



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





# PRODUCT DATASHEET

LED Headlight  
**Energizer**  
INTRINSICALLY SAFE

## INTRINSICALLY SAFE

- Division 1, Class 1 rated
- Approved by global agencies for intrinsically safe lights



## ECONOMICAL

- Useable light for 19 hours between battery changes with Energizer MAX® batteries
- Lifetime LED never needs replacing



## DURABLE

- Survives 2-meter drop test
- Shatterproof lens



## WATER RESISTANT

- Meets IEC 60529 IPX4 standards
- Continues to operate after exposure to splashing water from all directions



## MSHD31E



### BENEFITS

- EN60529 IP64 ingress protection - dustproof & water resistant
- Powerful beam illuminates objects up to 91 meters away
- Four lighting modes – high white, low white, red & green
- Discrete, push button switches for white & color modes
- Flip-up diffuser provides option of spot or area lighting
- Pivots to aim light where you need it

- UL/CUL intrinsic safety for hazardous locations Class I Div. 1 Groups A,B,C, & D, Class II Div. 1 Groups E,F,G, and Class III Div. 1; T4.
- MSHA for methane-air mixtures
- ATEX intrinsically safe flashlight for Ex ia I/II G Ex ia I/II C T4
- IECEx intrinsically safe flashlight for Ga Ex ia IIC T4
- -20°C to 40°C ambient operating range.
- 0539
- EN60529 ingress protection level IP64.

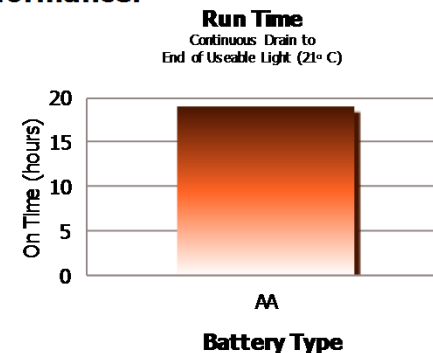
### Before Using Your Flashlight:

Please read all instructions and cautionary markings on the package and light

### Product Detail:

<b>Designation:</b>	Energizer Intrinsically Safe™ LED Headlight
<b>Model:</b>	MSHD31E
<b>Color:</b>	Safety Orange and Black
<b>Power Source:</b>	Three "AA"
<b>ANSI/NEDA:</b>	15 Series
<b>Lamp:</b>	One White High Power LED
<b>Lamp Life (hr):</b>	Lifetime
<b>Additional Lamps:</b>	2 Red and 1 Green LED
<b>Light Output (lumens):</b>	66
<b>Run Time (h:min):</b>	19
<b>Beam Distance (m):</b>	91
<b>Peak Beam Intensity (cd):</b>	2,070
<b>Durability:</b>	Survives 2-meter drop
<b>Typical Weight (g):</b>	230 with alkaline batteries
<b>Dimensions (mm):</b>	Light - 79.2 x 28.7 x 53.8 Battery Pack - 76.2 x 69.9 x 28.7

### Performance:



Tested according to ANSI / NEMA FL 1 Standards.

### Important Notice

This datasheet contains information specific to products manufactured at the time of its publication  
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