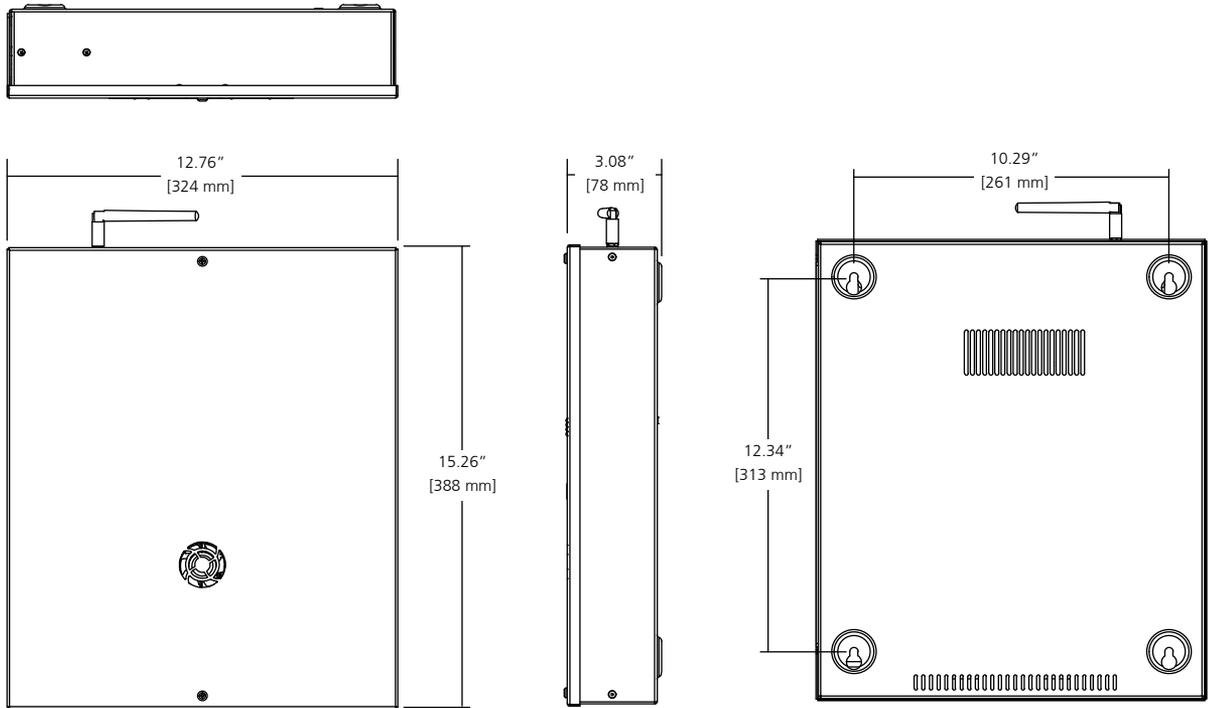
### ArcSystem Pro D4 Driver 700 CV - Wall Mount

12.76"
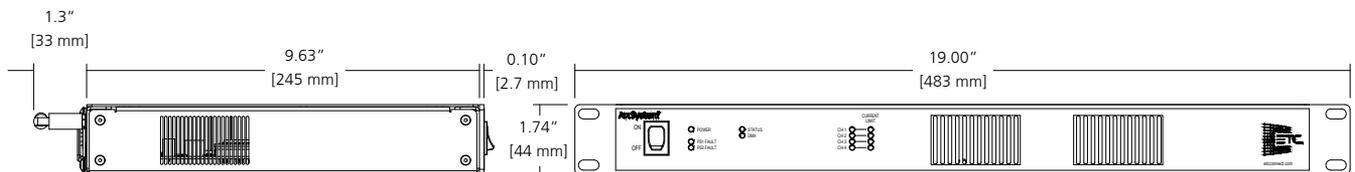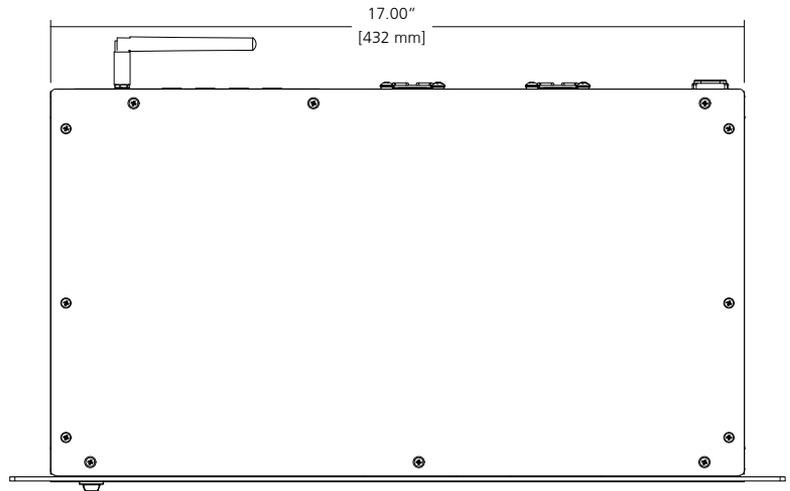[324 mm]

3.08"
[78 mm]

10.29"
[261 mm]

15.26"
[388 mm]

12.39"
[315 mm]
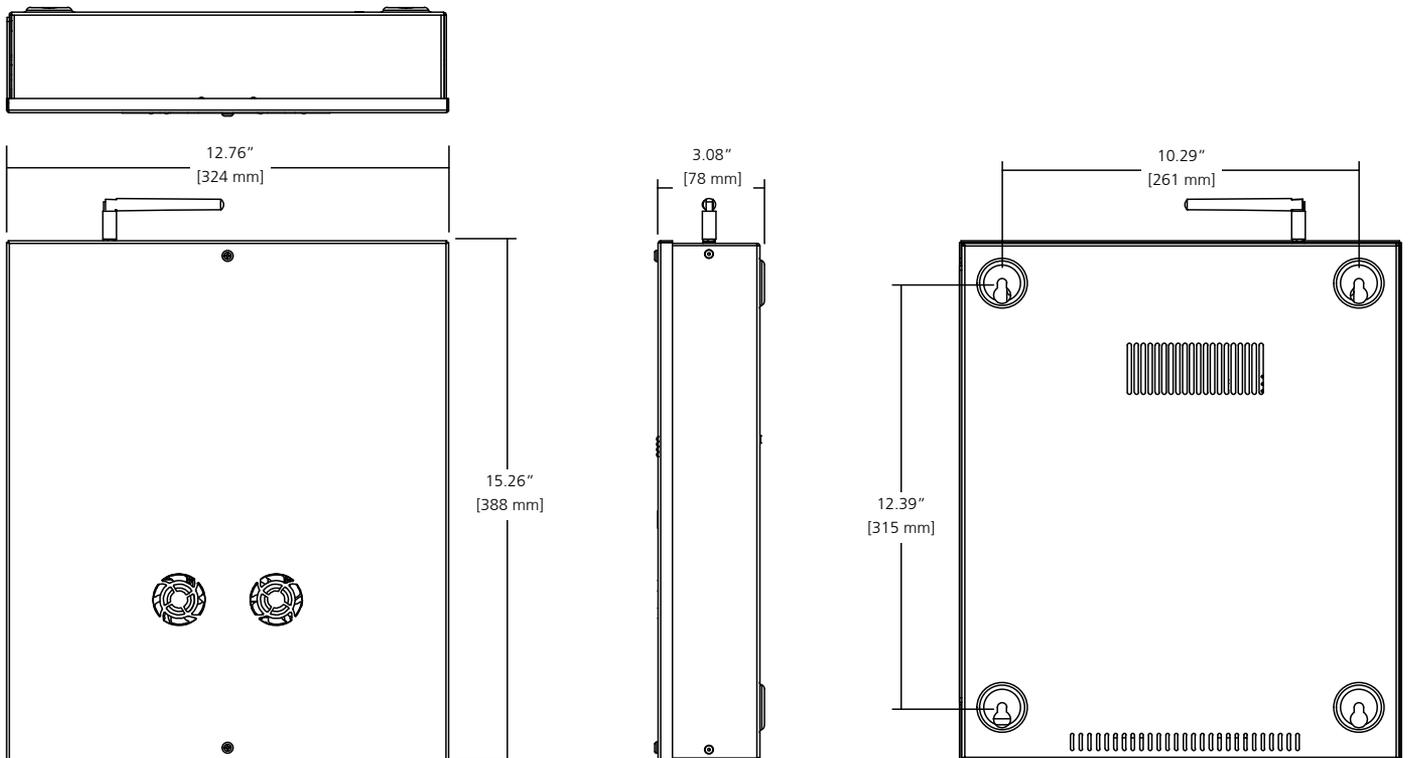
## PHYSICAL

### ArcSystem Pro D4 Driver 350/700 CV - standard Rack mount
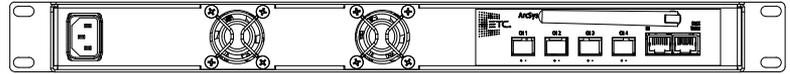


*350 Driver does not have the center mounted fan or vent

17.00"
[432 mm]

1.3"
[33 mm]

9.63"
[245 mm]

0.10"
[2.7 mm]

1.74"
[44 mm]

19.00"
[483 mm]

**etcconnect.com**