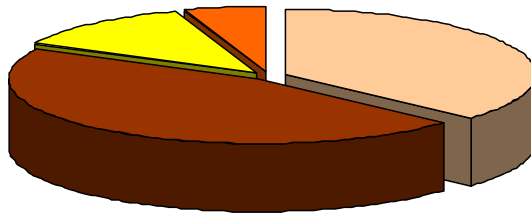


Announcement

LED Flashlight U.S.A. Market Forecast & Analysis 2018 - 2028



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ElectroniCast Consultants

LED Flashlight U.S.A. Market Forecast & Analysis

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10-Year Market Forecast

This market forecast report, which is available immediately, is part of a consultant service from ElectroniCast Consultants to our clients. This 2018-2028 market estimate and forecast is presented for our extensive study of the worldwide use of LED-based flashlights, which are used in the United States of America. The market data is segmented by rechargeable- versus standard-types. Several end-user application groups are covered in market forecast; finally, the forecast for the major sales channels are presented in easy-to-follow illustrations and text.

Company profiles of nearly 70 LED flashlight manufacturer/brands are presented, as well as market share estimates for selected market leaders for last year (2018) in the U.S.A. marketplace. ElectroniCast research findings, which are pertinent to Intellectual Property (IP), US Patents and related issues, are also provided.

Market Forecast by Product Categories

The forecast is based on the following LED flashlight product category types:

- Rechargeable
- Standard

Market Forecast by Application Categories

Market forecast of each product-type by the following end-user type (application) categories:

- Commercial/Industrial/Other (all non-government work applications)
- Government-Sector (all levels of government: local, state and federal)
 - Military/Law Enforcement/First Responders
 - Other: Government-Sector
- Consumer/Non-Specific

Market Forecast by Sales Channels

The market forecast of each product-type and end-user type (application), are also segmented by the following sales channels:

- Specialty Retail (e-Commerce/Internet and In-Store)
- General Retail (e-Commerce/Internet and In-Store)
- Direct from Manufacturer/Brand (Internet and Direct Sales/Other)

Market Forecast, By Function

This report provides our estimates for 2018 consumptions, as well as our 10-year market forecast for flashlights by the following functions:

- Consumption Value
- Quantity (number/units)
- Average Selling Prices (ASP)

Flashlights Covered in this Study All LED-based flashlights are included in this study, unless mentioned otherwise. LED flashlights, which are used as a work or task light; however, only the flashlight unit (itself) is counted, not any value-added components. A flashlight-based work/task light (not necessarily professional work) is a flashlight with valued-added accessories added permanently or detachable, which are designed to accommodate the specific needs of a related task, as discussed in some examples below:

- Hooks or clamps or straps or casing-design are added to the flashlight for the specific reason for hand-free operation; case design examples include: swivel lamp-heads; self-standing design, beam adjustments, others – the following are a few application examples:
 - Auto mechanics, surgeons or miners using headlamps;
Recreational/Sport hikers/campers using headlamps
 - Military and police using flashlights attached to the weapon/gun;
Recreational/Sport/Protection use of flashlights attached to a gun

- Police, security, delivery use of flashlights attached to a bicycle; Recreational/Sport use of flashlights attached to a bicycle (only if the light is easily removed from the holding bracket for double-use as a flashlight)
- Specific features added, such as (examples):
 - Chemical/Other resistant casing
 - Harsh environment/Rugged/Underwater upgrade case and other components
 - Explosion-proof upgrade case and other components
 - Casing designed to accommodate work-related hand controls or grips

Add-on or Built-on Accessories For flashlights that are equipped to wear on the head; for example in – sports, surgery/medical, in the mining industry and other hands-free use, the flashlight unit is included, plus internal recharging units and cord to an external battery module, and the external battery module (without batteries) are included in the pricing data; this is also true for flashlight brackets or clamps for guns, bicycles, other.

Not Included: Items not included in the overall price of the products, in this study:

- Aftermarket (sold separately) straps that are added to the flashlight unit
- Aftermarket (sold separately) mounting brackets for weapon-flashlights
- Storage/travel cases the flashlight
- Flashlights in Androids and other mobile communication/camera devices
- Novelty flashlights or toy-like novelty key-chain flashlights
- Camera/Film production lights
- Lanterns (also: combined lantern/flashlights are considered lanterns)

Market Research Methodology

Market analysis and technology forecasting are complex tasks. Any predictions of the shape and trends of technology and economic movement start from the notion that the germ of what will be important tomorrow is present, although smaller or larger or in a different form, in our environment today. However, taking as a basis for a prediction the assumptions of current, conventional belief creates a set of preconceived notions that can lead to serious mistakes. ElectroniCast, instead, looks to the basic driving forces.

The future market for a particular type of flashlight consumed in general purpose (household), as well as commercial/industrial and harsh environment, military/ aerospace, emergency services and law enforcement applications depend on a number of factors, including: User equipment demand, back-up lighting due to power failures, various work-related tasks and recreational purposes, as well in conjunction with explosion and dangerous environments and various other circumstances.

Information Base This study is based on analysis of information obtained continually over the past several years, but updated through the middle of March 2019. During this period, ElectroniCast analysts performed interviews with selected authoritative and representative individuals in the flashlight manufactures and brand distributors, as well as LED manufacturing (materials, chips, packaging, devices, and associated parts/pieces, and fittings/fixtures), other light sources and military/aerospace, law enforcement and other first responders, communication, automotive, medical services, R&D, and government regulating authorities, as well as power sources (batteries and capacitors). The interviews were conducted principally with:

- Engineers, marketing personnel and management at manufacturers of LEDs, other light source technologies, as well as flashlight material (plastic, metal, other) package design and reflective optics.
- Design group leaders, engineers, marketing personnel and market planners at major users and potential users and distributors of LEDs, other light sources, flashlights and power sources (batteries and capacitors).
- Other industry/sector experts, including those focused on patents/intellectual property, standards activities, trade associations, and investments.

The interviews covered issues of technology, R&D support, pricing, contract size, reliability, documentation, installation/maintenance crafts, standards, supplier competition and other topics.

A full review of published information was also performed to supplement information obtained through interviews. The following sources were reviewed:

- Professional technical journals and papers; Trade press articles
- Technical conference proceedings; Product literature
- Company profile and financial information
- Additional information based on previous ElectroniCast market studies; Personal knowledge of the research team.

In analyzing and forecasting the complexities of the American market for flashlights, it is essential that the market research team have a good and a deep understanding of the technology and of the industry. ElectroniCast members who participated in this report were qualified.

Bottom-up Methodology ElectroniCast forecasts are developed initially at the lowest detail level, and then summed to successively higher levels. The background market research focuses on the amount of each type of product used in each application in the base year (last year: 2018), and the prices paid at the first transaction from the manufacturer. This forms the base year data.

ElectroniCast analysts then forecast the growth rates in component quantity use in each application, along with price trends, based on competitive, economic

and technology forecast trends, and apply these to derive long term forecasts at the lowest application levels. The usage growth rate forecasts depend heavily on analysis of overall end user trends toward equipment usage and economic payback.

About ElectroniCast

ElectroniCast, founded in 1981, specializes in forecasting technology and global market trends in fiber optics communication components and devices, as well providing market data on light emitting diodes used in lighting.

As an independent consultancy we offer multi-client and custom market research studies to the world's leading companies based on comprehensive, in-depth analysis of quantitative and qualitative factors. This includes technology forecasting, markets and applications forecasting, strategic planning, competitive analysis, customer-satisfaction surveys and marketing/sales consultation. ElectroniCast, founded as a technology-based independent consulting firm, meets the information needs of the investment community, industry planners and related suppliers.

Proprietary Statement

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