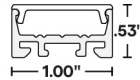
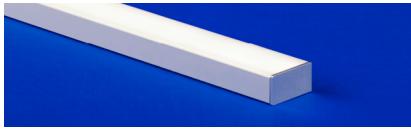




# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

## 24VDC Linear Fixtures - Surface & Recessed



- Choose from diffused, polar or frosted lens options for varying diode visibility and beam cutoff
- Delivers smooth and consistent light to highlight architectural features and surfaces
- Ideal for surface-mounted installations
- Integrated metal end caps combined with an extruded aluminum housing give this fixture a polished modern look
- When using a DW LED and DALI or DMX power supplies, LED wattage must be doubled

### INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5
PRODUCT	WATTS/ FT	CCT	RATED	LENS

### ADDITIONAL INFORMATION REQUIRED TO ORDER

6	7	8	9	10	11	12	13	14
WIRE INPUT/ OUTPUT	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL

Sample Part Number: **OP1WD-6.0-19/30-DRY-DF-P1-CON6-CON6-WH-CL2-CC-WH-48"-E**

<b>1</b> <b>PRODUCT</b> <b>OP1WD</b> LED engine is built with 2 wires suitable for phase dimming control. See following pages for compatible power supplies. <b>OP1DW</b> <b>OP1DW-USA</b> Select USA option for BAA and BABA projects. Only DRY or WET ratings apply. LED engine is built with 3 wires requiring 0-10V, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See following pages for compatible power s	<b>2</b> <b>WATTS/FT</b> <b>6.0</b> 6.0W/ft <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE <b>4.0HE</b> 4.0W/ft HE <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE	<b>3</b> <b>CCT</b> <b>19/27</b> 1900K/2700K <b>19/30</b> 1900K/3000K <b>20/27</b> 2000K/2700K <b>20/30</b> 2000K/3000K <b>27/40</b> 2700K/4000K <b>27/55</b> 2700K/5500K <b>24/30</b> 2400K/3000K <b>27/40</b> 2700K/4000K <b>20/27</b> 2000K/2700K <b>20/30</b> 2000K/3000K <b>27/40</b> 2700K/4000K <b>27/55</b> 2700K/5500K	<b>4</b> <b>RATED</b> <b>DRY</b> IP20 <b>WET</b> IP67 Can be suitable for exterior use. Contact factory for more information <b>DRY</b> IP20 <b>DMP</b> IP54 <b>WET</b> IP67		
<b>5</b> <b>LENS</b> <b>DF</b> Diffused <b>PR</b> Polar <b>FR</b> Frosted	<b>6</b> <b>WIRE INPUT/OUTPUT</b> <b>SINGLE (Input only)</b> <b>S1</b> End Feed <b>S2</b> Bottom Feed <b>PASS THROUGH (Input/Output)</b> <b>P1</b> End Feed <b>P2</b> Bottom Feed	<b>7</b> <b>CONNECTOR/WIRE IN</b> <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24" <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>8</b> <b>CONNECTOR/WIRE OUT</b> <b>CLS</b> Closed End (No feed) <b>BW</b> Bare Wire (Standard 36") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"		
<b>9</b> <b>WIRE COLOR</b> <b>WH</b> White <b>BK</b> Black	<b>10</b> <b>WIRE TYPE</b> <b>CL2</b> Class 2 <b>CL2P</b> Plenum Rated CL2P only available with bare wire leads (BW)	<b>11</b> <b>MOUNTING</b> <b>CC</b> Concealed Clip <b>MG</b> Magnet	<b>12</b> <b>FINISH</b> <b>ST</b> Satin <b>BK</b> Black <b>WH</b> White <b>CU</b> Custom Custom finishes require a longer lead time, consult factory. Any white finish other than RAL 9003 must be custom ordered	<b>13</b> <b>LENGTH (IN)</b> Minimum length is 12", maximum length is 98.43" not including end caps. Contact us for lengths under 12".	<b>14</b> <b>EXACT/OPTIMAL</b> <b>O</b> Optimal Illumination <b>E</b> Exact Specified Length Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end.

For continuous mounting, consider bottom feed.

BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

BW: Standard length is 36". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)



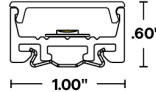
# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

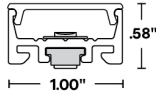
## 1 PRODUCT - DIMENSIONS



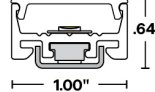
Profile



Profile with  
concealed clip



Profile with magnet clip



Profile with magnet mount  
clip and magnet mount  
accessory

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]  
Tested with OP1WD-6.0-30-DRY-\*\*

	3000K	
	LM/FT	CRI
FR	386	97
PR	364	97
DF	320	97

[Calculated L70 = 70000 hrs]  
Tested with OP1DW-2.5HE-30-DRY-\*\*

	3000K	
	LM/FT	CRI
FR	219	98
PR	206	98
DF	182	98

## TEMPERATURE RATINGS

		WD 6.0 W/FT		DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT		DW 4.0 HE W/FT		DW 8.0 HE W/FT	
		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	120°F	-4°F	145°F	-4°F	135°F	-4°F	140°F	-4°F	125°F	-4°F	130°F	-4°F	115°F

## 5 DIODE VISIBILITY

	WD (100%)	WD (50%)	DW-HE (ALL COOL)	DW-HE (50/50)	DW-HE (ALL WARM)
DF - Diffused lens					
PR - Polar lens					
FR - Frosted lens					



# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

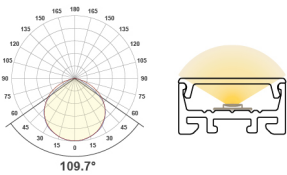
24VDC Linear Fixtures - Surface & Recessed

## PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

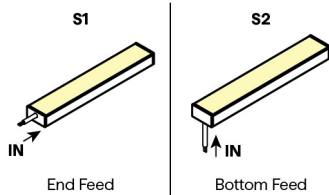
6W/ft

Frosted Lens

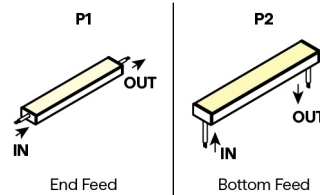


## 6 WIRE INPUT/OUTPUT

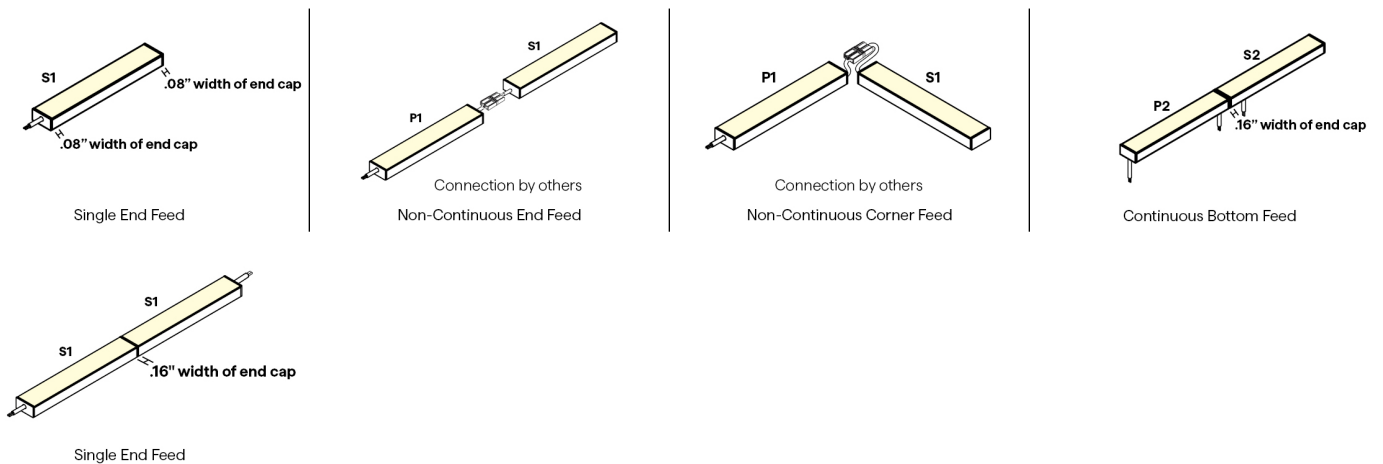
SINGLE (Input only)



PASS THROUGH (Input/Output)



## CONFIGURATION OPTIONS

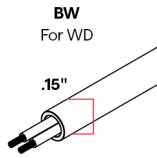




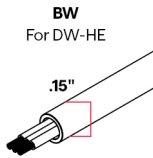
# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

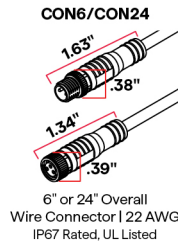
## 7 / 8 CONNECTOR/WIRE - IN/OUT



Bare Wire 36"  
22 AWG



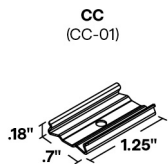
Bare Wire 36"  
22 AWG



## 9 WIRE COLOR



## 11 MOUNTING

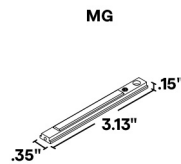


Concealed Clip

2 pieces of hardware provided for 4' or less; 4 pieces of hardware provided for greater than 4'

To order separately use CC-01 (sold in pairs)

Each clips comes with a #4 x 5/8" Flat Head screw.



Magnet Clip

One MG provided per foot

To order separately use MG-02



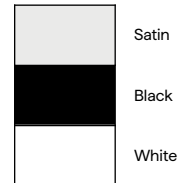
Magnet Mount  
Accessory for MG-02

Sold separately, to order use MMA-02

Each bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface

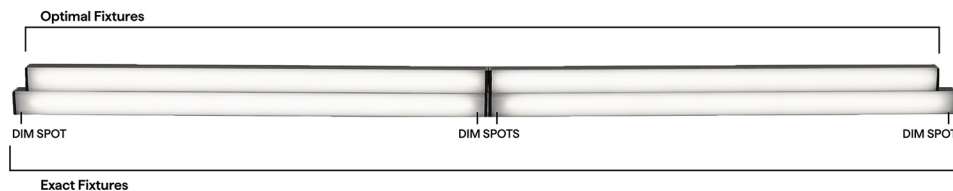
## 12 FINISH



Custom finishes require a longer lead time, consult factory

## 14 EXACT/OPTIMAL FIXTURE LENGTH

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.





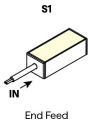
# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

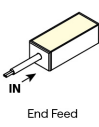
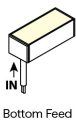
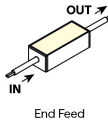
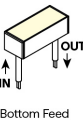
## WD DRY DMP LENGTHS BY INCH

Available in any length in between 12" and 98.43" not including end caps, chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

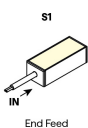
### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.41"		10.66"	
13"	12.41"		12.66"	
14"	12.41"		12.66"	
15"	14.41"		14.66"	
16"	14.41"		14.66"	
17"	16.41"		16.66"	
18"	16.41"		16.66"	
19"	18.41"		18.66"	
20"	18.41"		18.66"	
21"	20.41"		20.66"	
22"	20.41"		20.66"	
23"	22.41"		22.66"	
24"	22.41"		22.66"	
36"	34.41"		34.66"	
48"	46.41"		46.66"	
60"	58.41"		58.66"	
72"	70.41"		70.66"	
84"	82.41"		82.66"	
96"	94.41"		94.66"	

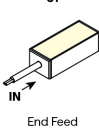
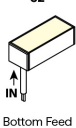
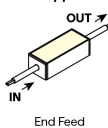
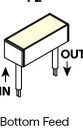
## WD WET LENGTHS BY INCH

Available in any length in between 12" and 98.43" not including end caps, chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.61"		10.76"	
13"	12.61"		12.76"	
14"	12.61"		12.76"	
15"	14.61"		14.76"	
16"	14.61"		14.76"	
17"	16.61"		16.76"	
18"	16.61"		16.76"	
19"	18.61"		18.76"	
20"	18.61"		18.76"	
21"	20.61"		20.76"	
22"	20.61"		20.76"	
23"	22.61"		22.76"	
24"	22.61"		22.76"	
36"	34.61"		34.76"	
48"	46.61"		46.76"	
60"	58.61"		58.76"	
72"	70.61"		70.76"	
84"	82.61"		82.76"	
96"	94.61"		94.76"	



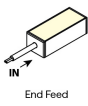
# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

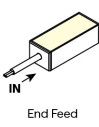
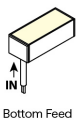
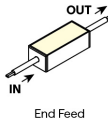
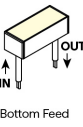
## DW-HE DRY DMP LENGTHS BY INCH

Available in any length in between 12" and 98.43" not including end caps, chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

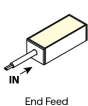
### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.51"		10.86"	
13"	12.51"		12.86"	
14"	12.51"		12.86"	
15"	14.51"		14.86"	
16"	14.51"		14.86"	
17"	16.51"		16.86"	
18"	16.51"		16.86"	
19"	18.51"		18.86"	
20"	18.51"		18.86"	
21"	20.51"		20.86"	
22"	20.51"		20.86"	
23"	22.51"		22.86"	
24"	22.51"		22.86"	
36"	34.51"		34.86"	
48"	46.51"		46.86"	
60"	58.51"		58.86"	
72"	70.51"		70.86"	
84"	82.51"		82.86"	
96"	94.51"		94.86"	

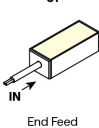
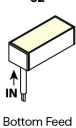
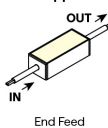
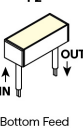
## DW-HE WET LENGTHS BY INCH

Available in any length in between 12" and 98.43" not including end caps, chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.66"		11.06"	
13"	12.66"		11.06"	
14"	12.66"		13.06"	
15"	14.66"		13.06"	
16"	14.66"		15.06"	
17"	16.66"		15.06"	
18"	16.66"		17.06"	
19"	18.66"		17.06"	
20"	18.66"		19.06"	
21"	20.66"		19.06"	
22"	20.66"		21.06"	
23"	22.66"		21.06"	
24"	22.66"		23.06"	
36"	34.66"		35.06"	
48"	46.66"		47.06"	
60"	58.66"		59.06"	
72"	70.66"		71.06"	
84"	82.66"		83.06"	
96"	94.66"		95.06"	



# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

## COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	
	DW-HE Warm Dim Applications	WD
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+WD QT-CAB-eLED+WD-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+WD QTM-eLED+WD-AWN QZ-DW	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
1%	QZ-DALI-DT8	QTM-eLED(E) QZ-DALI-DT6
10%	Non-Dim Power Supply with WD App Dongle	Non-Dim Power Supply with SW App Dongle


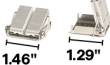



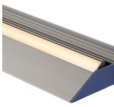



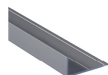


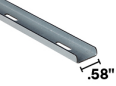
DIMMING PROTOCOL	INDOOR	
	DW-HE Warm Dim Applications	WD
Phase	QZ-DW	QT-CAB-QZ-PH/0-10V QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
0-10V	QT-CAB-eLED+WD QT-CAB-eLED+WD-AWN QTM-eLED+WD QTM-eLED+WD-AWN QZ-DW	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QTM-eLED+0-10V QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+WD-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+WD-AWN	QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6-AWN
ECO System		QTM-eLED(E)
DMX If using DW LED, wattage must be doubled		QZ-DMX
DALI-2: DT6 If using DW LED, wattage must be doubled except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6
DALI-2: DT8 If using DW LED, wattage must be doubled except for AWN	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8	
SCENE App Dimmed	Non-Dim Power Supply with WD App Dongle	Non-Dim Power Supply with SW App Dongle



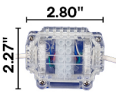

# OPTI-FLAT (01) FOR WARM DIM APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

## COMPATIBLE MOUNTING ACCESSORIES

<b>HINGE - HMB-M</b>  1.41" .71" Adjustable mounting bracket - Medium	<b>HINGE - HMB-L</b>  1.46" 1.29" Adjustable mounting bracket - Large	<b>HINGE - HMB-XL</b>  4" 1.46" Adjustable mounting bracket - XLarge	<b>Q-PIVOT</b>  .75" 1.03" Small mounting accessory	<b>Q-ANGLE</b>  2.23" 1.38" Adjustable mounting accessory	<b>QUOVA-STANDARD</b>  QUOVA Knife Edge	<b>NJ-LARGE</b>  J Mounting Bracket	<b>NU-LARGE</b>  U Mounting Bracket	<b>SD-J-LARGE</b>  J Mounting Bracket	<b>BL-LARGE</b>  Backwards L Mounting Bracket
<b>NL-LARGE</b>  L Mounting Bracket	<b>SD-L-LARGE</b>  L Mounting Bracket	<b>MMA-02</b>  .58" Magnet Mount Accessory of MG-02							

## COMPATIBLE WIRING ACCESSORIES

<b>Q-mini-J5</b>  2.80" 2.27" UL Listed miniature junction box, DRY/DMP (WET rated with silicone)	<b>CON120-EXT</b>  10ft Con cable extender DRY/DMP/WET
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## COMPATIBLE CONTROL ACCESSORIES

<b>SCENE APP DONGLE</b>  1.36" 2.58" Wi-Fi or Bluetooth Connectivity
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## COMPATIBLE APPS

<b>NFC APP</b>  Read and write DMX addresses and adjust voltage
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