# ETC

# Pro One-Cell (Remote Driver)

## ArcSystem Series

Type(s)

Project

Date

Notes

## GENERAL INFORMATION

The compact Pro One-Cell luminaire is a single-cell solution that is ideally suited for recessed or surface-mount installations in areas that require short- to medium-throw illumination. With a high grade metal construction, the Pro One-Cell Adjustable delivers the quality performance of the larger multi-cell versions, in a much smaller form factor.

A range of LED drivers are available for the Pro One-Cell luminaires including products from our D1 and D4 series, as well as remote drivers from our F-Drive systems, for more information please review the datasheets for these products.

In conjunction with the driver unit, the luminaire can be dimmed using either a wired-DMX connection or the onboard wireless ArcMesh protocol. Alternatively, a wired-only DMX/RDM version of the D1 driver is available for applications where wireless control and configuration is not required.

ArcSystem has been specifically developed for auditorium lighting applications where high-quality, extremely accurate and smooth dimming is required. The use of onboard device management in the driver allows all fixtures to be addressed remotely, ensuring fast and simple installation.

## GENERAL INFORMATION

### APPLICATIONS
- Auditoriums
- Work lights
- Lobbies
- Houses of worship
- Retail
- Museums
- Studios

### PRODUCT FEATURES
- Wired-DMX or wireless (ArcMesh) control protocols
- Stepless smooth dimming to blackout
- Convection cooled
- Fan-free, silent operation
- Multiple color-temperature and fixture color options

## ORDERING INFORMATION

### ArcSystem Pro One-Cell

| MODEL | FADE-TO-WARM | COLOR TEMP | BEAM ANGLE | FIXTURE COLOR | MOUNTING |
|-------|--------------|------------|------------|---------------|----------|
| ARCP1 | **BLANK** - Standard<br>**F** - Fade To Warm<br><br>(Only available with 2700 K and 3000 K options) | **2** - 2700 K<br>**3** - 3000 K<br>**35** - 3500 K<br>**4** - 4000 K<br>**5** - 5000 K | **18** - 18°<br>**30** - 30°<br>**50** - 50° | **W** - White<br>**B** - Black<br>**C** - Custom | **A** - Recess Adjust<br>**F** - Recessed Fixed<br>**Y** - Surface Yoke |
|  |  |  |  |  |  |

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

Color Options: Fixtures ship standard in black or white. For additional colors, please contact ETC.

## PRODUCT SPECIFICATIONS (PRO ONE-CELL)

### Source

| LED details | Bridgelux Vero 13 (standard) Vesta 15 (FTW) |
|---|---|
| Max field lumens | 2,300 (5000 K 50°) |
| Max total lumens | 2,459 (5000 K 50°) |
| Lumens per watt | 103 (5000 K 50°) |
| L70 rating (hours to 70% output) | 50,000 hours |

### Color

| Colors used | Fixed white |
|---|---|
| Color temperature options | 2700 K, 3000 K, 3500 K, 4000 K, 5000 K |
| Fade to warm | Optional on 2700 K and 3000 K |

### Optical

| Beam angle range | 15, 30, 50 |
|---|---|
| CRI | >90 |
| TM-30-18 data | Refer to ArcSystem photometry guide |
| Photometry data | See below or refer to ArcSystem photometry guide |

### Control (via separate driver)

| Input method | DMX-512 via RJ45 connector |
|---|---|
| Protocols | DMX, ArcMesh wireless, RDM (option) |
| Modes (footprint) | 1-channel |
| RDM configuration | Yes (with RDM driver option) |
| UI type | PC config app for ArcMesh option |
| Local control | No |
| Notes | RDM control via external RDM controller |

### Electrical

| Voltage range | 48 VDC Max (requires separate D1 or D4 driver to operate) |
|---|---|
| Input method | 4-position (2-pole) Molex connector with hard-wired 40 in (1 m) power cord |
| Inrush (including Driver) | D1 Driver: 20 A at 120 VAC D4 CC Driver: 15 A at all voltages |
| Wattage (typical / max / standby) | 20 W/23.7 W/<1 W |
| Current draw | 0.17 A at 120 V |

### Thermal

| Ambient operating temp | 0°–40°C (32°–104°F) |
|---|---|
| Fan (controllable) | N/A (convection cooled) |
| BTUs/hour | 68 |

### Physical

| Materials | Die-cast aluminum and cold-rolled steel |
|---|---|
| Color options | Black, white or custom color |
| Mounting options | Recessed spring clips (for 3–24 mm thick ceilings) or yoke |
| IP rating | IP-20 |
| Weight (adj / fixed / yoke) | 1.41 kg (3.1 lb)/1.41 kg (3.1 lb)/ 1.13 kg (2.5 lb) |
| Included accessories | Yoke (for yoke mount version) |
| Notes | See accessories list for power cable options |

### Warranty

| Full fixture | 5 years |
|---|---|
| LED array | 10 years |

### Regulatory and Compliance

| Approved regulatory standards | Standard version cETLus Listed Conforms to ANSI/UL STD.2108 Certified to CSA STD. C22.2 No: 250 CE Compliant EAC Compliant UKCA Compliant<br><br>Recessed fixtures additionally conform to ANSI/ UL STD. 2043 |
|---|---|

## RECESSED CEILING BRACKET



The optional recessed ceiling bracket can be used to install the Pro One-Cell luminaire and its companion D1 driver into a drop ceiling or for rough-in use. Model number ARCP1RCB.

## REMOTE DRIVERS



ArcSystem Pro One-Cell fixtures require an external ArcSystem D1 or D4 driver to operate. See separate datasheet or visit etcconnect.com/ArcSystem for additional information.
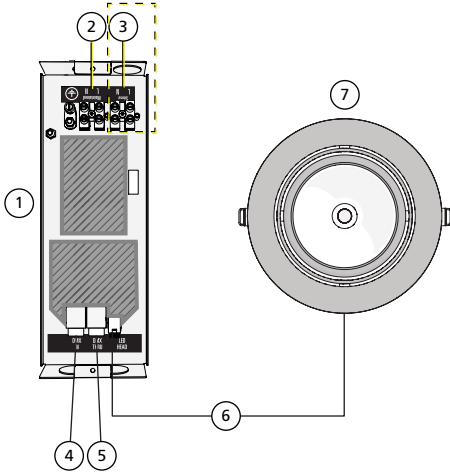
## PHOTOMETRY

### Lumen table

| COLOR TEMP | BEAM ANGLE | FIELD ANGLE | FIELD LUMENS | TOTAL LUMENS | MAX CANDELA |
|------------|------------|-------------|--------------|--------------|-------------|
| 3000 K | 18° | 52.4° | 1,224 | 1,310 | 10,324 |
| 3000 K | 30° | 70.9° | 1,550 | 1,659 | 6,403 |
| 3000 K | 50° | 82.7° | 1,977 | 2,116 | 3,046 |

IES light files are available on request for all beam angles of ArcSystem.

Full photometry and color information for the ArcSystem family is available in the ArcSystem Photometry and Color Info Guide.
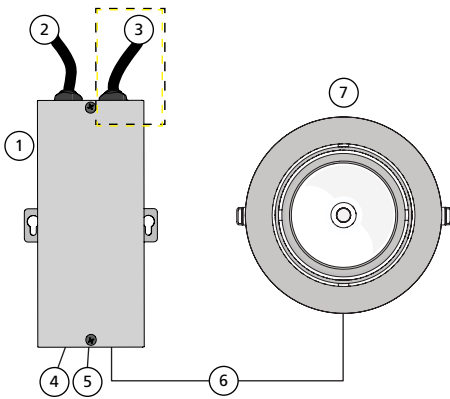
## D1 DRIVER WIRING DIAGRAM



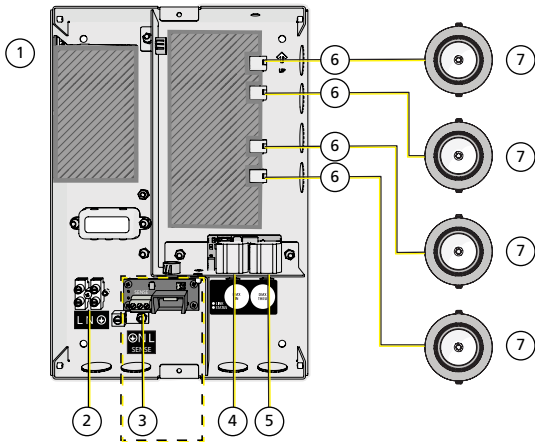| | Description | Notes |
|---|---|---|
| 1 | ArcSystem Pro D1 Driver | ARCPD1DM and ARCPD1DRDMM<br>ARCPED1DM and ARCPED1DRDMM (Emergency) |
| 2 | Maintained input power | Up to 6 mm² (10 AWG) line/neutral/ground<br>100–277 VAC, 50/60 Hz<br>ARCPD1DM/ARCPD1DRDMM: normal branch circuit<br>ARCPED1D/ARCPED1DRDMM: 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<br>100–277 VAC, 50/60 Hz, normal branch circuit<br>(ARCPED1DM/ARCPED1DRDMM only) |
| 4 | DMX input from external DMX source | RJ45 connector, Cat5e (or equivalent) 0.2 mm²<br>(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<br>(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<br>ARCP1 or ARCP1S | |
| **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<br>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<br>100–277 VAC, 50/60 Hz<br>ARCPD1DC/ARCPD1DRDMC: normal branch circuit<br>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<br>100–277 VAC, 50/60 Hz, normal branch circuit<br>(ARCPED1DC/ARCPED1DRDMC only) |
| 4 | DMX input from external DMX source | RJ45 connector, Cat5e (or equivalent) 0.2 mm²<br>(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<br>(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<br>ARCP1 or ARCP1S | |
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## D4 CC DRIVER WIRING DIAGRAM



| | Description | Notes |
|---|---|---|
| 1 | ArcSystem Pro D4 CC Driver | ARCPD4DCCMMW<br>ARCPED4DCCMMW (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>ARCPD4DCCMMW: normal branch circuit<br>ARCPED4DCCMMW: normal/emergency branch circuit<br>from UL1008 automatic transfer switch (ATS) by others |
| 3 | Sense input power<br>(emergency models only) | 0.2–2.5 mm² (24–14 AWG) line/neutral/ground<br>100–277 VAC, 50/60 Hz, normal branch circuit<br>(ARCPED4DCCMMW only) |
| 4 | DMX input from external DMX source | RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG)<br>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)<br>or larger conductors terminated to T568B standard |
| 6 | Luminaire cable | 18 AWG with Molex Mini-Fit connector, provided attached<br>to luminaire. Extension cables are available (see page 3). |
| 7 | ArcSystem Pro One-Cell or One-Cell Small luminaire<br>ARCP1 or ARCP1S | |
| **Note: The illustration is not drawn to scale.** | | |

## ACCESSORIES

| PART 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 |
| ARCP1RCB | ArcSystem Pro One-Cell Recessed Ceiling Bracket |

Extension cables to be used between the ARCMD1D driver and the Pro One-Cell luminaire.

## PHYSICAL

### Pro One-Cell Dimensions

| MODEL | HEIGHT | | WIDTH | | DEPTH | |
|---|---|---|---|---|---|---|
| | in | mm | in | mm | in | mm |
| Adjustable* | 6.14 | 156 | 7.77 | 197 | 6.14 | 156 |
| Fixed* | 7.75 | 197 | 7.75 | 197 | 6.26 | 159 |
| Yoke | 6.65 | 169 | 5.37 | 136 | 5.37 | 136 |

*Recommend hole cut-out: 165 mm / 6.5 in

### Pro One-Cell Weights

| MODEL | WEIGHT* | | SHIPPING WEIGHT | |
|---|---|---|---|---|
| | lb | kg | lb | kg |
| Adjustable | 3.1 | 1.41 | 3.5 | 1.60 |
| Fixed | 3.1 | 1.41 | 3.5 | 1.60 |
| Yoke | 2.50 | 1.13 | 3.0 | 1.36 |

*Does not include mounting hardware

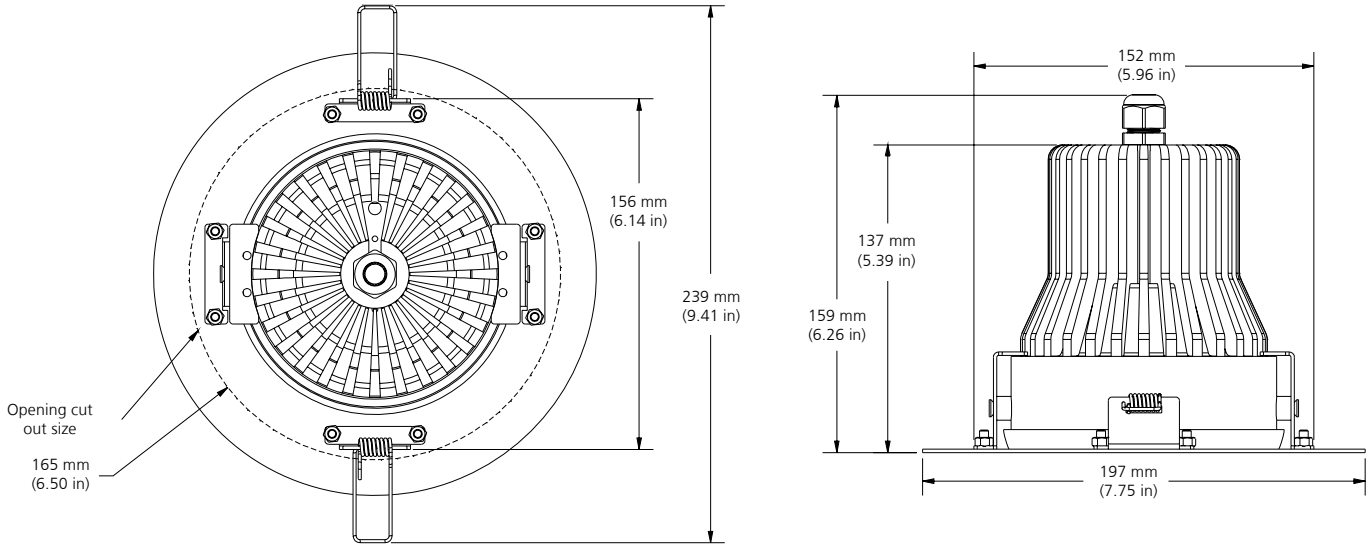**PRO ONE-CELL ADJUSTABLE**
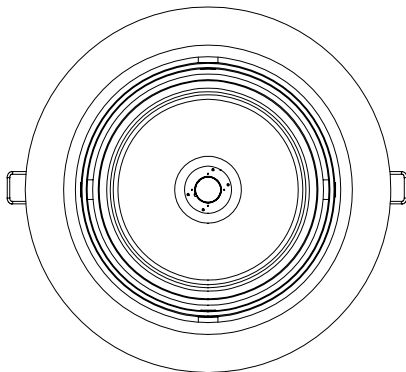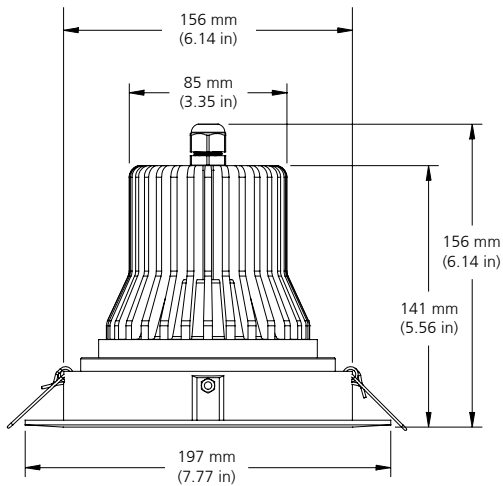


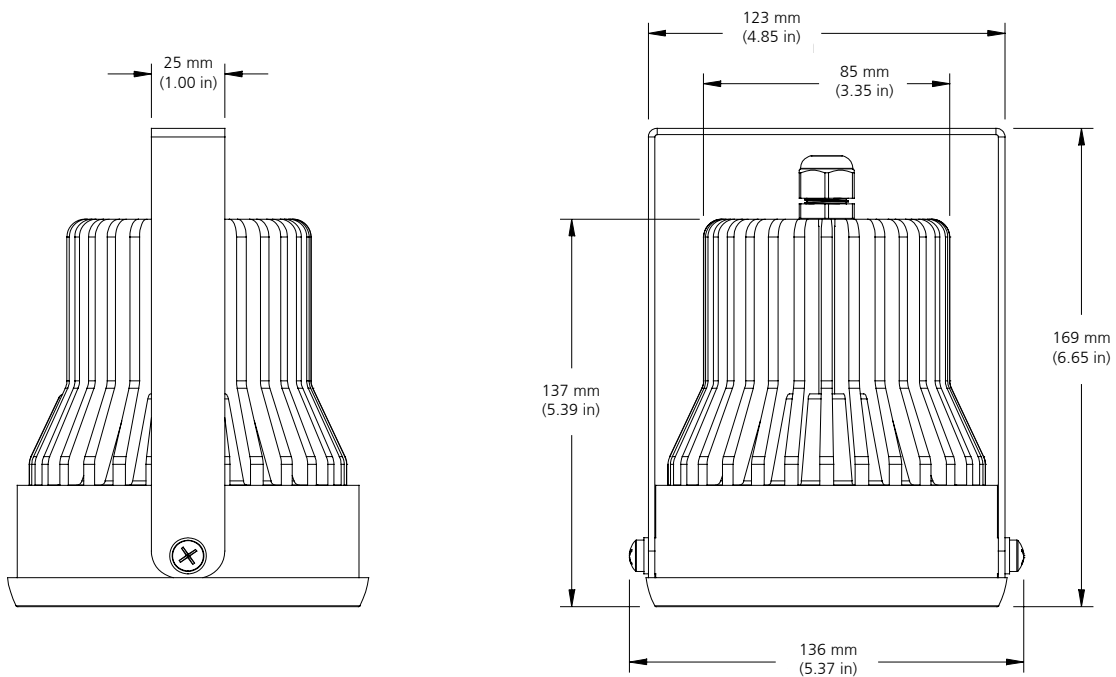**MAXIMUM TILT ANGLE: OUTER RING**
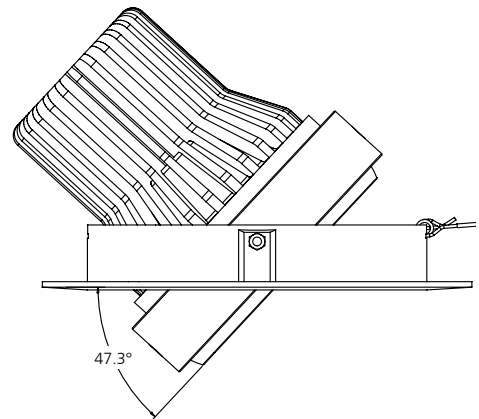


**MAXIMUM TILT ANGLE: INNER RING**

## PHYSICAL

### PRO ONE-CELL FIXED



Opening cut out size

165 mm (6.50 in)

156 mm (6.14 in)

239 mm (9.41 in)

152 mm (5.96 in)

137 mm (5.39 in)

159 mm (6.26 in)

197 mm (7.75 in)

### PRO ONE-CELL YOKE



25 mm (1.00 in)

123 mm (4.85 in)

85 mm (3.35 in)

137 mm (5.39 in)

169 mm (6.65 in)

136 mm (5.37 in)

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