### ArcSystem Pro D1/D1HO/D2/D4 CC Driver

### **ArcSystem Series**









Type(s)
Project
Date
Notes

### GENERAL INFORMATION

Designed for use with ArcSystem Pro One-Cell series luminaires, the ArcSystem driver range is a convection cooled LED driver providing superior quality dimming. Each driver type has been specifically optimized for the best possible control of its intended luminaire. With this in mind, the following chart details compatibility of each model:

DRIVER	SUITABLE FOR USE WITH:
D1 Driver	Pro One-Cell / Pro One-Cell Small
D1HO Driver	Pro One-Cell High-Output
D2 Driver	Pro One-Cell Micro
D4 CC Driver	Pro One-Cell / Pro One-Cell Small

Each D1 Driver provides power and control for one luminaire while the D2 can power up to two Pro One-Cell Micro luminaires. The D4 CC Driver provides power and control for up to four luminaires. Intensity may be controlled directly using a wired-DMX connection to the driver's RJ45 connectors or wirelessly using the separate ArcMesh Transmitter. An optional, wired-only, DMX/RDM version of each driver is available for projects that do not require wireless capability.

### GENERAL INFORMATION

#### **APPLICATIONS**

- Auditoriums
- Worklights
- Lobbies
- · Houses of worship
- Museums
- Studios

### **FEATURES**

- Wired-DMX with wireless ArcMesh control protocols
- Wired only DMX/RDM option available
- Stepless smooth dimming to absolute zero
- Silent operation
- Convection cooled
- Suitable for air handling/plenum use

### ORDERING INFORMATION

#### **ArcSystem Drivers**

MODEL	CONTROL	DRIVER CONSTRUCTION	REGULATORY
ARCPD1D - D1 Standard ARCPD1HD - D1HO Standard ARCPD2D - D2 Standard ARCPD4D - D4 Standard ARCPED1D - D1 Emergency ARCPED1HD - D1HO Emergency ARCPED2D - D2 Emergency ARCPED4D - D4 Emergency	(Blank) - DMX/ ArcMesh RDM - DMX/ RDM	M - Metal CCMMW - D4 CC Driver only C - Quick Connect, only available for D1 Drivers and CE market	(Blank) - ETL listed -CE - CE compliant

To complete the form, simply select an option at the bottom of each column to populate the last row with your desired part number.



### PRODUCT SPECIFICATIONS (ARCSYSTEM DRIVERS)

### Control

	·	
Input method	DMX-512 via RJ45	
Protocols	DMX, ArcMesh wireless, RDM (option)	
Modes (footprint)	D1/D1HO Driver: 1 channel and 1 luminaire D2 Driver: up to 2 channels and a total of 2 luminaires D4 Driver: up to 4 channels and a total of 4 luminaires	
RDM configuration	Yes (with RDM option)	
UI type	PC config app for ArcMesh option	
Local control	No	
Notes	ArcMesh wireless control requires optional TX1 transmitter	

### **Electrical**

Voltage range	100–277 VAC 50/60 Hz hard-wired	
Input method	Wiring compartment with two half-inch knock-outs at each end for field wiring D4: Removable plate for field drilled holes	
Inrush	Inrush and Fixture Per Circuit information on Page 3	
Wattage (max / standby)	D1 Driver: 20 W/<0.5 W D1HO Driver: 100 W/<3 W D2 Driver: 20 W/<0.5 W D4 CC Driver: 115 W/<0.5 W	
Power factor	>0.9	
Current draw	D1 Driver: 0.20 A at 120 VAC D1HO Driver: 0.83 A at 120 VAC D2 Driver: 0.17 A at 120 VAC D4 CC Driver: 0.95 A at 120 VAC	
Recommended maximum cable length from driver to luminaire	D1 Driver: 15 m (49 ft 2 in) D1HO Driver: 1 m (3 ft 3 in) D2 Driver: 15 m (49 ft 2 in) D4 CC Driver: 15 m (49 ft 2 in)	

### **Thermal**

Ambient operating temp	0-40°C (32-104°F)
Fan (controllable)	N/A (convection cooled)
BTUs/hour	D1 Driver: 85 D1HO Driver: 341 D2 Driver: 68 D4 CC Driver: 361

### Physical

Materials	Die-cast aluminum and cold-rolled steel	
Color options	Black	
Mounting options	4 screw holes in rear plate D1 Quick Connect has an included mounting strap (see drawing page 7) Optional recessed bracket for D1 or D1HO (see separate datasheet)	
IP rating	IP-20 (dry locations only)	
Weight	D1 Driver: 0.61 kg (1.35 lb) D1HO Driver: 1.14 kg (2.50 lb) D2 Driver: 0.71 kg (1.55 lb) D4 CC Driver: 1.9 kg (4.2 lb)	

### Warranty

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

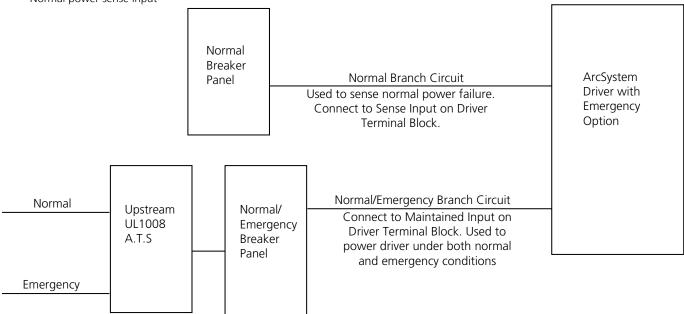
### **Regulatory and Compliance**

Approved regulatory standards	Standard version cETLus Listed Conforms to ANSI/UL STD.8750 Certified to CSA STD. C22.2 No: 250.13 CE Compliant	
	Emergency version cETLus Listed Conforms to ANSI/UL STD.924 Certified to CSA STD. C22.2 No: 141 CE Compliant	
	D1 Quick Connect Standard and Emergency version CE Compliant	
	FCC Compliant	
	D1/D1HO/D4 CC suitable for use in air handling systems 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 luminaire on at 100% overriding all other control signals. There is no control of the driver/luminaire via wireless ArcMesh or wired DMX until normal power is restored at the sense input.

### ACCESSORY INFORMATION

#### D1/D2/D4 Extension Cables (to Pro One-Cell Luminaire)

MODEL NUMBER	DESCRIPTION	
ARCDAHBC1	1 m extension cable	
ARCDAHBC2	2 m extension cable	
ARCDAHBC3	3 m extension cable	
ARCDAHBC5	5 m extension cable	
ARCDAHBC10	10 m extension cable	

### \*EXTENSIONS MAY NOT BE USED FOR D1HO/PRO ONE-CELL HIGH-OUTPUT

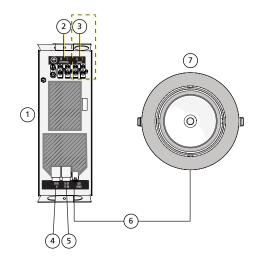
### INRUSH AND FIXTURE PER CIRCUIT INFORMATION

	ARCPD1D /	ARCPD1HD /	ARCPD2D /	ARCPD4D /
	ARCPED1D	ARCPED1HD	ARCPED2D	ARCPED4D
Max Inrush	20 A at 120 V	65 A at 120 V	20 A at 120 V	15 A at 120 V
	11 A at 230 V	34 A at 230 V	11 A at 230 V	8 A at 230 V
120 V, 20 A, High Inrush	80 drivers powering	19 drivers powering	94 drivers powering	16 drivers powering
(Sensor or SensorIQ)	80 luminaires	19 luminaires	188 luminaires	64 luminaires
120 V, 20 A, Standard Inrush	80 drivers powering	19 drivers powering	94 drivers powering	16 drivers powering
(Echo Relay Panel Mains Feed)	80 luminaires	19 luminaires	188 luminaires	64 luminaires
230 V, 10 A, C-Curve	80 drivers powering	19 drivers powering	94 drivers powering	16 drivers powering
(Sensor)	80 luminaires	19 luminaires	188 luminaires	64 luminaires
230 V, 15 A, C-Curve	120 drivers powering	28 drivers powering	141 drivers powering	25 drivers powering
(Sensor)	120 luminaires	28 luminaires	282 luminaires	100 luminaires

# ArcSystem Pro D1/D1HO/D2/D4 CC Driver

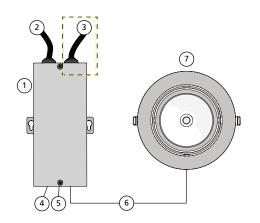
## **ArcSystem Series**

### D1 DRIVER WIRING DIAGRAM



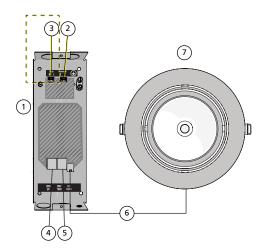
	Description	Notes		
1	ArcSystem Pro D1 Driver	ARCPD1DM and ARCPD1DRDMM ARCPED1DM and ARCPED1DRDMM (Emergency)		
2	Maintained input power	Up to 6 mm² (10 AWG) line/neutral/ground 100–277 VAC, 50/60 Hz ARCPD1DM/ARCPD1DRDMM: normal branch circuit ARCPED1D/ARCPED1DRDMM: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others		
3	Sense input power (emergency models only)	Up to 6 mm² (10 AWG) line/neutral/ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCPED1DM/ARCPED1DRDMM only)		
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) 0.2 mm <sup>2</sup> (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	Luminaire cable	18 AWG with Molex Mini-Fit connector, provided attached to luminaire. Extension cables are available (see page 3).		
7	ArcSystem Pro One-Cell or One-Cell Small luminaire ARCP1 or ARCP1S			
Note	Note: The illustration is not drawn to scale.			

### D1 DRIVER QUICK CONNECT WIRING DIAGRAM



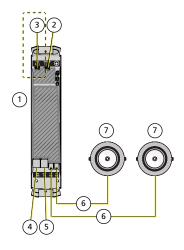
	Description	Notes		
1	ArcSystem Pro D1 Driver Quick Connect	ARCPD1DC or ARCPD1DRDMC ARCPED1DC or ARCPED1DRDMC (Emergency)		
2	Maintained input power	Use the provided cable: 18 AWG line/neutral/ground with a #8 22–18 AWG (0.5–1 mm²) ring terminal on ground 100–277 VAC, 50/60 Hz ARCPD1DC/ARCPD1DRDMC: normal branch circuit ARCPED1DC/ARCPED1DRDMC: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others		
3	Sense input power (emergency models only)	Use the provided cable: 18 AWG line/neutral/ground with a #8 22–18 AWG (0.5–1 mm²) ring terminal on ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCPED1DC/ARCPED1DRDMC only)		
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) 0.2 mm <sup>2</sup> (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	Luminaire cable	18 AWG with Molex Mini-Fit connector, provided attached to luminaire. Extension cables are available (see page 3).		
7	ArcSystem Pro One-Cell or One-Cell Small luminaire ARCP1 or ARCP1S			
Not	Note: The illustration is not drawn to scale.			

### D1HO DRIVER WIRING DIAGRAM



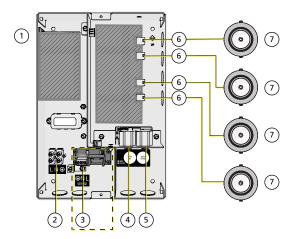
	Description	Notes			
1	ArcSystem Pro D1HO Driver	ARCPDH1D ARCPEDH1D (Emergency)			
2	Maintained input power	0.5–10 mm² (22–6 AWG) line/neutral 2.5–10 mm² (6–14 AWG) ground 100–277 VAC, 50/60 Hz ARCPDH1D: normal branch circuit ARCPEDH1D: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others			
3	Sense input power (emergency models only)	0.5–10 mm² (22–6 AWG) line/neutral 2.5–10 mm² (6–14 AWG) ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCPEDH1D only)			
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) 0.2 mm <sup>2</sup> (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 mm <sup>2</sup> (24 AWG) or larger conductors terminated to T568B standard			
6	Luminaire cable	18 AWG with Molex KK connector, provided attached to luminaire.			
7	ArcSystem Pro One-Cell High Output Iuminaire ARCP1H				
Note	Note: The illustration is not drawn to scale.				

### D2 DRIVER WIRING DIAGRAM



	Description	Notes				
1	ArcSystem Pro D2 Driver	ARCPD2D ARCPED2D (Emergency)				
2	Maintained input power	0.5–10 mm² (22–6 AWG) line/neutral 2.5–10 mm² (6–14 AWG) ground 100–277 VAC, 50/60 Hz ARCPD2D: normal branch circuit ARCPED2D: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others				
3	Sense input power (emergency models only)	0.5–10 mm² (22–6 AWG) line/neutral 2.5–10 mm² (6–14 AWG) ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCPED2D 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 mm <sup>2</sup> (24 AWG) or larger conductors terminated to T568B standard				
6	Luminaire cable	18 AWG with Molex Mini-Fit connector, provided attached to luminaire. Extension cables are available (see page 3).				
7	ArcSystem Pro One-Cell Micro luminaire ARCP1M					
Not	Note: The illustration is not drawn to scale.					

### D4 CC DRIVER WIRING DIAGRAM



Description	Notes
ArcSystem Pro D4 CC Driver	ARCPD4DCCMMW ARCPED4DCCMMW (Emergency)
Input power	0.5–10 mm² (22–6 AWG) line/neutral, 2.5–10 mm² (14–6 AWG) ground 100–277 VAC, 50/60 Hz ARCPD4DCCMMW: normal branch circuit ARCPED4DCCMMW: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others
Sense input power (emergency models only)	0.2–2.5 mm² (24–14 AWG) line/neutral/ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCPED4DCCMMW only)
DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) 0.2 mm <sup>2</sup> (24 AWG) or larger conductors terminated to T568B standard
DMX thru to another ArcSystem Pro Driver or other device	RJ45 connector, Cat5e (or equivalent) 0.2 mm <sup>2</sup> (24 AWG) or larger conductors terminated to T568B standard
Luminaire cable	18 AWG with Molex Mini-Fit connector, provided attached to luminaire. Extension cables are available (see page 3).
ArcSystem Pro One-Cell or One- Cell Small luminaire ARCP1 or ARCP1S	
	ArcSystem Pro D4 CC Driver  Input power  Sense input power (emergency models only)  DMX input from external DMX source  DMX thru to another ArcSystem Pro Driver or other device  Luminaire cable  ArcSystem Pro One-Cell or One-Cell Small luminaire

# ArcSystem Pro D1/D1HO/D2/D4 CC Driver

**ArcSystem Series** 

### PHYSICAL

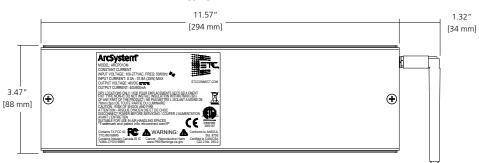
### **Product Dimensions**

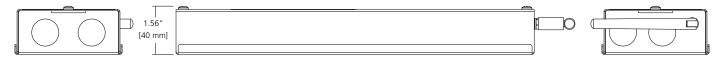
MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
D1 Driver	1.56	40	11.57	294	3.47	88
D1 HO Driver	3.03	77	9.98	253	3.49	89
D2 Driver	1.80	46	12.00	305	2.56	64
D4 CC Driver	11.09	282	8.20	209	2.28	58

### **Product Weight**

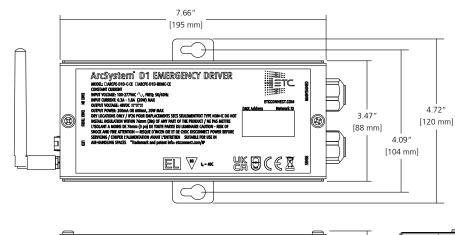
MODEL	WEI	GHT	SHIPPING WEIGHT		
	lb	kg	lb	kg	
D1 Driver	1.35	0.61	1.70	0.77	
D1 HO Driver	2.50	1.14	2.85	1.30	
D2 Driver	1.55	0.71	1.95	0.89	
D4 CC Driver	4.2	1.9	5.2	2.3	

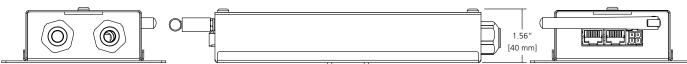
#### **ARCSYSTEM D1 DRIVER**





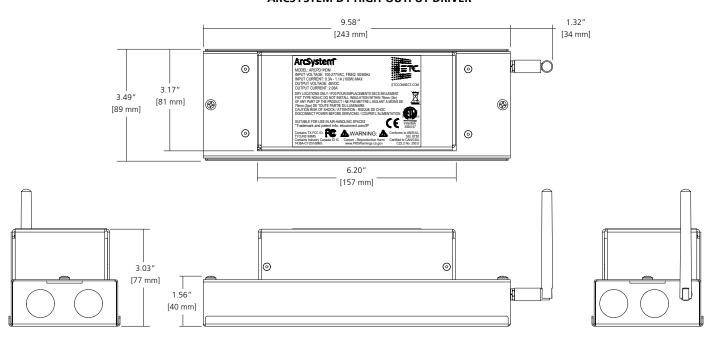
### **ARCSYSTEM D1 QUICK CONNECT**



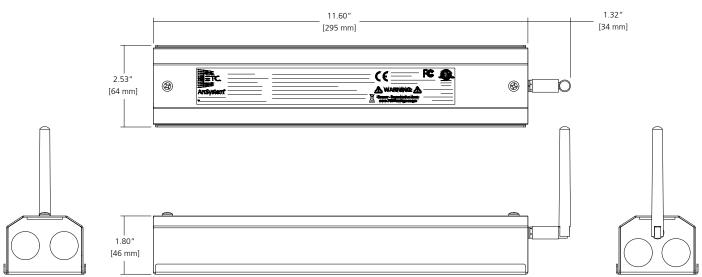


### PHYSICAL

### **ARCSYSTEM D1 HIGH-OUTPUT DRIVER**



### **ARCSYSTEM D2 DRIVER**

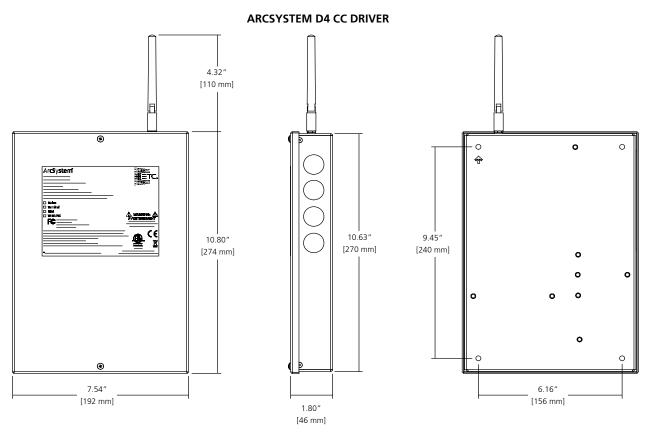


Note: Antennas not present in RDM only fixture model

# ArcSystem Pro D1/D1HO/D2/D4 CC Driver\*

ArcSystem Series

### PHYSICAL



Note: Antennas not present in RDM only fixture model

