



The EL240.128.45 is a TFEL display designed for use in extreme operating conditions.

Lumineq's Thin Film Electroluminescence (TFEL) displays have the widest operating temperature range of commercially available technology.

TFEL displays are ideal for use in industrial, medical, transportation, military, public safety and other demanding applications.

#### Lumineq Thin Film Electroluminescent Display

##### Product highlights:

- On-board LCD controller makes the display easy to interface with embedded systems
- MTBF 100,000 hours minimum
- High brightness and excellent contrast in all conditions
- Broad input voltage range from 8 to 18 VDC

##### General TFEL features and benefits:

- Instant ON in cold and hot temperatures
- No need for heating and cooling
- Very long lifetime
- Extremely stable brightness – measured 100,000 hours with > 85% left of initial luminance
- TFEL display brightness, contrast, viewing angle and response time are the same across the entire operating temperature range
- Wide viewing angle > 179° with crisp and clear image
- Very fast response time, < 1 ms
- Extremely rugged and solid TFEL display structure
- Very long production life time
- Extremely wide operating temperature range

##### Ordering Information:

| Product         | Part number   | Features  |
|-----------------|---------------|---|
| EL240.128.45    | 996-0301-01LF | Built-in RA8835A controller, locking connector, dimming |
| EL240.128.45 CC | 996-0301-03LF | Conformal coating                                       |

##### Technical specifications:

|                 |  |
|-----------------|--|
| Technology      | Thin Film Electroluminescence  |
| Color           | Amber  |
| Viewing angle   | 179°, any viewing directions   |
| Response time   | < 1 ms   |
| Luminance       | 130 cd/m <sup>2</sup> typical areal @ 240 Hz                                   |
| Contrast        | 97:1 typical @ 500 lux @ 240 Hz<br>13:1 typical @ 5,000 lux @ 240 Hz           |
| Resolution      | 240 × 128 pixels   |
| Pixel pitch     | 0.45 × 0.45 mm   |
| Weight          | 115 g  |
| Display size    | 140 × 77 × 15 mm   |
| Active area     | 108 × 58 mm  |
| Supply voltages | 5 and 8...18 VDC   |
| Power           | 3.1 W typical @ 120 Hz<br>5.8 W typical @ 240 Hz                               |
| MTBF            | > 100,000 hours  |
| Temperature     | Operating: -40 to +70 °C<br>Survival: -40 to +85 °C<br>Storage: -50 to +105 °C |
| Humidity        | 93% RH, oper., IEC 68-2-3  |
| Altitude        | 18,000 m, oper., IEC 68-2-13   |
| Shock           | 100 g-force, 6 ms, IEC 68-2-27   |
| Vibration       | 5 to 500 Hz, 0.02 g <sup>2</sup> /Hz random<br>IEC 68-2-36, test Fdb           |
| Interface       | 8-bit microprocessor (standard)  |

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