

EXP-LED-RL-FX5R

Explosion Proof Rechargeable LED Flashlight - 405 Lumens - 5 Light Patterns - Intrinsically Safe
Product ID: 48629



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EXP-LED-RL-FX5R Intrinsically Safe

Lamp Type: LED
Dimensions: 12.25" - L, 5.5" - OD
Weight: 6.5 lbs - 9 lbs w/ Charging Dock
Voltage: 120V or 240V AC
Amps: 1170mA
Lumens: 405
Lamp Life: 50,000+ Hrs
Beam Configuration: Wide Spot
Rotation/Pivot: 340° Rotating Head, 70° Pivoting Angle
Operational Modes: On, Off, Flash, Rotating and SOS
Lens Material: Unbreakable Lexan
Battery Type: Rechargeable Nickel Metal Hydride (6V)
Color: Green, Black
Runtime: 10 Hrs
Charge Time: 8 Hrs

Ratings / Approvals

Class I Division 1, Groups A, B, C & D
Class II , Groups E, F & G
Class III
cUL Listed
UL Certified
T4 Temp Rating
Induction Charging
Intrinsically Safe
Built-In Emergency Mode

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The Larson Electronics EXP-LED-RL-FX5R Explosion Proof Rechargeable LED Flashlight is designed for handheld lighting in hazardous locations and environments where potentially explosive vapors, gases and other volatile compounds may be encountered. This unit features five operational modes and a runtime of 10 hours. Operators may position the light by rotating and pivoting the head. The intrinsically safe portable light comes with a charging rack that powers the battery without charge contacts using induction charging technology, and features a built in emergency mode that turns the light on automatically when power is cut.

The EXP-LED-RL-FX5R produces a powerful white beam of 405 lumens with extra functionality and utility through the inclusion of secondary rear-mounted LEDs. A trigger-style switch allows operators to cycle through five possible light modes (On, Off, Flash, Rotating and SOS) for the six rear blue signaling lights. Operators may choose to utilize rear mounted LEDs independently or in tandem with the main forward LEDs. Positioning of the intrinsically safe unit includes vertical or horizontal, as well as 340° rotation with a 70° pivoting angle (light head).

The explosion proof flashlight comes with the following ratings: Class I, Division 1 Groups A, B, C & D; Class II, Groups E, F & G; and Class III.

LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.

LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.



[Click Photo to Enlarge](#)



[Click Photo to Enlarge](#)



[Click Photo to Enlarge](#)

Durability: The EXP-LED-RL-FX5R housing is constructed of lightweight and impact resistant ABS plastic, offering a non-slip ergonomic grip design and high durability. This explosion proof LED flashlight is impact and vibration resistant, water resistant and has no exposed metal or contacts. The light head on this unit is adjustable and can be pivoted through a wide range of directions to improve functionality and versatility, allowing users to use the unit as a hand carried flashlight or stationary area light as needed.

Charging/Power: Powering the explosion proof flashlight is a rechargeable nickel metal hydride battery at 6V. The power cell offers over 500 charging cycles. Charging is done via an included induction charging rack, which takes up to 8 hours for a full charge. Runtime for the EXP-LED-RL-FX5R is up to 10 hours. This flashlight includes a built in emergency mode that automatically turns the light on when power is cut. The light will automatically switch to battery power and turn on when the power goes out, making it easy to find in the dark.

Applications: Hazardous locations, confined spaces, inspections, chemical processing plants, food processing facilities, mining, law enforcement, shipyards, oil and gas, remote illumination, agricultural operations, grain storage facilities, detailed tasks and more.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

High Quality Construction

1. High Intensity LEDs- 405 Lumens
2. Trigger-activated Switches
3. Single or Tandem Front Rear Light Operation
4. Water Resistant
5. Chemical/Impact Resistant
6. 12 hour Runtime
7. Explosion Proof UL / Atext Approval
8. Unbreakable Lexan Lens
9. High impact ABS Plastic Housing

Superior LED Benefits

1. Extreme long life.
2. High efficiency and low amp draw.
3. High durability and reliability.
4. Small size and light wieght.
5. 100% recyclable.
6. No toxins-lead, mercury.
7. High light output.
8. Consistent color over time.
9. High Versatility.
10. No fragile glass used in construction.
12. Vibration/impact resistant.





Larson Electronics
1-800-369-6671
Sales@LarsonElectronics.com









Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: EXP-LED-RL-FX5R Series
Description: Explosion Proof Flashlight

Evaluated Listings:

UL: OERX.E303157 – NEC / United States standards

UL: OERX7.E303157 – CEC / Canada standards

The EXP-LED-RL-FX5R Series is certified to NEC & CEC standards for hazardous locations for:

- NEC: Class I, Division 1, Groups C, D; Class I, Division 2, Groups A, B, C, D; Class II, Divisions 1 & 2, Groups E, F, G
- CEC: Class I, Division 1, Groups C, D; Class I, Division 2, Groups A, B, C, D; Class II, Divisions 1 & 2, Groups E, F, G

The EXP-LED-RL-FX5R Series is comprised of a K & H INDUSTRIES GX1 series device. This device is manufactured to Larson Electronics specifications in regards to color and design. This may include additional external mounting accessories and/or custom mounting of the device. This assembly is built to NEC and CEC standards for hazardous locations.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature:

Name: James Thomas
Position: Operations Manager

**Tenergy Corporation**

436 Kato Terrace
Fremont, CA 94539
Tel: 510.687.0388 Fax: 510.687-0328
www.TenergyBattery.com

NIMH Battery Material safety data sheet

I - Product Identification and company/undertaking

Product Name: **Nickel Metal Hydride (NIMH) Rechargeable Battery**

Brand: TENERGY

Chemical System Nickel/Metal Hydride

Nominal Voltage: 1.2V

Designated for Recharge: ☒ Yes ☐ No

Effective Date: 05.08.2006

II - Hazardous Ingredients

IMPORTANT NOTE: The product is a manufactured article as described in 29 CFR 1910.1200. The battery cell is contained in a hermetically-sealed case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, hazardous materials are fully contained inside the battery cell. The battery cell should not be opened or exposed to heat because exposure to the following ingredients contained within could be harmful under some circumstances. The following information is provided for the user's information only.

Chemical Name	CAS No.	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Nickel (powder)	7440-02-0	1TWA	1 TWA
Nickel hydroxide	12054-48-7	1 TWA	1 TWA
Cobalt	7440-48-4	0.1 TWA	Dust & Fume 0.005
Manganese	7439-96-5	Fume: 5 Ceiling Limit	Dust: 5 Fume: 1
Lanthanum	7439-91-0	NA	NA
Cerium	7440-45-1	NA	NA
Neodymium	7440-00-8	NA	NA
Potassium hydroxide	1310-58-3	NA	2 Ceiling Limit
Sodium hydroxide	1310-73-2	2 TWA	2 Ceiling Limit
Lithium hydroxide	1310-65-2	NA	NA

The information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. **TENERGY CORPORATION** makes no warranty, expressed or implied, with respect to this information and disclaims all liabilities from reliance on it.

Notes: 1. Concentrations vary depending on the state of charge or discharge.
2. TWA is the time weighted average concentration over an 8-hour period.



Tenergy Corporation

436 Kato Terrace

Fremont, CA 94539

Tel: 510.687.0388 Fax: 510.687-0328

www.TenergyBattery.com

III — Physical Data for Battery

Melting point (iF) NA	Boiling point (iF) NA	% Volatile by Volume NA
Vapor Pressure (mm Hg) NA	Evaporation Rate Vapor	Density (Air = 1) NA
Specific Gravity (H ₂ O) NA	Solubility in Water NA	Appearance and Odor No Odor

IV - Fire and Explosion Hazard Data

Flash Point: NA Lower Explosive Limit: NA Upper Explosive Limit: NA

Extinguishing Media: Any class of extinguishing medium may be used on the batteries or their packing material. Special Fire Fighting Procedures: Exposure to temperatures of above 212F can cause venting of the liquid electrolyte.

Internal shorting could also cause venting of the electrolyte. There is potential for exposure to iron, nickel, cobalt, rare earth metals (cerium, lanthanum neodymium, and praseodymium), manganese, and aluminum fumes during fire; use self-contained breathing apparatus.

V – First Aid Measures

If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately.

If electrolyte comes into contact with eyes, wash with copious amounts of water fifteen (15) minutes, and contact a physician.

VI - Health Hazard Data

Threshold Limit Values: See Section II

Effects of a Single (Acute) Overexposure:

Inhalation: During normal use inhalation is an unlikely route of exposure due to containment of hazardous materials within the battery case. However, should the batteries be exposed to extreme heat or pressures causing a breach in the battery cell case, exposure to the constituents may occur. Inhalation of cobalt dusts may result in pulmonary conditions.

Ingestion: If the battery case is breached in the digestive tract, the electrolyte may cause localized burns.

Skin Absorption: No evidence of adverse effects from available data.

Skin Contact: Exposure to the electrolyte contained inside the battery may result in chemical burns.

Exposure to nickel may cause dermatitis in some sensitive individuals.

Eye Contact: Exposure to the electrolyte contained inside the battery may result in severe irritation and chemical burns.

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Carcinogenicity:

Nickel has been identified by the National Toxicology Program (NTP) as reasonably anticipated to be a carcinogen. Cobalt has been identified by IARC as a 2Bcarcinogen. Other Effects of Repeated

(Chronic) Exposure:

Chronic overexposure to nickel may result in cancer; dermal contact may result in dermatitis in



sensitive individuals.

Medical Conditions Aggravated by Overexposure:

A knowledge of the available toxicology information and of the physical and chemical properties of the material suggests that overexposure is unlikely to aggravate existing medical conditions.

Emergency and First Aid Procedures:

Swallowing: Do not induce vomiting. Seek medical attention immediately.

Skin: If the internal cell materials of an opened battery cell come into contact with the skin, immediately flush with water for at least 15 minutes.

Inhalation: If potential for exposure to fumes or dusts occurs, remove immediately to fresh air and seek medical attention.

Eyes: If the contents from an opened battery come into contact with the eyes, immediately flush eyes with water continuously for at least 15 minutes. Seek medical attention.

Section VII - Reactivity Data

The batteries are stable under normal operating conditions.

Hazardous polymerization will not occur.

Hazardous decomposition products: oxides of nickel, cobalt, manganese, lanthanum, and cerium. Conditions to avoid: heat, open flames, sparks, and moisture.

Potential incompatibilities (i.e., materials to avoid contact with): The battery cells are encased in a non-reactive container; however, if the container is breached, avoid contact of internal battery components with acids, aldehydes, and carbamate compounds.

VIII - Spill and Leak Procedures

Spill and leaks are unlikely because cells are contained in an hermetically-sealed case. If the battery case is breached, don protective clothing that is impervious to caustic materials and absorb or pack spill residues in inert material. Dispose in accordance with applicable state and federal regulations.

VIX - Safe Handling and Use (Personal Protective Equipment)

Ventilation Requirements: Not required under normal use.

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Expressed or implied, with respect to this information and disclaims all liabilities from reliance on it.

Respiratory Protection:	Not required under normal use.
Eye Protection:	Not required under normal use.
Gloves:	Not required under normal use.



X- Precautions for Safe Handling and Use

Storage: Store in a cool place, but prevent condensation on cell or battery terminals. Elevated temperatures may result in reduced battery life. Optimum storage temperatures are between -31F and 95F.

Mechanical Containment: If there are special encapsulations or sealing requirements, consult your Tenergy Corporation representative about possible cell hazard precautions or limitations.

Handling: Accidental short circuit will bring high temperature elevation to the battery as well as shorten the battery life. Be sure to avoid prolonged short circuit since the heat can burn attendant skin and even rupture of the battery cell case.

Batteries packaged in bulk containers should not be shaken. Metal covered tables or belts used for assembly of batteries into devices can be the source of short circuits; apply insulating material to assembly work surface. If soldering or welding to the case of the battery is required, consult your **TENERGY CORPORATION** representative for proper precautions to prevent seal damage or external short circuit.

Charging: This battery is designed for recharging. A loss of voltage and capacity of batteries due to self-discharge during prolonged storage is unavoidable. Charge battery before use. Observe the specified charge rate since higher rates can cause a rise in internal gas pressure which may result in damaging heat generation or cell rupture and/or venting.

Labeling: If normal label warnings are not visible, it is important to provide a device label stating: CAUTION: Do not dispose in fire, mix with other battery types, charge above specified rate, connect improperly, or short circuit, which may result in overheating, explosion or leakage of cell contents.

XI – Measures for fire extinction

In case of fire, it is permissible to use any of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture. Fire fighters should wear self-contained breathing apparatus.

XII – Ecological information

N.A

XIII - Recycling and Disposal

Tenergy Corporation encourages battery recycling. Our Nickel Metal Hydride batteries are not defined by the federal government as hazardous waste and are safe for disposal in the normal municipal waste stream.

DO NOT INCINERATE or subject battery cells to temperatures in excess of 212F. Such treatment can cause cell rupture.

XIV – Transportation

Tenergy Corporation sealed Nickel Metal Hydride batteries are considered to be "dry cell" batteries and are not subject to dangerous goods regulation for the purpose of transportation by the U.S. Department of Transportation (DOT), the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) or the International Maritime Dangerous Goods regulations (IMDG). More information concerning shipping, testing, marking and packaging can be obtained from Labelmaster at



Tenergy Corporation

436 Kato Terrace
Fremont, CA 94539
Tel: 510.687.0388 Fax: 510.687-0328
www.TenergyBattery.com

<http://www.labelmaster.com>. IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting.

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XV – Regulatory Information

Special requirement be according to the local regulatory

XVI – Other Information

The data in this Material Safety Data Sheet relates only to the specific material designated herein



OERX.E303157 - Equipment and Systems for Use in Hazardous Locations

Equipment and Systems for Use in Hazardous Locations

[See General Information for Equipment and Systems for Use in Hazardous Locations](#)

K & H INDUSTRIES INC

E303157

160 ELMVIEW AVE

HAMBURG, NY 14075-3763 USA

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III

Lanterns, Model(s) GX1, intrinsically safe for use with self-contained, non-replaceable rechargeable cells.

[Last Updated](#) on 2018-02-15

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OERX7.E303157 - Equipment and Systems for Use in Hazardous Locations Certified for Canada

Equipment and Systems for Use in Hazardous Locations Certified for Canada

[See General Information for Equipment and Systems for Use in Hazardous Locations Certified for Canada](#)

K & H INDUSTRIES INC

E303157

160 ELMVIEW AVE

HAMBURG, NY 14075-3763 USA

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III**Lanterns**, Model(s) GX1, intrinsically safe for use with self-contained, non-replaceable rechargeable cells.[Last Updated](#) on 2018-02-15

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Frequently Asked Questions (FAQ)