

## INNOVATIVE & CUSTOM LED INTERIOR LIGHTING



### BRIGHT IDEAS IN LED LIGHTING TECHNOLOGY

EMTEQ understands the critical nuances of blending technology and environment to create the desired look for your aircraft interior. We also understand that time is money. Overall, the aircraft fuel, electrical power, and maintenance savings realized by installing LED lighting is remarkable compared to older less reliable halogen, incandescent, and fluorescent tube systems.

#### FEATURES & BENEFITS

- Ease of installation, weight savings, low maintenance and long life
- Zone control sets mood and enhances aesthetics
- Step or 100% variable dimmable for desired lighting ambience
- State of the art LED technology means optimal output and superior color consistency
- Varying sizes available to fit any application
- Easily customized for LED color, lens styles and plating finishes
- Emergency voltage options available
- Products do not require additional power supplies or dimming modules

## WASH LIGHTING

Wash lighting is one of our premier product lines. With hundreds of successful installations and many satisfied customers, we understand how to blend technology and environment – fabrics, light and aircraft architecture angles – to create the desired look for your aircraft. Our wash lighting products provide bright, continuous, even lighting, many with built in dimming features, to create your desired atmosphere.

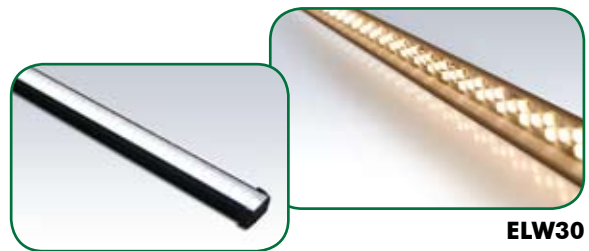


**DAYLIGHT lighting**

### UPWASH, DOWNWASH & CUSTOM LIGHTING APPLICATIONS

#### Compact Wash Lighting

- DAYLIGHT™
  - » Variable white lighting – ability to select multiple white color temperatures
  - » Control colors, intensity and fade times in groups via communication to CMS
- ELW30
  - » High intensity, low-profile 3-row wash with upgraded LED technology
- ELW35
  - » Built-in current control devices
  - » High intensity, compact wash light



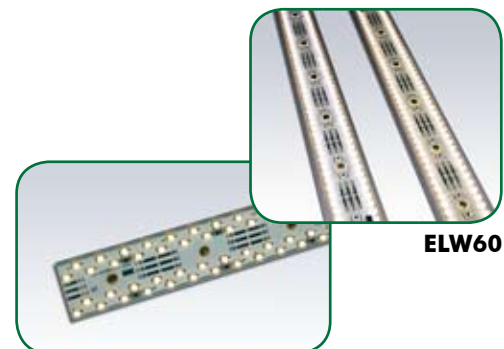
**ELW35**

**ELW30**

#### Flat Wash Lighting

These very low profile lights are ideal for tightly spaced areas. They are step dimmable. There is no need for a power supply or dimming modules as these lights connect directly into aircraft power.

- ELW60
  - » Side emitting LEDs are ideal for even illumination
- ELW61
  - » Direct emitting LEDs make ELW61 a more intense alternative to ELW60

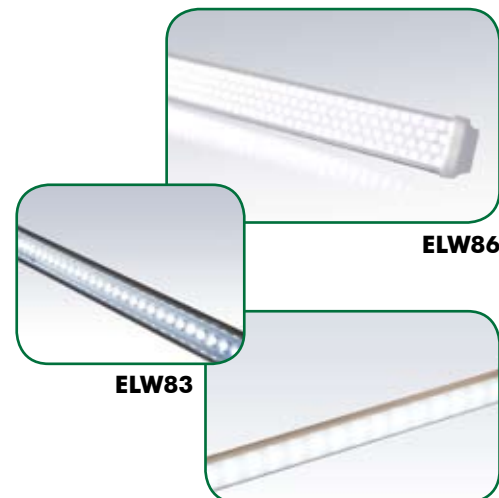


**ELW61**

**ELW60**

#### Wide Body and Regional Aircraft Wash Lighting

- ELW83
  - » 115VAC step-dimmable wash operating directly off of aircraft power
- ELW86
  - » Four rows of LEDs for ultra bright illumination
- ELWA-1002
  - » Consistent light output, withstanding power fluctuations while in flight



**ELW83**

**ELW86**

**ELWA-1002**

## QUASAR® Full Spectrum Lighting

The QUASAR lighting systems have a simple architecture with minimal use of external system components and wiring for ease of integration. These are fully dimmable, have 32 preset lighting modes, and can control independent light assemblies.

- ELW70 – Business Aircraft
  - » Operate directly off of aircraft power; no additional power supplies required
  - » Compact size
- ELW71 – Wide-body, VIP Aircraft
  - » Optimal intensity



## DIRECT LIGHTING

Direct lighting compliments many of our other lighting products, providing evenly distributed, direct, high intensity illumination. Often used as the primary source of cabin lighting, it is also ideal for work surface lighting in galleys, lavatory vanity lighting, baggage compartments, entryways and other discrete applications.

### Dome Lights

- ELD30
  - » Brighter than 20W MR16 and all other EMTEQ dome lights
  - » Field programmable dimming modes
  - » Compact with multiple light beam spread options
- ELD25
  - » High intensity, compact dome with emergency backup
- ELD24
  - » Mid-size dome light
  - » Grill and curved or flat bezel options available



### PMA Approved Products

EMTEQ has PMA approved products and installation kits for regional and commercial aircraft. Contact us today for more information.

## Direct Lighting continued

### Reading Lights

- ELR12
  - » Low-profile with emergency backup options
  - » Focused, direct lighting ideal for high ceiling headliners
- ELR17
  - » Low-profile with more emergency backup options than ELR12
  - » Wide angle lighting ideal for valance panels/PSU installations and wide body aircraft
- ELR16 & ELR19
  - » Larger reading lights with ultra high intensity
  - » Applicable in civil and military aircraft



### Marker and Mini-Spot Lights

- ELM20 & ELM21
  - » Shape, LED color temperature & plating options available
  - » Ideal for emergency or accent lighting in tight spaces
- ELMS
  - » Dimming, bezel, plating & LED color temperature options
  - » Ideal for accent lighting and lighting work areas

## ACCENT & COURTESY LIGHTING

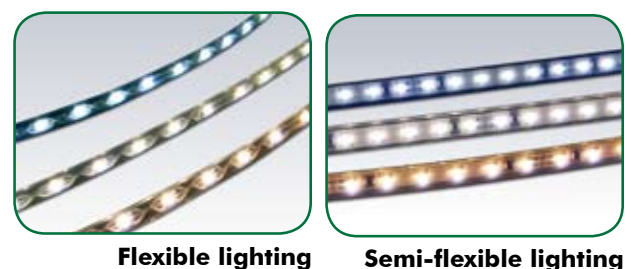
Accent lighting provides an aesthetically pleasing, decorative touch throughout the aircraft. These accent lights can be used to highlight any items deserving of extra attention. Our dimming modules are recommended for accent applications to create a more subtle aura.

### Flexible and Semi-flexible Lights

EMTEQ's line of flexible lighting is made with robust housing materials capable of withstanding harsh environments. Options to customize your lights include length, color, & dimming. Lights are hooked up directly into 28VDC aircraft power.

Application of EMTEQ's flexible lighting is endless, but can include areas such as pathways, glareshields, handrails, lavatories, galleys, toe kicks, etc.

- SFT (semi-flexible)
  - » Flexible on the vertical plane only
- FLT (flexible)
  - » Fully flexible on vertical and horizontal planes

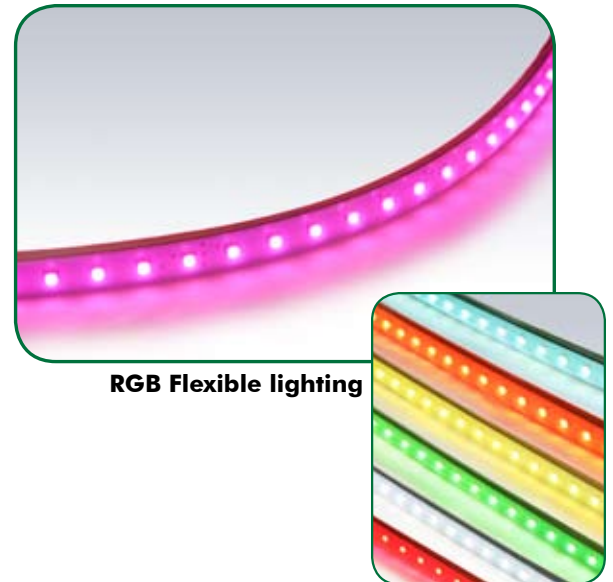




## RGB Flexible Lighting

Full spectrum semi-flexible lighting utilizing the latest LED technology paired with variable color selection is ideal for any curved aperture in need of vibrant hues.

- ELS3
  - » Maximum color blending for consistent, even light output
  - » Discreet control achieves up to 6 colors
  - » Low profile, robust, lightweight housing



RGB Flexible lighting

## EMERGENCY AND EXIT LIGHTING

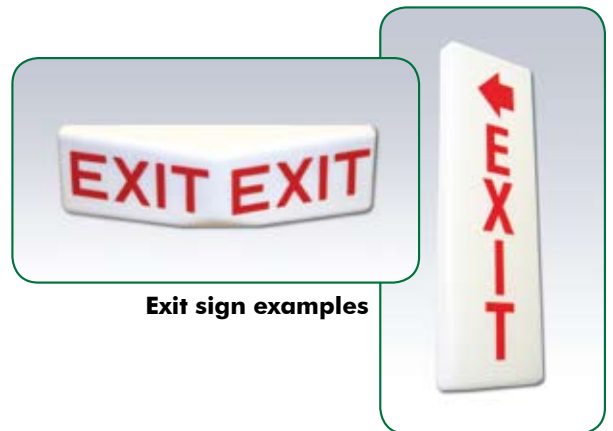
Nearly all EMTEQ lights can be used for emergency lighting, due to minimal current draw and our range of LED color and lens options. Our flex lighting can be installed along aisles or furniture perimeters as accent lighting, but can also remain continually lit for emergency purposes without being obtrusive.

### Exit Signs

EMTEQ's exit signs can be designed in most languages, as well as in different shapes for surface or recessed mounting. State-of-the-art LEDs ensure optimal performance with brighter illumination than traditional exit signs. Our exit signs are versatile, providing any look depending on your needs.

Most EMTEQ exit signs are custom. Below are examples of standard and custom exit signs.

- Horizontal
  - » Horizontal prism
- Vertical
  - » Flat exit sign
  - » Options include arrows, text direction, shape, size, graphics and second languages



Exit sign examples

### Emergency Lighting

Marker lights, mini-spot lights and flexible lighting can all be used as emergency lighting inside your aircraft. These lights are available in red as well as other colors, serving as excellent choices for emergency applications.



Marker lights

## NVIS/NVG LIGHTING

EMTEQ's Night Vision Imaging System (NVIS) lighting products are MIL-L-85762, MIL-STD-3009, D0-275 compliant, and are designed to support NVIS Green A and B, NVIS Red and NVIS White in single or dual-mode colors. They are ideal for low-level, general area and accent lighting applications for police, military and search and rescue operations.

### NVIS Reading and Dome Lights

- NVD05
  - » Compact dome light
  - » Emergency voltage options
- NVR08
  - » Adjustable reading light
  - » Emergency voltage options

### NVIS Wash Lights

- NVW40
  - » NVIS wash light without lens
  - » More compact with reflective profile track
- NVW50
  - » NVIS wash light with lens

### NVIS Flexible Lighting

Compact housing of these flexible NVIS lights makes them ideal for tight spaces.

### NVIS Chartholder

Switch between white or NVIS Green LEDs to view your map or any other items on this dual-mode chartholder.



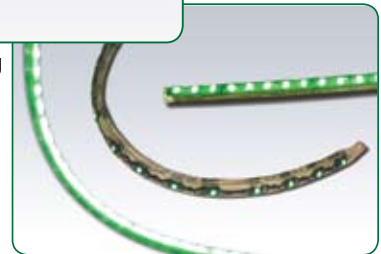
NVR08



NVD05



NVIS wash lighting



NVIS flexible & semi-flexible strip lighting



NVIS chartholder

## CUSTOM APPLICATIONS

EMTEQ excels at custom LED lighting system design, engineering and manufacturing. Our products are adaptable to support almost any aircraft interior application or market – from air transport and military, to corporate and HOS/VIP, to helicopter.



### Custom light assemblies



## LED ACCESSORIES

We help make installations as simple as possible with products that are robust and attractive. Each accessory coordinates with standard EMTEQ products and aircraft interiors. For example, to ensure even illumination, we offer compact voltage regulators, regulated dimmers and panel-mounted dimmer units. Other accessories include:

- Disc & poppet-type air gaspers
- Ordinance signs
- Call buttons
- Switches



## VALUE-ADDED CAPABILITIES

### ENSURING COMPREHENSIVE SOLUTIONS AND SUPPORT FOR YOUR PROGRAM'S SUCCESS.

- Project and program management including on-site engineering support
- On-site technical support, 24-hour AOG support, and installation services
- In-house FAA DER, DAR, DMIR, and PMA certification expertise; FAA consulting services including DER major alteration approval
- Product development, design, testing and analytical services
- FAA and EASA STC development and design data package development with FAA Partnership for Safety Plan and sales/local authority certification approval coordination
- FAA and EASA approved structural repair development
- Transport Canada Aeronautical Products Manufacturer and Maintenance Organization approvals and Transport Canada Design Approval Organization at ACS-NAI
- Subcontract manufacturing services to airframe manufacturers and maintenance organizations

## QUALITY ASSURANCE

EMTEQ's global quality inspection programs comply with EN/JSIQ/AS9100:2004, ISO9001:2008, or EN9100:2003 standards, as well as airframe OEM standard compliance for the consistent production of high performance products. EMTEQ has an approved FAA/EASA Part 145 Repair Station in New Berlin and an EASA Part 145 Repair Station in Switzerland. EMTEQ's New Berlin office is an FAA/PMA approved manufacturing facility. Additionally, we provide first article inspection, customer drawing log and revision control, as well as warehousing and lot control of customer supplied parts.

**CONTACT US TODAY TO DISCUSS HOW WE CAN SUPPORT YOUR SPECIFIC NEEDS.**

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