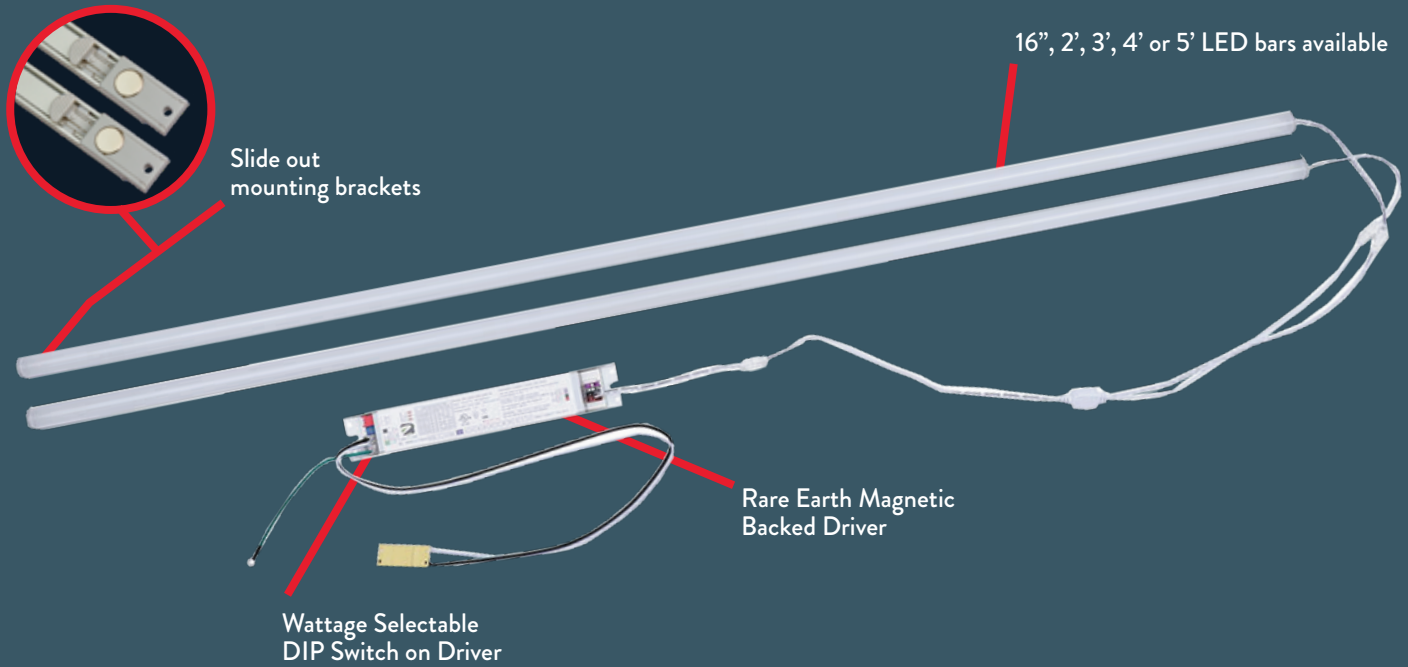


# MAGNILUMEN PLUS<sup>TM</sup>

## 16", 2', 3', 4' and 5' LED Magnetic Retrofit Kits

Magnilumen<sup>TM</sup> Plus is designed to retrofit fluorescent fixtures with standard 0-10 volt dimming. Kits are easy to install and fit into almost any existing linear fluorescent fixture with onboard magnets.



- **Enhanced Product Flexibility:** Wattage Selectable and Color Selectable (CSK - Color Selectable Kelvin in Retail Packs Only) options allow the end user to adjust lumen output and color temperature to application needs.
- **Ease of Use:** Pre-installed onboard magnets on both bars and driver. Slide out mounting brackets on bars, pre drilled holes on driver for easy screw mount installation. (Self drilling screws included).
- **DLC Listed:** 150 lm/W with frosted lens installed. Maximized energy savings: 170 lm/W with clear lens or 180 lm/W with no lens.

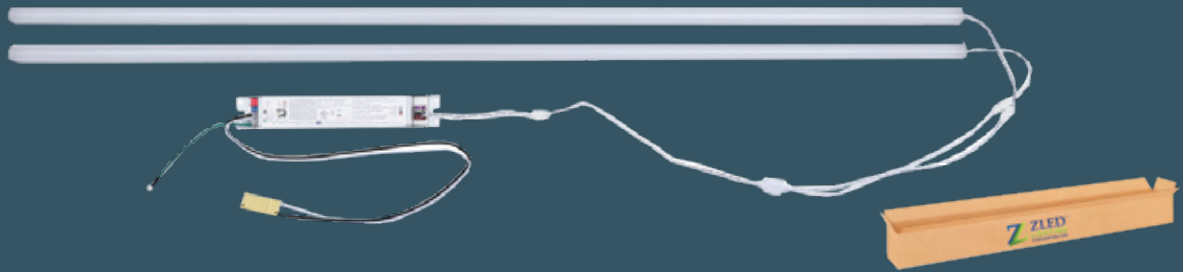
**APPLICATIONS**

- CHANNEL LIGHTS
- VAPOR TIGHTS
- TROFFER
- COVE LIGHTING
- SURFACE MOUNT
- HIGH BAYS
- SHELF DISPLAY
- RETAIL DISPLAY
- DIRECT & INDIRECT
- LINEAR HIGH BAY
- EMERGENCY
- INDOOR SIGNAGE

<b>WATTAGE</b>	Wattage selectable drivers
<b>COLOR TEMPS</b>	27K, 30K, 35K, 40K, 50K, 65K, Green, Blue, Orange, Yellow, Red, Amber, Black Light (color selectable in retail pack only)
<b>EFFICACY</b>	150 lm/W with Frosted Lens 170 lm/W with Clear Lens 180 lm/W with No Lens
<b>VOLTAGE INPUT</b>	100-277VAC 100-347VAC (special order)
<b>DRIVER OUT VOLTAGE</b>	27-42VDC
<b>CRI</b>	80+ (standard); 90+ (special order)
<b>DIMMING</b>	0-10VDC, (optional: TRIAC, DALI, LUTRON ECOSYSTEM)
<b>AMBIENT TEMP</b>	-20 to 50C; -40 to 122F
<b>SURGE PROTECTION</b>	2KV
<b>RATED</b>	IP20 for damp location
<b>WARRANTY</b>	7 years Magnilumen Standard, 5 years Color, 3 years Black Light
<b>LED LIFESPAN (L70)</b>	100,000 hours Magnilumen Standard 50,000 hours Colors
<b>FLICKER</b>	Meets Title 24 Flicker Requirements

# KIT OPTIONS

## JOB PACK



Magnetic LED bars, selectable magnetic driver, 24" harness, and screws  
(27K, 30K, 35K, 40K, 50K, 65K, Green, Blue, Yellow, Orange, Red, Amber, Black Light)

## RETAIL PACK



Magnetic LED bars, selectable magnetic driver, 24" harness  
with CSK switch (35K, 40K, 50K), and screws

### LUMEN OUTPUT

- 150 lm/W with Frosted Lens
- 170 lm/W with Clear Lens
- 180 lm/W with No Lens

### WATTAGE SELECTABLE

- Toolless wattage selectable option on driver via DIP switch.

#### MAXIMUM WATTAGE

- 2 foot: 15W per bar
- 3 foot: 20W per bar
- 4 foot: 30W per bar
- 5 foot: 38W per bar

### COLOR TEMPERATURE SELECTABLE STANDARD IN RETAIL PACKS, OPTIONAL IN JOB PACKS

- Toolless color temperature selectable option on harness via switch.
- 35K, 40K, 50K options available.

### INSTALLATION MADE EASIER

- Onboard magnets on LED bars, driver and CCT switch designed for quick and easy installation.
- Mounting brackets for screw mounting (where applicable).

# JOB PACK PART BUILDER

MRK	# of Bars	Length of Bar	Kit Wattage	Color Temp	PLUS	Options
	1 2 3 4	16 = 16 inches 2 = 2 feet (21.06 inches) 3 = 3 feet (30.91 inches) 4 = 4 feet (42.91 inches) 5 = 5 feet (58 inches)	20 = 20W Driver 30 = 30W Driver 40 = 40W Driver 50 = 50W Driver 60 = 60W Driver 100 = 100W Driver  Max wattage per bar by length 16" - 10W Max 2 ft. - 15W Max 3 ft. - 22W Max 4 ft. - 30W Max 5 ft. - 38W Max	27K = 2700K 30K = 3000K 35K = 3500K 40K = 4000K 50K = 5000K 65K = 6500K AMBER-585NM = TURTLE SAFE AMBER NO UV BLACK = BLACK LIGHT ❶ BLUE = BLUE LED GREEN = GREEN LED ORANGE = ORANGE LED RED = RED LED YELLOW = YELLOW LED AMBER = AMBER LED		90CRI = HIGH CRI AO = AUX 12V OUTPUT AO Drivers - available in 20, 40, 60 W BL = MAGNIBLEND CL = CLEAR LENS EM = EMERGENCY BATTERY BACKUP MS = FACTORY SUPPLIED INFRARED (PIR) MOTION SENSOR MV = FACTORY SUPPLIED MICROWAVE MOTION SENSOR NL = NO LENS or DIFFUSER TR = DRIVER WITH TRIAC DIMMING DALI = Includes DALI 2 Driver LUTRON = Includes Lutron® Hi-Lume® 1% ECOSYSTEM® 3 Wire Driver



All Color Bars 2ft and 4ft only.

Consult factory for additional drivers.

❶ = Black Light Max Wattages  
20W - 4 ft.

Lutron, Hi-Lume and EcoSystem are all registered trademarks.

## 2 FOOT RETAIL KIT

150 lm/W with Frosted Lens, 170 lm/W, with Clear Lens, 180 lm/W with No Lens



PRODUCT NUMBER	COLOR TEMP CSK	QTY/ LENGTH	DRIVER	WATTAGE	LUMENS WITH LENS	LUMENS WITHOUT LENS	RATED	DLC CODE	UPC BARCODE
MRK2220-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 2 ft = 21.06"	20W	Max. 20W	3000	3600	ETL, DLC	PH6IV9OX	080101407472
MRK2230-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 2 ft = 21.06"	30W	Max. 30W	4500	5400	ETL, DLC	P6Q72IGJ	080101408448

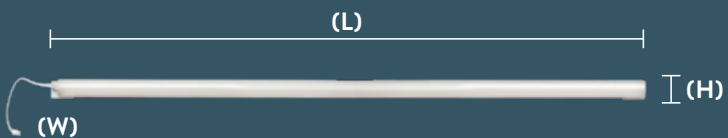
## 4 FOOT RETAIL KIT

150 lm/W with Frosted Lens, 170 lm/W, with Clear Lens, 180 lm/W with No Lens



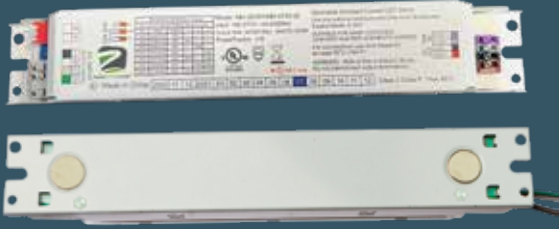
PRODUCT NUMBER	COLOR TEMP CSK	QTY/ LENGTH	DRIVER	WATTAGE	LUMENS WITH LENS	LUMENS WITHOUT LENS	RATED	DLC CODE	UPC BARCODE
MRK2420-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	20W	Max. 20W	3000	3600	ETL, DLC	PTML224Q	080101408271
MRK2430-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	30W	Max. 30W	4500	5400	ETL, DLC	PDL8J2HO	080101407922
MRK2440-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	40W	Max. 40W	6000	7200	ETL, DLC	P4S826L6	080101407977
MRK2450-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	50W	Max. 50W	7500	9000	ETL, DLC	S-KYTS7G	080101408028

## DIMENSIONS



	L	W	H
16 inch	16"	.72"	.75"
2 feet	21.06"	.72"	.75"
3 feet	30.91"	.72"	.75"
4 feet	42.91"	.72"	.75"
5 feet	58"	.72"	.75"

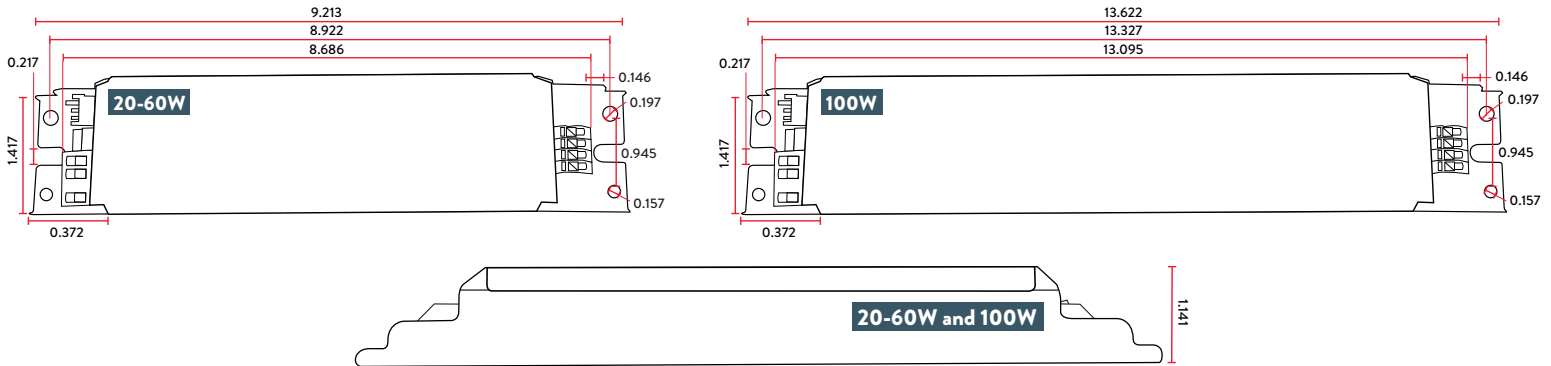
# MAGNILUMEN PLUS DRIVER SPECIFICATIONS



MODEL NUMBER	DEFAULT WATTAGE	INPUT VOLTAGE	POWER FACTOR	EFFICIENCY	THD	OUTPUT VOLTAGE
MRK-DRIVER-20W-2H-PLUS	20W	100-277VAC	≥0.9	≥88%	≤10%	27-42VDC
MRK-DRIVER-30W-2H-PLUS	30W	100-277VAC	≥0.9	≥88%	≤10%	27-42VDC
MRK-DRIVER-40W-2H-PLUS	40W	100-277VAC	≥0.9	≥88%	≤10%	27-42VDC
MRK-DRIVER-50W-2H-PLUS	50W	100-277VAC	≥0.9	≥88%	≤10%	27-42VDC
MRK-DRIVER-60W-2H-PLUS	60W	100-277VAC	≥0.9	≥88%	≤10%	27-42VDC
MRK-DRIVER-100W-4WH-PLUS	100W	100-277VAC	≥0.9	≥88%	≤10%	27-42VDC

## MAGNILUMEN PLUS DRIVER DIMENSIONS

(Unit: inches)

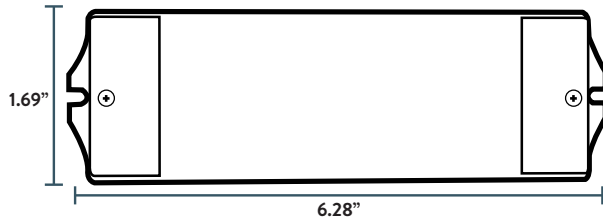


## DIMMABLE LED TRIAC DRIVER WITH 5 IN 1 DIMMING (WATTAGE SELECTABLE)

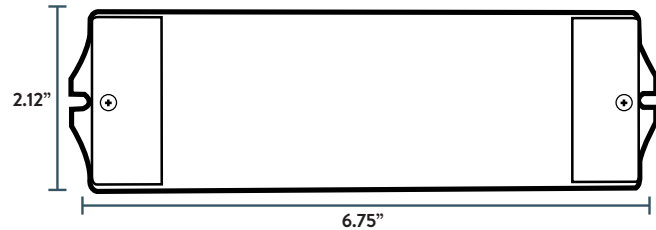
20W, 40W, 60W with DIP Switch (Triac, Forward Phase, MLV, ELV, 0-10V)

Input Voltage: 100-277VAC

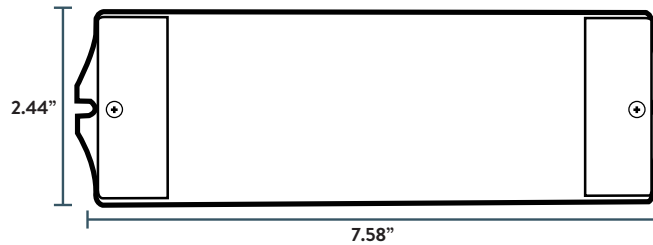
20W CONSTANT CURRENT DRIVER WITH DIP SWITCH



40W CONSTANT CURRENT DRIVER WITH DIP SWITCH



60W CONSTANT CURRENT DRIVER WITH DIP SWITCH



MODEL NUMBER	DEFAULT WATTAGE	INPUT VOLTAGE	POWER FACTOR
ZL-DRIVER-20W-TRIAC	20W	100-277VAC	>0.95
ZL-DRIVER-40W-TRIAC	40W	100-277VAC	>0.95
ZL-DRIVER-60W-TRIAC	60W	100-277VAC	>0.95

# WATTAGE DRIVER LUMENS

## DRIVER WATTAGE POWER SELECTABLE OPTIONS

Wattage selectable options allow the end user to adjust lumen output to their specific needs.

DEFAULT WATTAGE	WATTAGE POWER SELECTABLE OPTIONS
20W	8W, 10W, 14W, 16W, 18W, 20W, 22W
30W	10W, 16W, 20W, 24W, 28W, 30W, 32W
40W	24W, 28W, 30W, 32W, 38W, 40W, 42W
50W	25W, 30W, 38W, 40W, 45W, 50W, 52W
60W	40W, 45W, 50W, 55W, 57W, 60W, 62W
100W	65W, 70W, 75W, 85W, 90W, 95W, 100W



Toolless Wattage Selectable Switch (red switch)

- Setting info on driver and website.

## SUGGESTED FIXTURE LUMENS CHART FOR MAGNILUMEN PLUS RETROFITS

WATTAGES	150 lm/W with Frosted Lens		WATTAGES	170 lm/W with Clear Lens		WATTAGES	180 lm/W with No Lens	
	MAGNILUMEN PLUS	SUGGESTED FIXTURE		MAGNILUMEN PLUS	SUGGESTED FIXTURE		MAGNILUMEN PLUS	SUGGESTED FIXTURE
8W	1,200		8W	1,360		8W	1,440	
10W	1,500		10W	1,700		10W	1,800	
14W	2,100		14W	2,380		14W	2,520	
16W	2,400		16W	2,720		16W	2,880	
18W	2,700		18W	3,060		18W	3,240	
20W	3,000	← 2'x2'	20W	3,400	← 2'x2'	20W	3,600	← 2'x2'
22W	3,300		22W	3,740		22W	3,960	
24W	3,600		24W	4,080		24W	4,320	
25W	3,750		25W	4,250		25W	4,500	
28W	4,200		28W	4,760		28W	5,040	
30W	4,500		30W	5,100		30W	5,400	
32W	4,800	← 2'x4' (8-10')	32W	5,440	← 2'x4' (8-10')	32W	5,760	← 2'x4' (8-10')
34W	5,100		34W	5,780		34W	6,120	
35W	5,250		35W	5,950		35W	6,300	
38W	5,700		38W	6,460		38W	6,840	
40W	6,000	← 2'x4' (10' and above)	40W	6,800	← 2'x4' (10' and above)	40W	7,200	← 2'x4' (10' and above)
42W	6,300		42W	7,140		42W	7,560	
45W	6,750		45W	7,650		45W	8,100	
47W	7,050		47W	7,990		47W	8,460	
50W	7,500	← Low Bay	50W	8,500	← Low Bay	50W	9,000	← Low Bay
52W	7,800		52W	8,840		52W	9,360	
55W	8,250		55W	9,350		55W	9,900	
57W	8,550		57W	9,690		57W	10,260	
60W	9,000		60W	10,200		60W	10,800	
62W	9,300		62W	10,540		62W	11,160	
65W	9,750		65W	11,050		65W	11,700	
70W	10,500		70W	11,900		70W	12,600	
75W	11,250		75W	12,750		75W	13,500	
85W	12,750		85W	14,450		85W	15,300	
90W	13,500		90W	15,300		90W	16,200	
95W	14,250		95W	16,150		95W	17,100	
100W	15,000	← High Bay	100W	17,000	← High Bay	100W	18,000	← High Bay

These are suggested lumen fixture packages based upon photometrics and manufacturers experience. Vital decisions may vary based on actual criteria. For High Bays above 20ft Use High Output Magnilumen™ Kits.

# ENCLOSURES FOR MAGNILUMEN PLUS DRIVERS

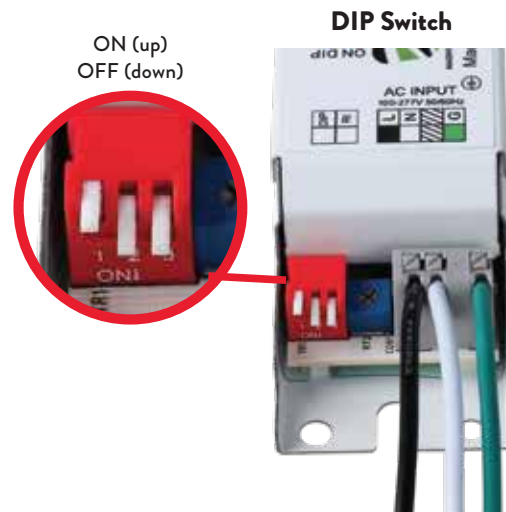


## 100W DRIVER ENCLOSURE (with two knockouts)

PN: MRK-100W-DRIVER-ENCLOSURE  
 DIMENSIONS: 16" (L) x 1.75" (W) x 1.3125" (D)

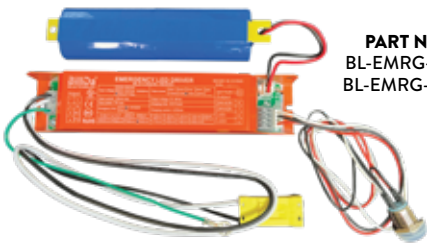
## 20-60W DRIVER ENCLOSURE (with two knockouts)

PN: MRK-20/60W-DRIVER-ENCLOSURE  
 DIMENSIONS: 12" (L) x 1.75" (W) x 1.3125" (D)



# OPTIONS

## EMERGENCY BACK-UP LED DRIVER



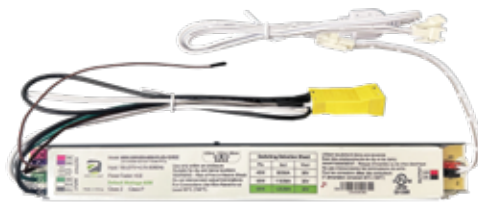
**PART NUMBER:**  
 BL-EMRG-LED-15-1H  
 BL-EMRG-LED-20-1H

Plug and Play To Magnilumen™ Retrofit Kit  
 90 Minutes Minimum Run time in Emergency Mode  
 2200L in Emergency Mode

## SENSORS



## AO DRIVERS WITH 12V AUXILIARY OUTPUT FOR CONTROLS



Wattage Selector Switch

## FEATURES

### 20/30/40W Selectable

- Built-in 0-10V adjustable power LED Driver
- 12V 0.1A Auxiliary source
- Output current 470mA; 660mA; 880mA
- Selectable Wattage: 20W, 30W, 40W
- For luminaires of protection Class P

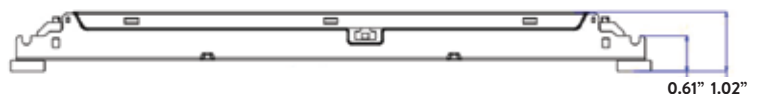
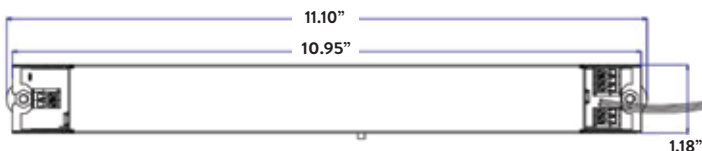


### 40/50/60W Selectable

- Built-in 0-10V adjustable power LED Driver
- 12V 0.1A Auxiliary source
- Output current 900mA; 1100mA; 1250mA
- Selectable Wattage: 40W, 50W, 60W
- For luminaires of protection Class P



Part Number	Default Wattage	Input Voltage	Power Factor	Efficiency	THD	Output Voltage	Output Current
MRK-DRIVER-40W-2WH-AO-PLUS	40W	120-277VAC	≥0.9	>85%	<20%	27-42VDC	470mA @ 20W; 660mA @ 30W; 880mA @ 40W
MRK-DRIVER-60W-2WH-AO-PLUS	60W	120-277VAC	≥0.9	>85%	<20%	27-42VDC	900mA @ 40W; 1100mA @ 50W; 1250mA @ 60W



# OPTIONS – HARNESSSES

A 2-Way harness is standard with kits but unique situations might require a special harness. 1, 3, and 4-Way harness options are available.

## PLUG & PLAY HARNESSSES & EXTENSIONS

### 1-WAY HARNESS – Connects 1 LED bar to 1 driver

**PART NUMBER: HARNESS-1-WAY-12IN**

Connects 1 LED bar to 1 driver.

Main Lead



Leads to LED Bars

**PART NUMBER: HARNESS-1-WAY-16IN**

Connects 1 LED bar to 1 driver.



**PART NUMBER: HARNESS-1-WAY-24IN**

Connects 1 LED bar to 1 driver.



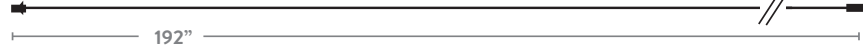
**PART NUMBER: HARNESS-1-WAY-8FT**

Connects 1 LED bar to 1 driver, with an 8 ft extension on driver end



**PART NUMBER: HARNESS-1-WAY-16FT**

Connects 1 LED bar to 1 driver, with a 16 ft extension on driver end



### 2-WAY HARNESS (STANDARD) – Connects 2 LED bars to 1 driver

**PART NUMBER: HARNESS-2-WAY**

Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"



**PART NUMBER: HARNESS-2-WAY-OPT**

Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"

### 3-WAY HARNESS – Connects 3 LED bars to 1 driver

**PART NUMBER: HARNESS-3-WAY**

Lead from driver connection to splitter: 11.00"; 3 leads to bars: each 11.75"



**PART NUMBER: HARNESS-3-WAY-EXT (2 short, 1 long)**

Has 6 ft extension on driver end. Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"; 1 lead to bars: 72.00"



### 4-WAY HARNESS – Connects 4 LED bars to 1 driver

**PART NUMBER: HARNESS-4-WAY**

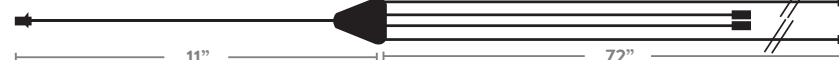
Lead from driver connection to splitter: 11.00"; 4 leads to bars: each 11.75"



**PART NUMBER: HARNESS-4-WAY-2-WAY-EXT**

(2 long, 2 short)

2 leads have 6 ft extension. Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"; 2 leads to bars: 72.00"



## CSK SWITCH – PLUG & PLAY HARNESSSES

Color Selectable Switch with Magnetic Back



**PART NUMBER: HARNESS-2-WAY-CSK-SWITCH**

Lead from driver connection to CSK switch: 11.00";  
2 leads to bars: each 11.75"



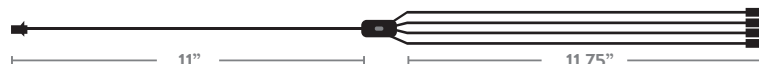
**PART NUMBER: HARNESS-2-WAY-4-WAY-CSK-SWITCH**

Lead from driver connection to CSK switch: 11.00";  
2 leads each to 4 bars: each 11.75"



**PART NUMBER: HARNESS-4-WAY-CSK-SWITCH**

Lead from driver connection to CSK switch: 11.00";  
4 leads to bars: each 11.75"



## OPTIONAL MOUNTING HARDWARE

### MAGNETS FOR DIRECTIONAL USE

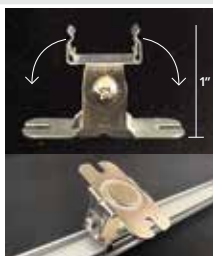
45 Degree Angle Magnet

**PART NUMBER:**  
MAG-NO-HOOK-45DEG



Magnet with Hook (adjustable 0-180 degrees)

**PART NUMBER:**  
MAG-HOOK-ADJUSTABLE



### MOUNTING MAGNETS AND HARDWARE

Magnet with Hook

**PART NUMBER:**  
MAG-HOOK



Clip with No Magnet, No Hook

**PART NUMBER:**  
NO-MAG-NO-HOOK



No Hook Magnet

**PART NUMBER:**  
MAG-NO-HOOK



All Magnilumen™ LED Bars come with onboard magnets and self-drilling screws standard. Additional mounting magnets and hardware available.