

Our retrofit LED lighting solutions are designed for vapor tight fixtures to withstand the harsh environments of agricultural applications. Agricultural and livestock lighting requires specialized fixtures designed to resist corrosion, ammonia, and high-pressure washdowns while optimizing animal health and productivity.



Cattle/Dairy Barn



Swine Barn



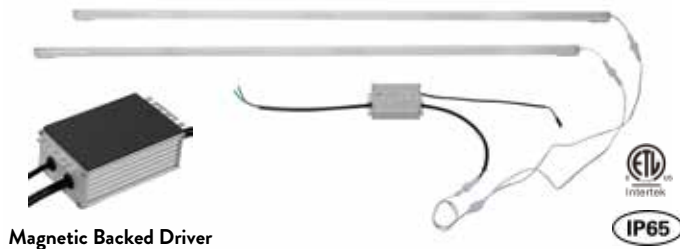
Poultry House



Horse / Equine Barn

Ideal for agricultural and livestock environments, including dairy barns, poultry houses, swine facilities, horse barns, and other animal housing areas.

Magnilumen Plus Agriculture



MAGNILUMEN PLUS FEATURES

WATTAGE	Programmable Driver 40W, 50W, 60W
COLOR TEMPS	30K, 35K, 40K, 50K, Red, Green, Blue, Amber
EFFICACY	150 lm/W with Frosted Lens 170 lm/W with Clear Lens 180 lm/W with No Lens Amber - 41 lm/W Red - 36 lm/W Blue - 80 lm/W Green - 125 lm/W
NANOMETERS	Amber - 585nm Red - 620-622.5nm Blue - 450-452.5nm Green - 520-522.5nm
VOLTAGE INPUT	100/277V; 120/277V - Color
DRIVER OUT VOLTAGE	27-54VDC
CRI	80+; Standard >80 - Color
DIMMING	0-10VDC
AMBIENT TEMP BARS	-20°C to 50°C; -4°F to 122°F
AMBIENT TEMP DRIVER	-40° to 90°C; -40° to 48.2°F -40° to 50°C; -40° to 122°F
SURGE PROTECTION	6KV
RATED	IP67 - Driver; IP65 - Bars via silicone encapsulation IP20 - Color
LISTED	ETL
WARRANTY	5 year; 3 year - Color
LED LIFESPAN (L70)	100,000 hours; 50,000 hours - Color
FLICKER	Meets Title 24 Flicker Requirements
LENGTH	2ft - 21.06"; 4ft - 42.75"
WIDTH	.73"
DRIVER VIBRATION TEST	10- 500Hz X, Y, Z vertical axes vibrate at a constant acceleration of 1.0G (depth 3.5mm) for 1 hour
EMERGENCY BATTERY	Optional
LENS	Clear - Included; (Frosted Lens or No Lens Optional)

Magnilumen Plus Agriculture High Output



HIGH OUTPUT FEATURES

WATTAGE	2ft- 30W; 4ft- 60W
COLOR TEMPS	40K, 50K
EFFICACY	155 lm/W with Frosted Lens 165 lm/W with Clear Lens 173 lm/W with No Lens
LUMENS	Up to 10,000 Lumens Per LED Bar
VOLTAGE INPUT	100/277V
DRIVER OUT VOLTAGE	27-54VDC
CRI	80+
DIMMING	0-10V
AMBIENT TEMP BARS	-20°C to 50°C; -4°F to 122°F
AMBIENT TEMP DRIVER	-40° to 90°C; -40° to 48.2°F
SURGE PROTECTION	6KV
RATED	IP67 - Driver; IP65 - Bars via silicone encapsulation
LISTED	ETL
WARRANTY	5 year
LED LIFESPAN (L70)	50,000 hrs.
FLICKER	Meets Title 24 Flicker Requirements
LENGTH	2ft - 21.06"; 4ft - 42.75"
WIDTH	1"
DRIVER VIBRATION TEST	10- 500Hz X, Y, Z vertical axes vibrate at a constant acceleration of 1.0G (depth 3.5mm) for 1 hour
EMERGENCY BATTERY	Optional
LENS	Frosted - Included (Clear Lens or No Lens Optional)

Magnilumen Plus Bars for Agriculture and Livestock are design with watertight connections, conformal coating, and drivers are IP65 rated.

A well-designed agricultural lighting system should provide consistent illumination, reduce shadows and dark areas, provide adequate visibility for animals and workers, operate reliably, provide appropriate periods of light and darkness where required, use energy efficiently, and minimize maintenance requirements. Let's work together to develop a lighting solution tailored to the specific needs of your operation.



RED – Poultry, swine, nighttime observation
Can be useful for low-disruption nighttime lighting



GREEN – Poultry and specialty agricultural applications
Tailored LED systems regulate circadian rhythms in poultry, swine, and calves, improving immunity, metabolism, and bone development; application should be carefully selected



BLUE – Specialty poultry applications
Blue light has been studied for effects on bird behavior, stress, and physiological responses. Results vary with wavelength, intensity, age, and lighting program.



AMBER – Outdoor agricultural areas, wildlife-sensitive locations
Useful where reduced blue light is desired



MAGNILUMEN PLUS AGRICULTURE PART BUILDER

MRK	# of Bars	Length of Bar	Wattage	Color	PLUS	Options
	1 2 3 4	2 = 2 feet 4 = 4 feet	40W 50W 60W	30K 35K 40K 50K		NL = No Lens FL = Frosted Lens EM15 = 15W Emergency Battery Backup EM20 = 20W Emergency Battery Backup EMV = Factory Supplied External Microwave Motion Sensor* IMV = Factory Supplied Internal Microwave Motion Sensor*

MRK	# of Bars	Length of Bar	Color Temp	PLUS
	1 2 3 4	4 = 4 feet (42.91 inches) 2 = 2 feet (21.06 inches) (Special Order)	AMBER = AMBER RED = RED BLUE = BLUE GREEN = GREEN	

* Remote Sold Separately

Required power supply for motion sensor included

MAGNILUMEN PLUS AGRICULTURE HIGH OUTPUT PART BUILDER

MRK	# of Bars	Length of Bar	Wattage	Color	PLUS-HO	Options
	1 2	2 = 2 feet 4 = 4 feet	30W = 2 feet 60W = 4 feet	40K 50K		NL = No Lens CL = Clear Lens EM15 = 15W Emergency Battery Backup EM20 = 20W Emergency Battery Backup EMV = Factory Supplied External Microwave Motion Sensor* IMV = Factory Supplied Internal Microwave Motion Sensor*

* Remote Sold Separately

Required power supply for motion sensor included

Disclaimer: Optional accessories such as motion sensors and backup LED drivers are available for agriculture applications; however, no warranty is offered on these items. Due to the harsh conditions and high salt content present in coastal and marine environments, these components are more susceptible to corrosion and premature failure.

HAZLOC WARNING: Magnilumen Agriculture retrofit kits and accessories are not rated for hazardous location fixtures. Do not install in classified hazardous fixtures where explosive gases, vapors, or combustible dusts may be present.



LUMENS

Magnilumen Plus Agriculture

WATTAGE	LUMENS WITH FROSTED LENS (STANDARD)	LUMENS WITH CLEAR LENS (OPTIONAL)	LUMENS WITH NO LENS
40	5400	6120	6480
50	6750	7650	8100
60	8100	9180	9720

COLOR	EFFICACY	NANOMETERS
Red	36 lm/W	620-622.5nm
Green	125 lm/W	450-452.5nm
Blue	80 lm/W	520-522.5nm
Amber	41 lm/W	585nm

Magnilumen Plus Agriculture High Output

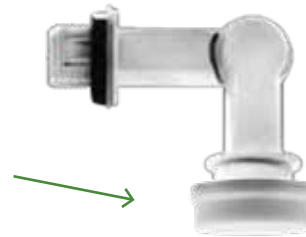
WATTAGE	LUMENS WITH FROSTED LENS (STANDARD)	LUMENS WITH CLEAR LENS (OPTIONAL)	LUMENS WITH NO LENS
30	4050	4590	4860
60	8100	9180	9720

OPTIONS

EXTERNAL MICROWAVE MOTION SENSOR

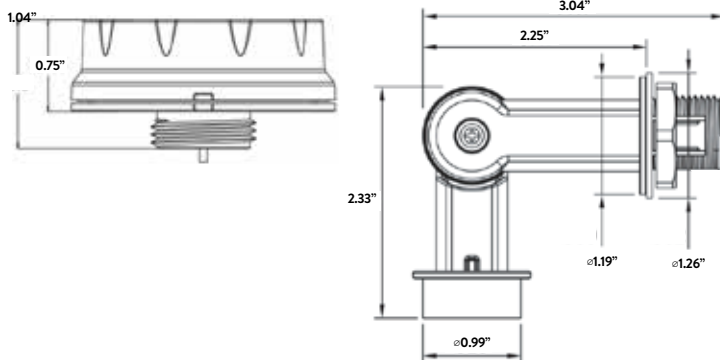
- Power Supply: 10-15VDC, <30mA
- HF System: 5.8GHz+75MHz
- Dim Control Output: DIM 0-10V
- Detection Distance: ≥3m/9ft
- Mounting Height: 12m/39ft Max.
- Input Range: 12VDC
- Temperature: -40°F-140°F (-40°C-60°C)

• Part Number: EMV

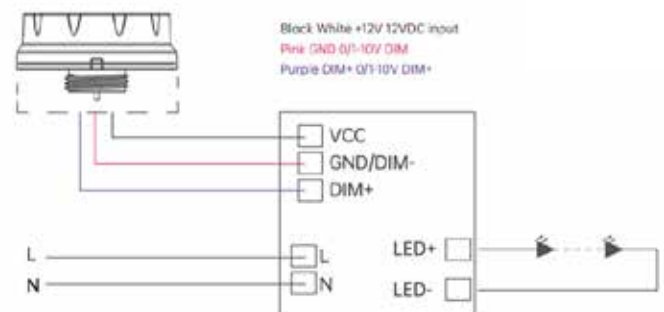


Part Number: ZL-REMOTE-HD05R
(Sold Separately)

DIMENSIONS



WIRING DIAGRAM



SENSOR POWER SUPPLY

- Input: 100-277VAC 50/60Hz
- Input Power: 5.5W Max
- Output: 12VDC 250mA
- Required power supply for motion sensor included



Disclaimer: Optional accessories such as motion sensors and backup LED drivers are available for marine-grade applications; however, no warranty is offered on these items. Due to the harsh conditions and high salt content present in coastal and marine environments, these components are more susceptible to corrosion and premature failure.

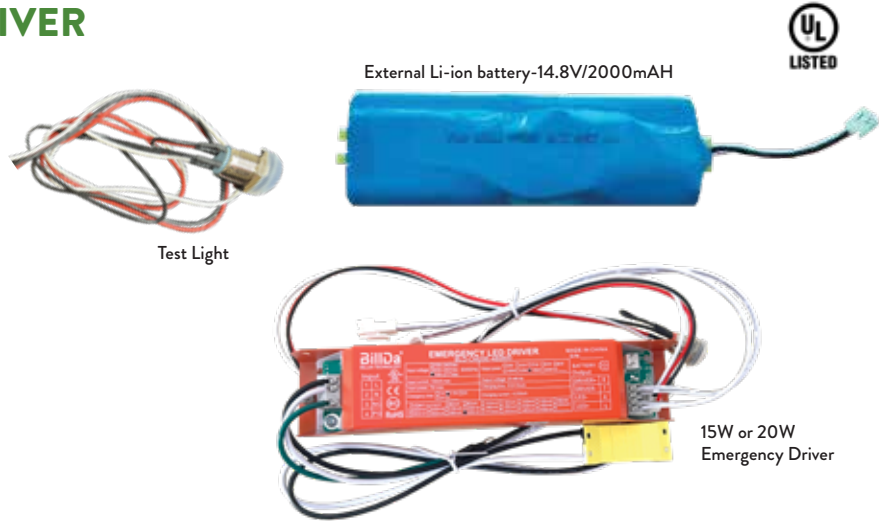
OPTIONS

EMERGENCY BACK-UP LED DRIVER

- **Wattages:** 15W, 20W
- **Voltage Input:** 120/277V
- **Battery:** External Li-ion battery-14.8V/2000mAH
- **Battery Charging Time:** 24 hours
- **Operating Temperature:** 32 to 104F
- **Indicator:** Test switch and charging indicator light
- **Emergency Time:** 1.5 hours
- **Driver Dimensions (LxHxD):** 15W: 7.4" x 1.5" x 1.1"
20W: 7.4" x 1.5" x 1.2"
- **Battery Dimensions (LxHxD):** 15W: 6" x 1.5" x .75"
20W: 6" x 2.25" x .75"
- **Plug and Play Installation**
- **Warranty:** 5 year
- **Listed:** UL

- **Part Number:** BL-EMRG-LED-15-1H
BL-EMRG-LED-20-1H

LUMENS	15W	20W
150 lm/W with Frosted Lens	2,250	3,000
170 lm/W with Clear Lens	2,550	3,400
180 lm/W with No Lens	2,700	3,600



INTERNAL MICROWAVE MOTION SENSOR

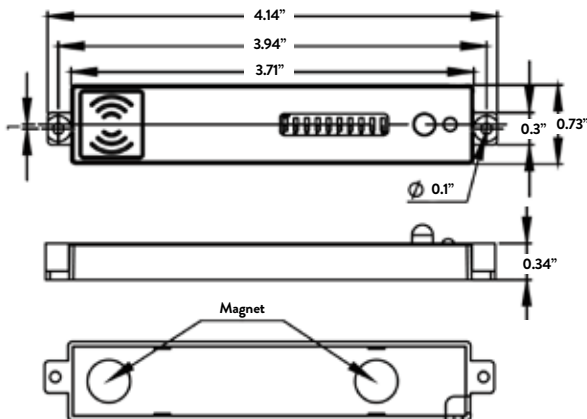
- **Power Supply:** 12V-24VDC, >50mA
- **HF System:** 5.8GHz+75MHz
- **Dim Control Output:** 0-10V, max. 25mA sinking current
- **Detection Radius / Angle:** 0-10V, max. (5.m) @8ft. (2.5) height/360°
- **Mounting Height:** Max. 20ft (6m)
- **Remote Range:** 50ft. (15m) indoor, no blacklight
- **Humidity:** Max. 95% RH
- **Temperature:** -40°F-158°F (-40°C-70°C)

- **Part Number:** IMV



Part Number: ZL-REMOTE-RC-100
(Sold Separately)

DIMENSIONS



WIRING DIAGRAM

