EMTEQ offers an extensive line of both traditional and high-intensity LED reading light products that cater to numerous applications within the corporate and government systems markets.

**Features & Benefits**

- Lower profile than traditional reading lights
- Can be used as emergency backup
- High intensity directional light source
- Exceptional life expectancy
- Durable design
- Low current draw
- Low heat emission
- Bright illumination
- Easy to install and maintain, resulting in reduced maintenance and installation time
- Eliminates need for bulb replacement
- Many options for LED color and plating finishes

**Air Gaspers That Complement Your Lighting Aesthetics**

Our air gasper products are designed with the same engineering and aesthetic qualities as our LED reading lights for a broad array of complementary product combinations.

**Features & Benefits**

- Precise volumes of air flow
- Poppet-type and disc-type available
- Several plenum cap sizes available
- Easy installation and operation
- No air leakage or noise
- Custom design available for size and plating
- Designed to complement EMTEQ reading and dome lights
25/8” High Intensity Reading Lights – ELR16, ELR17 & ELR19

These low-profile LED reading lights offer emergency backup and adjustable light intensity. Options for overall size, light color and plating finishes make this a highly versatile product for applications in any size aircraft and for installations in many interior locations.

**ELR16 Specifications**

- **Voltage:** 28VDC
- **Emergency backup:** 0VDC, 6VDC, 12VDC, 24VDC, 28VDC
- **Current draw:** 98mA
- **Weight:** 5.6oz; .16kg
- **Color temperature:** 5500K, 4200K, 3600K, 2850K
- **Intensity:**
  - 5500K = 80 footcandles
  - 4200K = 50 footcandles
  - 3600K = 50 footcandles
  - 2850K = 50 footcandles

**ELR16 Order Guide**

<table>
<thead>
<tr>
<th>EMTEQ LED Reading Light</th>
<th>ELR16 - 28 XX X X - X</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Voltage</strong></td>
<td></td>
</tr>
<tr>
<td>28 = 28VDC</td>
<td></td>
</tr>
<tr>
<td><strong>Emergency Voltage</strong></td>
<td></td>
</tr>
<tr>
<td>28 = 28VDC</td>
<td>06 = 6VDC</td>
</tr>
<tr>
<td>24 = 24VDC</td>
<td>00 = None</td>
</tr>
<tr>
<td>12 = 12VDC</td>
<td></td>
</tr>
<tr>
<td><strong>Color Options</strong></td>
<td></td>
</tr>
<tr>
<td>C = Cool white (5500 Kelvin)</td>
<td></td>
</tr>
<tr>
<td>D = Warm white (4200 Kelvin)</td>
<td></td>
</tr>
<tr>
<td>E = Warm white (3600 Kelvin)</td>
<td></td>
</tr>
<tr>
<td>F = Warm white (2850 Kelvin)</td>
<td></td>
</tr>
<tr>
<td><strong>Lens Style</strong></td>
<td></td>
</tr>
<tr>
<td>A = Clear</td>
<td></td>
</tr>
<tr>
<td>B = Diffused</td>
<td></td>
</tr>
<tr>
<td><strong>Termination</strong></td>
<td></td>
</tr>
<tr>
<td>2 = (1) Harness (12&quot;) without connector</td>
<td></td>
</tr>
<tr>
<td>4 = (1) Harness (12&quot;) with Male Molex Microfit connector</td>
<td></td>
</tr>
<tr>
<td>6 = (1) Harness (12&quot;) with Male Molex Standard connector</td>
<td></td>
</tr>
</tbody>
</table>

All values nominal.
**ELR17 Specifications**

- **Voltage:** 28VDC
- **Emergency backup:** 0VDC, 6VDC, 12VDC, 24VDC, 28VDC
- **Current draw:** 60mA
- **Weight:** 3.2oz; .09kg
- **Color temperature:** 5500K, 4200K, 3600K, 2850K

  - **Intensity:**
    - 5500K = 40 footcandles
    - 4200K = 30 footcandles
    - 3600K = 30 footcandles
    - 2850K = 30 footcandles

---

**ELR17 Order Guide**

<table>
<thead>
<tr>
<th>ELR17 Order Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMTEQ LED Reading Light</strong></td>
</tr>
<tr>
<td><strong>Operating Voltage</strong></td>
</tr>
<tr>
<td>28 = 28VDC</td>
</tr>
<tr>
<td><strong>Emergency Voltage</strong></td>
</tr>
<tr>
<td>28 = 28VDC 06 = 6VDC</td>
</tr>
<tr>
<td>24 = 24VDC 00 = None</td>
</tr>
<tr>
<td>12 = 12VDC</td>
</tr>
<tr>
<td><strong>Color Options</strong></td>
</tr>
<tr>
<td>C = Cool white (5500 Kelvin)</td>
</tr>
<tr>
<td>D = Warm white (4200 Kelvin)</td>
</tr>
<tr>
<td>E = Warm white (3600 Kelvin)</td>
</tr>
<tr>
<td>F = Warm white (2850 Kelvin)</td>
</tr>
<tr>
<td><strong>Lens Style</strong></td>
</tr>
<tr>
<td>A = Clear</td>
</tr>
<tr>
<td>B = Diffused</td>
</tr>
<tr>
<td><strong>Termination</strong></td>
</tr>
<tr>
<td>2 = (1) Harness (12&quot;) without connector</td>
</tr>
<tr>
<td>4 = (1) Harness (12&quot;) with Male Molex Microfit connector</td>
</tr>
<tr>
<td>6 = (1) Harness (12&quot;) with Male Molex Standard connector</td>
</tr>
</tbody>
</table>

All values nominal.
ELR19 Specifications

Voltage: 28VDC
Emergency backup: 0VDC, 6VDC, 12VDC, 24VDC, 28VDC
Current draw: 94mA
Weight: 6.4oz; .18kg
Color temperature: 5500K, 4200K, 3600K, 2850K
Intensity: 5500K = 80 footcandles
4200K = 50 footcandles
3600K = 50 footcandles
2850K = 40 footcandles

ELR19 Order Guide

<table>
<thead>
<tr>
<th>ELR19</th>
<th>XX</th>
<th>X</th>
<th>X</th>
<th>-</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMTEQ LED Reading Light</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating Voltage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 = 28VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emergency Voltage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 = 28VDC</td>
<td>06 = 6VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 = 24VDC</td>
<td>00 = None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 = 12VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Color Options</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C = Cool white (5500 Kelvin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D = Warm white (4200 Kelvin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E = Warm white (3600 Kelvin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F = Warm white (2850 Kelvin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lens Style</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A = Clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B = Diffused</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Termination</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = (1) Harness (12&quot;) without connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = (1) Harness (12&quot;) with Male Molex Microfit connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 = (1) Harness (12&quot;) with Male Molex Standard connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All values nominal.
2” High Intensity Reading Lights – ELR12 & ELR13

The ELR12 and ELR13 products offer the latest in LED technology. The ELR12 can be used for focused, direct spot lighting in high ceiling headliners, ideal for reading. The ELR13 offers a wider spread of light than the ELR12, making it appropriate for valance panels/PSU installations and is ideal for wide body and VIP aircraft.

**ELR12 Specifications**

- **Voltage:** 28VDC
- **Emergency backup:** 0VDC, 6VDC, 28VDC
- **Current draw:** 68mA
- **Weight:** 4.3oz; .12kg
- **Color temperature:** 5100K, 4000K, 3500K, 2650K
- **Intensity at 28”:**
  - 4000K = 55 footcandles
  - 3500K = 48 footcandles

**ELR12 Order Guide**

<table>
<thead>
<tr>
<th>ELR12</th>
<th>28</th>
<th>XX</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
</table>

**Operating Voltage**

- **28 = 28VDC**

**Emergency Voltage**

- **28 = 28VDC**
- **06 = 6VDC**
- **00 = None**

**Color Options**

- **B = Cool white (5100 Kelvin)**
- **C = Warm white (4000 Kelvin)**
- **W = Warm white (3500 Kelvin)**
- **F = Warm white (2650 Kelvin)**

**Dimming**

- **0 = None**
- **1 = Pot dimming**

**Termination**

- **2 = (1) Harness (12” +/- 2.5”) without connector**
- **4 = (1) Harness (12” +/- 2.5”) with Molex Microfit connector**
- **6 = (1) Harness (12” +/-2.5”) with Molex Standard connector**

All values nominal.
**ELR13 Specifications**

- **Voltage:** 28VDC
- **Emergency backup:** 0VDC, 6VDC, 28VDC
- **Current draw:** 68mA
- **Weight:** 4.3oz; .12kg
- **Color temperature:** 5100K, 4000K, 3500K
- **Intensity:**
  - 4000K = 37 footcandles
  - 3500K = 35 footcandles

**ELR13 Order Guide**

**EMTEQ LED Reading Light**

**Operating Voltage**
- 28 = 28VDC

**Emergency Voltage**
- 28 = 28VDC
- 06 = 06VDC
- 00 = None

**Color Options**
- B = Cool white (5100 Kelvin)
- C = Cool white (4000 Kelvin)
- W = Warm white (3500 Kelvin)

**Dimming**
- 0 = None
- 1 = Pot dimming

**Termination**
- 2 = (1) Harness (12" +/- 2.5") without connector
- 4 = (1) Harness (12" +/- 2.5") with Molex Microfit connector
- 6 = (1) Harness (12" +/- 2.5") with Molex Standard connector

All values nominal.
AIR GASPERS

EMTEQ Air Gapers are designed to complement our existing line of LED reading and dome light products with the same superior engineering and aesthetic qualities for which our products are known.

EMG04 POPPET-TYPE SPECIFICATIONS

Weight: 5oz (.14kg) (with plenum cap)
Airflow: 3.0 SCFM (wide open and 3.0” (76mm) of water pressure)
Leakage: 0.20 CFM max (fully closed and 20” (508mm) of water pressure)

EMG06 DISC-TYPE SPECIFICATIONS

Weight: 3.1oz (with plenum cap)
Airflow: 13.0 SCFM (wide open and 0.5” (13mm) of water pressure)
Leakage: 0.5 CFM max (fully closed and 3” (76mm) of water pressure)

EMG04 & EMG06 INSTALLATION

Maximum panel thickness: 0.375” (9.5mm)
Recommended mounting hole: 2.0” (51mm) diameter

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Hose Port Diameter*</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMG0X</td>
<td>Gasper without plenum cap</td>
<td></td>
</tr>
<tr>
<td>EMG0X-01*</td>
<td>Gasper with plenum cap</td>
<td>.75”; 1.91cm</td>
</tr>
<tr>
<td>EMG0X-02</td>
<td>Gasper with plenum cap</td>
<td>.875”; 2.22cm</td>
</tr>
<tr>
<td>EMG0X-03</td>
<td>Gasper with plenum cap</td>
<td>1.00”; 2.54cm</td>
</tr>
<tr>
<td>EMG0X-04</td>
<td>Gasper with plenum cap</td>
<td>1.25”; 3.18cm</td>
</tr>
</tbody>
</table>

*This option is not available for the EMG06
**COMPLETE CAPABILITIES**

At EMTEQ, we provide a full range of avionic solutions, service, support and expertise to meet the needs of your customers and understand that reliability, resourcefulness, responsiveness and a partnership approach establishes a solid foundation on which to build your confidence.

Serving both forward fit and retrofit applications in the government systems, corporate, and air transport markets, we specialize in an array of products and services, including:

- Coax Cables & Trays
- Avionics Engineering, Kits & Certification
- Wire Harnessing
- CMS & Cabin Comfort
- LED Interior Lighting
- LED Exterior Lighting
- Aircraft Engineering & Certification
- Specialty Structures & Mechanical Systems

**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, ISO9001:2000, 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.**

---

**EMTEQ, Inc.**  
5349 S. Emmer Drive  
New Berlin, WI 53151 USA  
ph: +1 888-679-6170  
sales@emteq.com  
www.emteq.com

**ACS-NAI, Ltd.**  
Winnipeg, MB Canada  
ph: +1 204-783-5402

**ACS-NAI Montreal**  
Saint-Laurent, QC Canada  
ph: +1 514-312-6054

**EMTEQ Engineering**  
Miramar, FL USA  
ph: +1 305-863-1600

**EMTEQ Europe GmbH**  
Bachenbülach, Switzerland  
ph: +41 44 218 12 00

**EMTEQ do Brasil**  
Taubaté - SP - Brazil  
Partner Office:  
Cable Technology Inc.  
Great Falls, MT USA  
ph: +1 406-452-4700