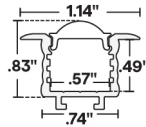
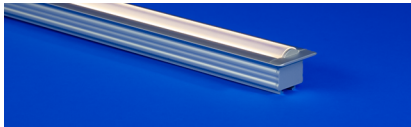




# ESSENTIALS EMBD-OPTICS (02)

## STATIC WHITE

### 24VDC Linear Fixtures - Recessed



- Recessed fixture designed for drywall and millwork installations
- Choose from 12°, 14°, 20°, 30°, 45° or 60° beam angles
- Mounting options include spring or magnet mounting clips
- Features painted end caps to match extrusion finish
- Suitable for installation in the storage area of a clothes closet when specified with LEDs at 4.0 watts or less per foot per NEC regulations
- Can be suitable for exterior use when specified as wet, contact factory for more information



#### INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5	6
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS
				STD	

#### ADDITIONAL INFORMATION REQUIRED TO ORDER

7	8	9	10	11	12	13	14	15
WIRE INPUT/ OUTPUT	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL

Sample Part Number: **EB2SW-5.0-30-DRY-STD-20-P1-BW-BK-CL2-SP-ST-48"-E**

1	PRODUCT	2	WATTS/FT	3	CCT	4	RATED	5	EFFICIENCY	6	LENS																																												
	<b>EB2SW</b> <b>EB2SW-USA</b>  Select USA option for BAA and BABA projects. Only DRY or WET ratings apply.  See following pages for compatible power supplies.		<table><tr><td>1.5</td><td>1.5W/ft</td></tr><tr><td>3.0</td><td>3.0W/ft</td></tr><tr><td>4.0</td><td>4.0W/ft</td></tr><tr><td>5.0</td><td>5.0W/ft</td></tr></table>	1.5	1.5W/ft	3.0	3.0W/ft	4.0	4.0W/ft	5.0	5.0W/ft		<table><tr><td>20</td><td>2000K</td></tr><tr><td>22</td><td>2200K</td></tr><tr><td>24</td><td>2400K</td></tr><tr><td>27</td><td>2700K</td></tr><tr><td>30</td><td>3000K</td></tr><tr><td>35</td><td>3500K</td></tr><tr><td>40</td><td>4000K</td></tr></table>	20	2000K	22	2200K	24	2400K	27	2700K	30	3000K	35	3500K	40	4000K		<table><tr><td><b>DRY</b></td><td>IP20</td></tr><tr><td><b>WET</b></td><td>IP67</td></tr><tr><td colspan="2">Can be suitable for exterior use, contact factory for more information</td></tr></table>	<b>DRY</b>	IP20	<b>WET</b>	IP67	Can be suitable for exterior use, contact factory for more information			<table><tr><td><b>STD</b></td><td>Standard</td></tr></table>	<b>STD</b>	Standard		<table><tr><td>12</td><td>Optical 12°</td></tr><tr><td>14</td><td>Optical 14°</td></tr><tr><td>20</td><td>Optical 20°</td></tr><tr><td>30</td><td>Optical 30° DRY or DMP only</td></tr><tr><td>45</td><td>Optical 45° DRY or DMP only</td></tr><tr><td>60</td><td>Optical 60° DRY or DMP only</td></tr><tr><td colspan="2">For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages</td></tr></table>	12	Optical 12°	14	Optical 14°	20	Optical 20°	30	Optical 30° DRY or DMP only	45	Optical 45° DRY or DMP only	60	Optical 60° DRY or DMP only	For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages	
1.5	1.5W/ft																																																						
3.0	3.0W/ft																																																						
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<b>DMP</b>	IP54																																																						

7	WIRE INPUT/OUTPUT	8	CONNECTOR/WIRE IN	9	CONNECTOR/WIRE OUT	10	WIRE COLOR
<b>SINGLE (Input only)</b> <b>S1</b> End Feed <b>S2</b> Bottom Feed		▶	<b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	▶	<b>CLS</b> Closed End (No feed)	<b>WH</b> White <b>BK</b> Black <b>N/A</b> For Barrel  wet barrel only available in black	
<b>PASS THROUGH (Input/output)</b> <b>P1</b> End Feed <b>P2</b> Bottom Feed		▶	<b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	▶	<b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"		

For continuous mounting, consider bottom feed.

BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

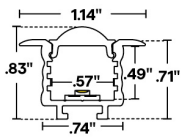
11	WIRE TYPE	12	MOUNTING	13	FINISH	14	LENGTH (IN)	15	EXACT/OPTIMAL
	<b>CL2</b> Class 2 <b>CL2P</b> Plenum Rated <b>N/A</b> For Barrel  CL2P only available with bare wire leads (BW)		<b>SP</b> Spring Clip <b>MG</b> Magnet		<b>ST</b> Satin <b>CU</b> Custom  Custom finishes require a longer lead time, consult factory		Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".		<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. See Exact/Optimal Fixture Length charts.



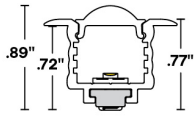
# ESSENTIALS EMBD-OPTICS (02) STATIC WHITE

24VDC Linear Fixtures - Recessed

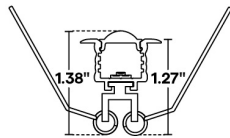
## 1 PRODUCT - DIMENSIONS



Profile with optical lens



Profile with optical lens and magnet mounting clip



Profile with optical lens and spring mounting clip



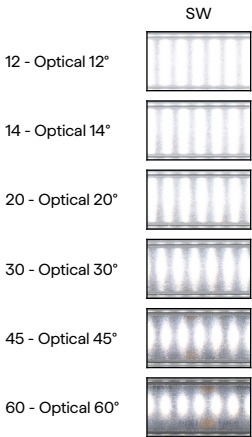
Spring mounting clip

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]  
Tested with EB2SW-\*\*-30-DRY-STD

	1.5 W/FT		3.0 W/FT		4.0 W/FT		5.0 W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
12	121	98	211	98	262	98	319	98
14	138	98	240	98	299	98	363	98
20	141	98	247	98	307	98	373	98
30	156	98	272	98	339	98	412	98
45	160	98	280	98	348	98	423	98
60	160	98	278	98	346	98	421	98

## 6 DIODE VISIBILITY



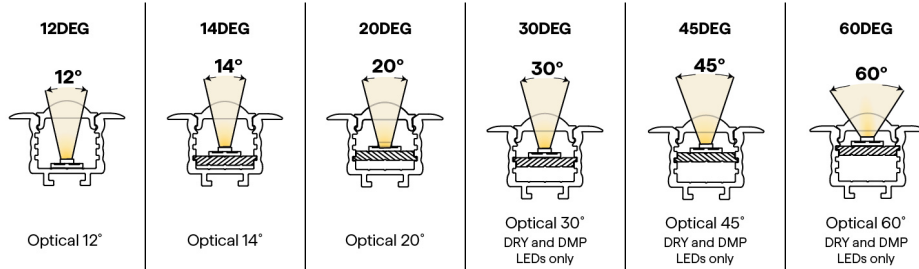


# ESSENTIALS EMBD-OPTICS (02) STATIC WHITE

24VDC Linear Fixtures - Recessed

## PHOTOMETRIC PERFORMANCE

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

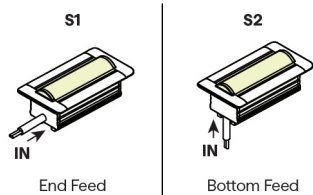


## TEMPERATURE RATINGS

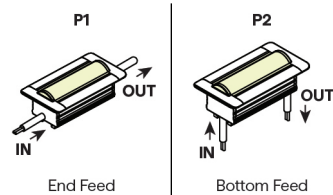
		1.5 W/FT		3.0 W/FT		4.0 W/FT		5.0 W/FT	
		Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Recessed	-4°F	135°F	-4°F	130°F	-4°F	120°F	-4°F	110°F
DMP	Ambient Operating Temp - Recessed	-4°F	130°F	-4°F	125°F	-4°F	115°F	-4°F	105°F
WET	Ambient Operating Temp - Recessed	-4°F	130°F	-4°F	125°F	-4°F	115°F	-4°F	105°F

## 7 WIRE INPUT/OUTPUT

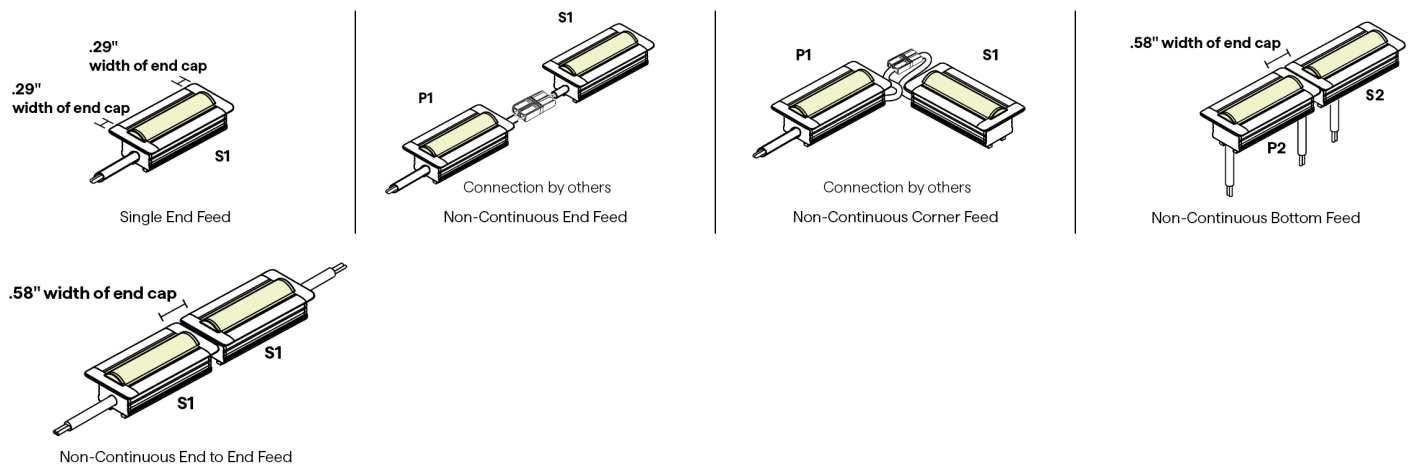
SINGLE (Input only)



PASS THROUGH (Input/Output)



## CONFIGURATION OPTIONS



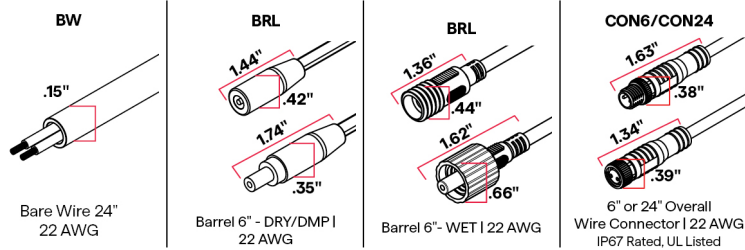


# ESSENTIALS EMBD-OPTICS (02) STATIC WHITE

24VDC Linear Fixtures - Recessed

## 8 / 9 CONNECTOR/WIRE - IN/OUT

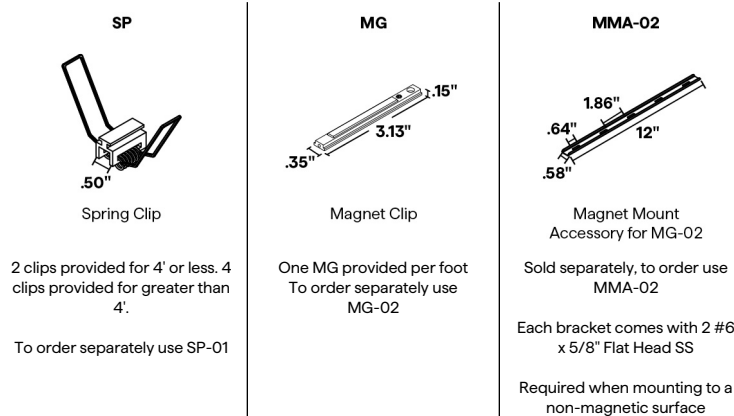
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



## 10 WIRE COLOR



## 12 MOUNTING



## 13 FINISH



Custom finishes require a longer lead time, consult factory

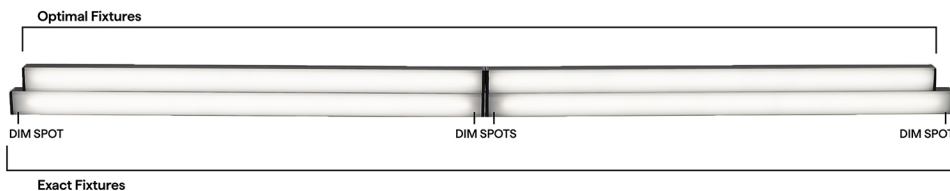
Custom finishes require a longer lead time, consult factory

## 14 EXACT/OPTIMAL FIXTURE LENGTH

[E/O Length Calculator →](#)

[E/O Explained →](#)

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.



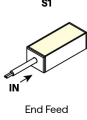


# ESSENTIALS EMBD-OPTICS (02) STATIC WHITE

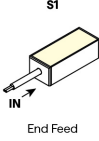
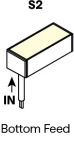
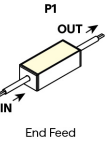
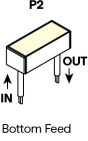
## 24VDC Linear Fixtures - Recessed

### SW DRY DMP LENGTHS BY INCH

#### EXACT LENGTH

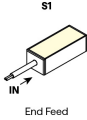
Requested Length	Potential dim spot on either end of a S1 fixture
	
12"	0.5"
13"	0.5"
14"	0.5"
15"	0.5"
16"	0.5"
17"	0.5"
18"	0.5"
19"	0.5"
20"	0.5"
21"	0.5"
22"	0.5"
23"	0.5"
24"	0.5"
36"	0.5"
48"	0.5"
60"	0.5"
72"	0.5"
84"	0.5"
96"	0.5"

#### OPTIMAL LENGTH

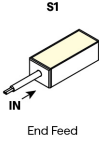
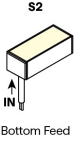
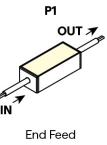
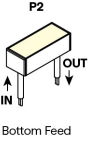
Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	11.41"		11.66"	
13"	12.41"		12.66"	
14"	13.41"		13.66"	
15"	14.41"		14.66"	
16"	15.41"		15.66"	
17"	16.41"		16.66"	
18"	17.41"		17.66"	
19"	18.41"		18.66"	
20"	19.41"		19.66"	
21"	20.41"		20.66"	
22"	21.41"		21.66"	
23"	22.41"		22.66"	
24"	23.41"		23.66"	
36"	35.41"		35.66"	
48"	47.41"		47.66"	
60"	59.41"		59.66"	
72"	71.41"		71.66"	
84"	83.41"		83.66"	
96"	95.41"		95.66"	

### SW WET LENGTHS BY INCH

#### EXACT LENGTH

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

#### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	11.56"		11.71"	
13"	12.56"		12.71"	
14"	13.56"		13.71"	
15"	14.56"		14.71"	
16"	15.56"		15.71"	
17"	16.56"		16.71"	
18"	17.56"		17.71"	
19"	18.56"		18.71"	
20"	19.56"		19.71"	
21"	20.56"		20.71"	
22"	21.56"		21.71"	
23"	22.56"		22.71"	
24"	23.56"		23.71"	
36"	35.56"		35.71"	
48"	47.56"		47.71"	
60"	59.56"		59.71"	
72"	71.56"		71.71"	
84"	83.56"		83.71"	
96"	95.56"		95.71"	



# ESSENTIALS EMBD-OPTICS (02) STATIC WHITE

24VDC Linear Fixtures - 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		OUTDOOR	
	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+
Dim to Black	Q6M-DC+CAP QTM-DC+CAP iQ-PH+QD1	Q6M-DC+CAP QTM-DC+CAP iQ-PH+QD1	QOM-DC+CAP QOM-PH	QOM-DC+CAP QOM-PH
0.1%	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	Q-SET-QZ-DMX Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QOM-eLED+DALI-DT6 QOM-eLED+PS-DALI-DT6 QZ-DMX QZ-PH/0-10V	Q-SET-QZ-DMX Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QOM-eLED+DALI-DT6 QOM-eLED+PS-DALI-DT6 QZ-DMX QZ-PH/0-10V
1%	QTM-eLED(E) QZ-DALI-DT6	QTM-eLED(E) QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QZ-DALI-DT6
10%	Non-Dim Power Supply with SW App Dongle	Non-Dim Power Supply with SW App Dongle	Q-HEX-mini-DC Q-SET-mLED	



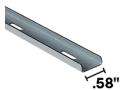
# ESSENTIALS EMBD-OPTICS (02) STATIC WHITE

24VDC Linear Fixtures - Recessed

DIMMING PROTOCOL	INDOOR		OUTDOOR	
	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+
Non-Dim	QT-CAB-eLED-ND QTM-eLED-ND QZ-ND	QT-CAB-eLED-ND QTM-eLED-ND QZ-ND	Q-SET-QZ-ND Q-SET-eLED-ND QOM-eLED-ND QZ-ND	Q-SET-QZ-ND Q-SET-eLED-ND QOM-eLED-ND QZ-ND
Phase	Q6M-DC+CAP QT-CAB-QZ-PH/0-10V QTM-DC+CAP QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP iQ-PH+QD1	Q6M-DC+CAP QT-CAB-QZ-PH/0-10V QTM-DC+CAP QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP iQ-PH+QD1	Q-HEX-mini-DC Q-SET-QZ-PH/0-10V Q-SET-mLED QOM-DC+CAP QOM-PH QZ-PH/0-10V	Q-SET-QZ-PH/0-10V QOM-DC+CAP QOM-PH QZ-PH/0-10V
0-10V	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QZ-PH/0-10V	Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QZ-PH/0-10V
Lutron Athena	QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6-AWN	QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6-AWN		
ECO System	QTM-eLED(E)	QTM-eLED(E)		
DMX	QZ-DMX	QZ-DMX	Q-SET-QZ-DMX QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-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	Q-SET+QZ-DALI-DT6 QOM-eLED+DALI-DT6 QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QOM-eLED+DALI-DT6 QZ-DALI-DT6
SCENE App Dimmed	Non-Dim Power Supply with SW App Dongle	Non-Dim Power Supply with SW App Dongle		

## COMPATIBLE MOUNTING ACCESSORIES

MMA-02



Magnet Mount Accessory  
of MG-02