## **100<sup>+</sup> YEARS** OF PROTECTING PROFESSIONALS THROUGH INNOVATIVE LIGHTING





A Marmon Group/Berkshire Hathaway Company

## GLOBAL LEADER in innovative safety products that erase darkness.

Koehler Bright Star is located in Hanover Township, Pennsylvania, USA and is a member of the Marmon Group/ Berkshire Hathaway Company. The Marmon Group is an international association of manufacturing and service companies which consists of over 150 autonomously run business units, located in 300 facilities in 22 countries and employs 17,000 employees.

Koehler Bright Star was founded in 1909 as a battery manufacturer. In the 1930's Koehler Bright Star developed and produced the first plastic safety certified flashlight for use in hazardous locations. During the past century the technology has changed significantly but the extreme conditions that our products operate in have not.

Today, Koehler Bright Star develops and manufactures most products in Pennsylvania. Our business focus remains on markets that require products that will normally operate in extreme and hazardous environments.

Our R&D, supply chain, manufacturing and quality systems are structured to integrate top technology into durable and safe lighting products. Koehler Bright Star products are offered through our global distributor network. If durability and safety are a requirement, then Koehler Bright Star is the right choice.

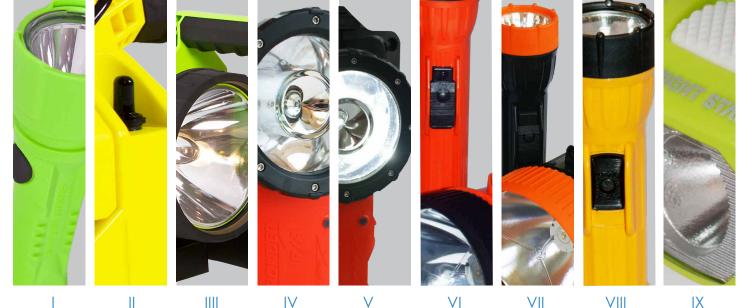






ISO 9001:2015 certified

### TABLE OF CONTENTS



I: RAZOR2 & RAZOR P. 6-7 Maximum LED brightness at 325 lumens with the highest safety ratings

II: LIGHTHAWK GENII P. 8-9 Super Bright, long run time and lightweight

III: LIGHTHAWK VISION 600 P. 10-11 Powerful 600 Lumens with a flood beam

IV: RIGHT ANGLE LED ALKALINE P. 12-13 Optimal brightness, safety, and weight

V: RA LED RECHARGEABLE P. 14-15 Intrinsically safe and rechargeable li-ion battery

VI: WORKSAFE LED P. 16-17 Most affordable and safest lights on the market



#### VII: WORKSAFE LED ATEX P. 18-19 Safest in hazardous environments

VIII: INDUSTRIAL 2618 P. 20-21 Extremely durable industrial grade switch with a super tough polycarbonate lens

#### IX: VISION LED HEADLAMP P.22-23 Hands-free, lightweight, spot and flood

### Safety Ratings: P. 4-5

Learn about key ratings and guidelines for testing our entire product line.



## Manufacturer of the **Safest Flashlights in the WORLD**

## Understanding Intrinsic Safety Ratings

Intrinsic safety is a protection technique for the safe operation of electrical equipment by limiting electrical and thermal energy available for ignition in hazardous areas.

### UNDERSTANDING CLASSES: The National Electric Code (NEC) defines hazardous locations by "Class" & "Division." There are 3 classes:

Class 1 locations are made hazardous by the presence of flammable gases, liquids, or vapors. Class 2 locations are hazardous because combustible dusts are

Class 3 locations contain easily ignitable fibers or flyings.



### UNDERSTANDING GROUPS:

#### Group A Acetylene

#### Group B Hydrogen

**Group C** Ethylene, and carbon monoxide

Group D Propane, gasoline, naphtha, benezene, Group E Metals including aluminum, and

**Group F** Carbonaceous dusts including coal,

Group G Dusts not included in E and F including



### **UNDERSTANDING DIVISIONS:**

The "division" designation refers to the likelihood that ignitable concentrations of flammable materials are present. There are two divisions:

**Division 1** designates an environment where ignitable concentrations of flammable gases, liquids, vapors, or dust can exist some of the time or all of the time under normal operating conditions, or where easily ignitable fibers and flyings are manufactured, handled, or used.

**Division 2** locations are where ignitable concentrations are not likely to exist under normal operating conditions or where Class 3 materials are stored or handled.

## WHAT'S IN A **RATING?**

#### **DEFINITION OF ZONE OR DIVISION**

**ZONE 0:** An area in which an explosive mixture is continuously present or present for long periods

ZONE I / DIVISION I: An area in which an explosive mixture is likely to occur in normal operation

ZONE II / DIVISION II: An area in which an explosive mixture is not likely to occur in normal operation and if it occurs it will exist only for a short time

If you may be working in a hazardous location, choose a flashlight designed to meet global protection methods, both UL and ATEX/IECEx for use under the type of conditions you could encounter there.

### UNDERSTANDING FL1 STANDARDS:



Light Output is the total luminous flux. It is the overall quantity of emitted overall light energy as measured by integrating the entire angular output of the portable light source. Light output in this standard is expressed in inits of lumens

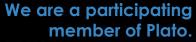


Run Time is defined as the duration of time from the initial ight output value - defined as 30 econds after the point the device is first turned on - using fresh batteries, until the light output reaches 10% of the initial



Beam Distance is defined as the distance from the device to which the light beam is 0.25 lux (0.25 lux is approximately the equivalent of the light emitted from the full moon "on a clear night in an open field").







#### NORTH AMERICAN CLASSIFICATION

- Class | Division | (gases) **Class II Division I (dusts)** Class I Division I (gases) **Class II Division I (dusts)**
- Class I Division II (gases)
- Class II Division II (dusts)

#### **EUROPEAN & IEC** ASSIFICATION Zone 0 (gases) Zone 20 (dusts) Zone 1 (gases) Zone 21 (dusts) Zone 2 (gases)

Zone 22 (dusts)



Waterproof up to at least an IPX7 rating which means the sample is submerged to a minimum of 1 meter depth for 30 minutes. If this test is performed it must be done after impact resistance is completed to ensure water resistance under real-life conditions



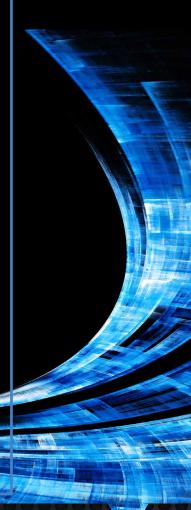
Impact Resistance is the height, measured in meters, from which the light can be dropped onto cured concrete and still work properly. Dropped samples cannot have any visible cracks or breaks and must remain fully unctional to receive rating



Peak Beam Intensity is the orightest point in the beam neasured in candela. Candela s the modern unit of measurement for light intensity eplacing the now obsolete uni know as candlepower

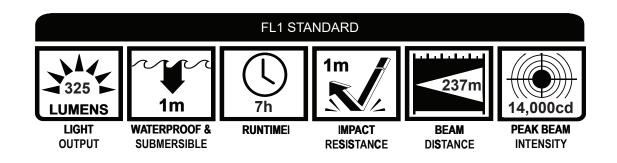


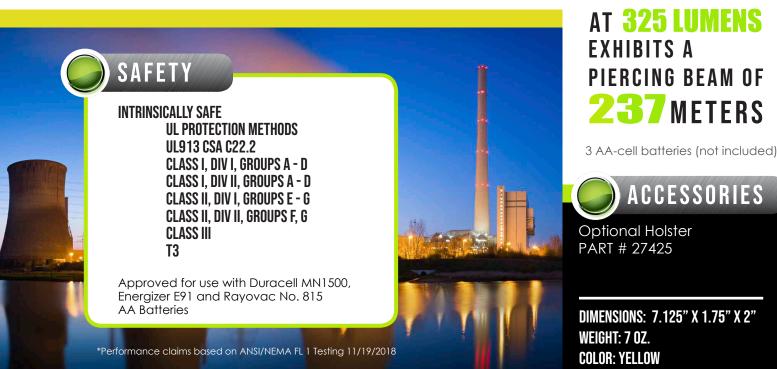




## Intrinsic LED RAZOR2

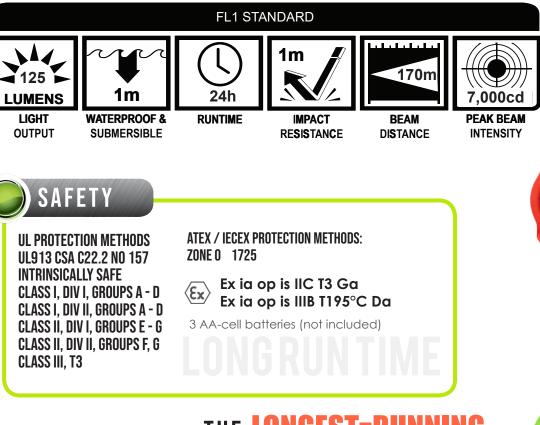






## Intrinsic LED RAZOR

The Razor and the Razor 2 were designed for the most demanding needs in hazardous locations. Constructed from durable polypropylene that can withstand the most abusive environments, these lightweight flashlights feature an ergonomically designed push button switch for easy accessibility and a secure grip design for maximum comfort. Watertight, they will float if dropped in water and are dust tight. Tail slot for lanyard.



**Optional Holster** PART # 27425

ACCESSORIES

DIMENSIONS: 7.125" X 1.75" X 2" WEIGHT: 7 OZ. COLOR: BLACK, SAFETY ORANGE, HI-VIS GREEN

## THE LONGEST-RUNNING FLASHLIGHT IN ITS CLASS

Black Model # 60100

Hi-Vis Green Model# 60101

Safety Orange Model # 60102



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**FLASHLIGHT.COM** 



The Lighthawk Lantern was the first lantern developed with Lithium Ion Rechargeable Battery Technology, bringing the most reliable battery technology to the flashlight market. Long run times, fast recharge times and extremely lightweight.

Developed to reduce the overall weight of equipment carried into a fire scene or work place. Extremely lightweight for the hand lantern class at 1.9lbs with a smoke piercing beam at 300 Lumens.

#### TRUSTED BY THE FOLLOWING PROFESSIONS:

Designed for the demanding needs and environments of the Fire, Service, Utility and Transit markets. Meets NFPA 1901 14.1.11.2 2003 Edition



### FEATURES

Multi-Function switch Main light with high / low mode Rear signaling light Steady on / flashing modes

Battery Charge Indicator: Red for charging / Green for fully charged

Low Battery Indicator: When 30 minutes of run time remain, high mode automatically switches to low mode and the front beam will begin to flash 3 times every 5 minutes.

### SAFETY

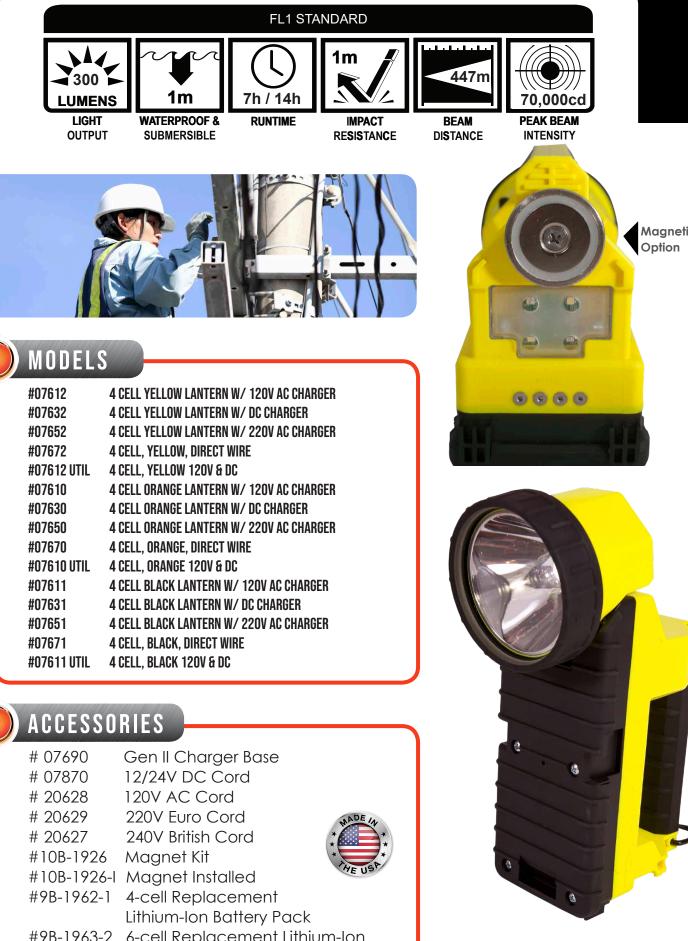
**UL PROTECTION METHODS** UL 913 CSA 22.2 NO 157 **INTRINSICALLY SAFE** 

CLASS I, II, III DIV I GROUPS C-G, T1 CLASS I, II, III DIV II GROUPS A-G, T5 **INGRESS PROTECTION LEVEL: IP67** 





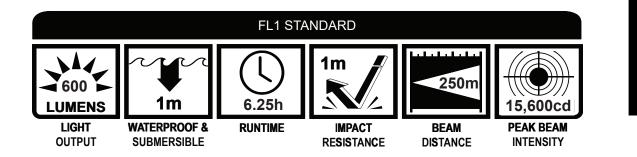




#07612	4 CELL YELLOW LANTERN W/ 120V AC
#07632	4 CELL YELLOW LANTERN W/ DC CHAR
#07652	4 CELL YELLOW LANTERN W/ 220V AC
#07672	4 CELL, YELLOW, DIRECT WIRE
#07612 UTIL	4 CELL, YELLOW 120V & DC
#07610	4 CELL ORANGE LANTERN W/ 120V AC
#07630	4 CELL ORANGE LANTERN W/ DC CHAR
#07650	4 CELL ORANGE LANTERN W/ 220V AC
#07670	4 CELL, ORANGE, DIRECT WIRE
#07610 UTIL	4 CELL, ORANGE 120V & DC
#07611	4 CELL BLACK LANTERN W/ 120V AC C
#07631	4 CELL BLACK LANTERN W/ DC CHARGI
#07651	4 CELL BLACK LANTERN W/ 220V AC C
#07671	4 CELL, BLACK, DIRECT WIRE
#07611 UTIL	4 CELL, BLACK 120V & DC

APPE220	IIIE 3
 # 07690 # 07870 # 20628 # 20629	Gen II Charger Base 12/24V DC Cord 120V AC Cord 220V Euro Cord
# 20627 #10B-1926 #10B-1926-I #9B-1962-1	4-cell Replacement
#9B-1963-2	Lithium-Ion Battery Pa 6-cell Replacement Li Battery Pack

## LIGHTHAWK VISION 600



### FEATURES

Wall and vehicle mountable

Microprocessor controlled

Super tough nylon construction

LED charge status indicator

Non-Slip rubber bottom and handle

Low battery indicator

High visibility flashing LED tail light

Waterproof for 24 hours at 1M

### Magnetic Mount Available

Lithium Ion rechargeable battery included

DIMENSIONS: 9.5" X 3.125" X 5.125" Weight: 1.9 LBS Color: HI-VIS Green



## ACCESSORIES

#9B-1962-1: 4-Cell Replacement Li-Ion Battery Pack #07890: Charger Base with 120V AC Cord #20628: 120V AC Adapter #21132: Shoulder strap #21134: Seat Belt Style Strap #20629: 220V Euro Cord #07870: 12/24V DC Cord #10B-1926: Magnet Kit #10B-1926-I: Magnet Installed #9B-1963-2: 6-cell Replacement Li-Ion Battery Pack

## 600 Lumens

The Lighthawk Vision 600 offers a powerful 600 Lumens with a flood beam and articulating head to light up a large field of vision in a work area. So powerful you can use it as an area light. Finally a long running area light that only weighs 1.9 lbs.

#### **TRUSTED BY THE FOLLOWING PROFESSIONS:**

Designed with the needs in mind for Utility and Transit markets. Certified NFPA 1901-14.1.11.2 (2003) certified mounted in any position

#### **OUR TECHNOLOGY:**

The Lighthawk Lantern was the first lantern developed with Lithium Ion Rechargeable Battery Technology, bringing the most reliable battery technology to the flashlight market. Long run times, fast recharge times and extremely lightweight.

## MODEL OPTIONS

#### 07712

High Vis Green Lantern w/120V AC Charger

07752 High Vis Green Lantern w/220V AC Charger

**07732** High-Vis Green Lantern w/12/24V DC Charger

**07712 UTIL** High Vis Green Lantern w/ 120V AC & 12/24V DC Chargers



## RESPONDER RIGHT ANGLE LED

The Right Angle LED offers optimal brightness, safety, and weight. The alkaline model can be used as a rechargeable with the addition of a lithium ion battery pack, charging base and cord. The low profile R/A LED also offers a smoke cutting beam with intrinsically safe certifications.

#510304 ALKALINE

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#### **OPTIC TECHNOLOGY:**

Bright Star utilizes the latest optic technology to maximize light output with 220 Lumens. The RA's optic distributes light into a custom beam pattern that pierces smoke and dust with 60,000 CD. Additionally, the optics enable the RA body to maintain a slim profile and keep the light focused in the proper direction at all times. This slim profile also keeps the light tight against the body preventing entanglement in air packs.

#### **220 Lumens and 60,000 Candelas FOR CUTTING THROUGH THE THICKEST DARKEST SMOKE CONDITIONS**



FL1 S 220 LUMENS LIGHT OUTPUT WATERPROOF & SUBMERSIBLE RUNTIME

## FEATURES

Extremely durable

Oversized push button switch for gloved hands

Stainless steel clip

Smoke cutting beam with advanced optic technology from its wide eye lens

6AA-Cell Alkaline (batteries not included)

Super-tough nylon construction

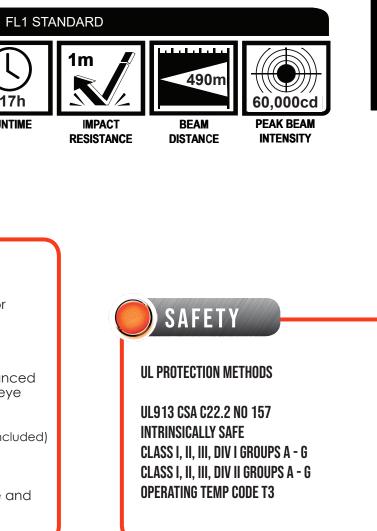
Same light used in both alkaline and rechargeable models





## ACCESSORIES

510201-N : Lithium Ion Replacement Battery Pack 510220 : Charger Base Only 510202 : Alkaline Battery Tray 510180 : 12/24V DC Charger Cord 510181 : 120V AC Charger Cord 510182 : Euro/Int'I AC Charger Cord



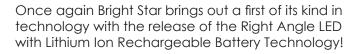
6 AA-cell batteries (not included)

DIMENSIONS: 7.2" X 3.2" X 1.8" Weight: 15 OZ. (With Batteries) Color: Safety orange





# RECHARGEABLE RIGHT ANGLE LED with Lithium Ion Technology



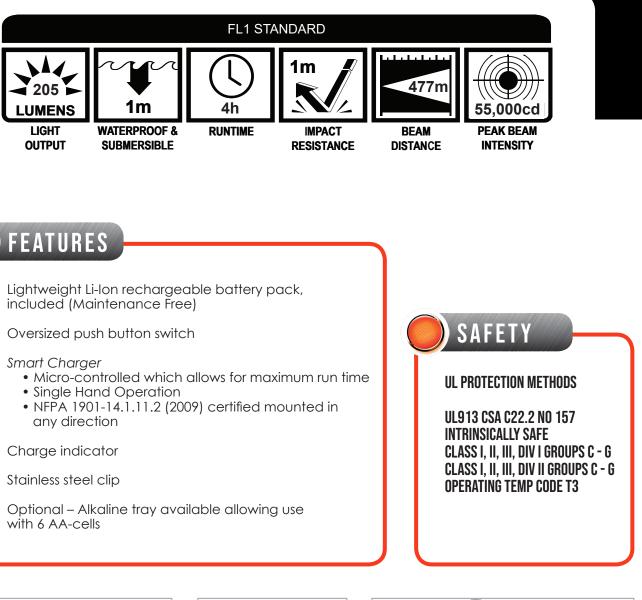
Bright Star's proven Lithium Ion technology has now been released in the new RA LED, giving the user the best in battery realiability and reducing the overall weight of the light. No more maintenance on your rechargeable battery and any concerns with the run time or life span of the battery. Finally a dependable rechargeable battery in a Right Angle light with a beam distance of 477 meters and 205 Lumens!

**RECHARGEABLE BATTERY PACK:** First Lithium Ion Rechargeable on the market that is extremely lightweight and compact for close placement near the body.

## A BEAM DISTANCE OF **477 m** and A SMOKE CUTTING BEAM OF **205 lumens**



**MODEL OPTIONS** 







Model # 510221 w/ 120V AC charger

Model # 510318 w/ direct wire charger

Model # 510242 w/ Euro/Int'l charger

Model # 510221 UTIL w/ 120V AC & 12/24V DC chargers





## ACCESSORIES

510201-N: Lithium Ion Replacement Battery Pack 510220 : Charger Base Only 510202 : Alkaline Battery Tray 510180 : 12/24V DC Charger Cord 510181 : 120V AC Charger Cord 510182 : Euro/Int'l AC Charger Cord





DIMENSIONS: 7.2" X 3.2" X 1.8" WEIGHT: 11 OZ. WITH LI-ION BATTER **COLOR: SAFETY ORANGE** 



# WORKSAFE LED SERIES

The WorkSAFE LED series was developed using a proven product platform and integrating the highest LED technology. The LED technology significantly increased light output and run-time.

**INTRINSICALLY SAFE:** The intrinsically safe certification on these lights gives you the absolute confidence to use our lights in the most hazardous environments without concern of any safety issues.

#2217 LED

PART #15460



s without

#2224 LED PART #15720

FLASHLIGHTS ACCEPT OPTIONAL WANDS

PART #23853 (Red)

PART #23860 (Yellow)

#2206 LED PART #08050

### OFFER THE HIGHEST GLOBAL Safety approvals at the Most affordable price.

**THE WORKSAFE LED<sup>™</sup> SERIES** 

## FEATURES & SAFETY

#### WATERPROOF

SWITCH GUARD PROTECTS SWITCH ON IMPACT 3 WAY SWITCH FOR SIGNALING CAPABILITY FOR MARINE APPLICATIONS 5 BINER CLIP INCLUDED FOR BELT ATTACHMENT ON 2217 AND 2224 MODELS CRUSH-RESISTANT CASE Polycarbonate lens

2206 LED

2217 LED

2224 LED

1m

WATERPROOF &

SUBMERSIBLE

**1**m

WATERPROOF &

SUBMERSIBLE

**1**m

WATERPROOF &

SUBMERSIBLE

90

LUMENS

LIGHT

OUTPUT

80

LUMENS

OUTPUT

60

LUMENS

LIGHT

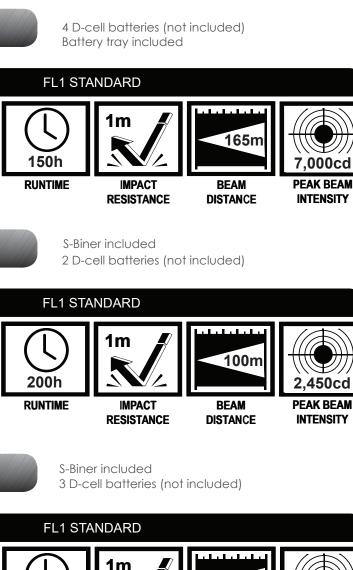
OUTPUT

16

FACETED REFLECTOR Anti-Roll Tube Chemical Resistant Non-Slip Grip

#### **Intrinsically Safe**

UL Protection Methods: Class I, II, III, Div I, Groups A - G Class I, II, III, Div 2, Groups A - G Operating Temp T5



ImImIm250hImImRUNTIMEImpact<br/>RESISTANCEBEAM<br/>DISTANCEPEAK BEAM<br/>INTENSITY

17



#2217 ATEX PART #16460

The WorkSAFE LED ATEX / IECEx series offers the highest global safety certification at the most affordable price. Our WorkSAFE LED ATEX / IECEx Series offers both ATEX / IECEx Zone 0 & Zone I as well as Class I Division I, Groups A-G intrinsically safe certifications.

The intrinsically safe certification on these lights gives you the absolute confidence to use our lights in the most hazardous environments without concern of any safety issues.

#2206 ATEX PART #09050

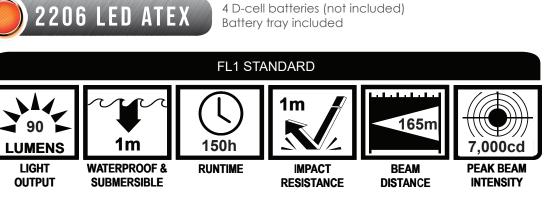


Intrinsically Safe **ATEX / IECEx Protection Methods** ATEX / IECEx Rating Info:

2206 LED ATEX **2217 LED ATEX** Zone I Zone 0 Ex 11 2GD Ex ib IIB T3 Gb Ex ib IIIB T180°C D 😥 II 1GD Ex ia IIB T3 Ga Ex ia IIIB T145°C Da

FEATURES







OUTPUT

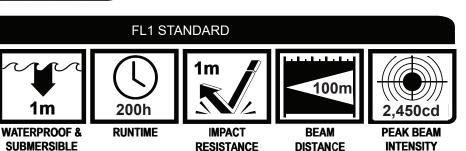
**FLASHLIGHTS** 

WANDS

## **SAFETY RATINGS**

WATERPROOF SWITCH GUARD PROTECTS SWITCH ON IMPACT ANTI-ROLL TUBE STATIC DISSIPATIVE NON-SLIP GRIP CRUSH-RESISTANT CASE POLYCARBONATE LENS FACETED REFLECTOR 3-WAY SWITCH FOR SIGNALING CAPABILITIES S BINER CLIP INCLUDED FOR 2217 MODEL

S-Biner included. 2 D-cell batteries (not included)



## **ACCEPT OPTIONAL**

PART #23853 (Red) PART #23860 (Yellow)





# INDUSTRIAL 2618 LED

From the original designers of the industrial work light, Bright Star advances the technology in this lighting category with the new 2618 LED industrial light. A great all around industrial work light, designed for the toughest environments at an affordable price.

LUMEN INFO: Super Bright for the industrial light category at 60 Lumens with one of the longest run times at 200 Hours all with a budget in mind.

# LONG LASTING AT **RUN TIME**

#11500



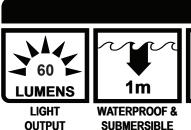
200 hours run time	
Switch guard protects switch on impact	
Deep ribbed case for non-slip grip	
Anti-roll tube	

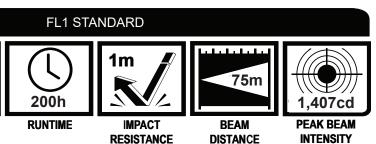


Chemical/grease resistant

Very economical and reliable LED flashlight

2 D-Cell (batteries not included)





OUTPUT





DIMENSIONS: 8.04" X 3.39" X 2.34" WEIGHT: 5.02 OZ | COLOR: YELLOW

### ACCESSORIES WANDS / DIRECTOR LIGHTS:

Lens ring accepts snap-in wands. Highly visible, bright & durable director lights. The removable tip allows you to direct the light beam. PART #23853 (Red) | PART #23860 (Yellow)

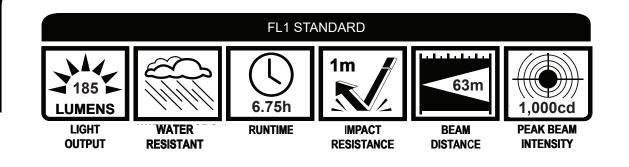
## VISION LED HEADLAMP



The Vision LED Headlamp provides lightweight, hands-free illumination up to 185 lumens. The user has the ability to switch from spot to flood in both high and low modes.

A great all around headlamp, designed for a variety of environments at an affordable price.









4 Light Modes: High Spot, Low Spot, High Flood, Low Flood allows user to choose beam that best suits their need at any given time

Large push button switch

Lightweight polymer housing design

Adjustable mount for greater vision

Multi-use adjustable strap securely adheres to helmets, hardhats and heads

IPx4 rated water-resistant design suitable for outdoor use in wet environment

MODE	SETTING	OUTPUT LUMENS	PEAK BEAM INTENSITY CANDELA	BEAM DISTANCE METERS	RUN TIME Hours	POWER SOURCE	WEIGHT
CDOT	HIGH	185	1000	63	6.75	3 AAA	
SPOT	LOW	65	320	35	20		3.5 oz.
FLOODLIGHT	HIGH	20	10	6	>70hrs	Batteries	with Batteries
TEOODEIGIII	LOW	10	6	4	> I 40hrs		

3 AAA Cell Alkaline Batteries (sold separately)



DIMENSIONS: 2.4" X 1.3" X 1.75" Weight: 3.5 oz. with batteries Color: HI-VIS green





A Marmon Group/Berkshire Hathaway Company

### FLASHLIGHT.com

380 STEWART ROAD, HANOVER TOWNSHIP, PA 18706 1-800-788-1696