



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

Lumineq® 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 display controller
- MTBF 100,000 hours minimum
- High brightness and excellent contrast
- Broad input voltage range from 8 to 18 VDC
- Wide temperature range from -40 to +70 °C
- Built-in Epson S1D13700 display controller

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

Technical specifications:

| | |
|-----------------|--|
| Technology | Thin Film Electroluminescence |
| Color | TFEL-yellow |
| Viewing angle | 179°, any viewing directions |
| Response time | < 1 ms |
| Luminance | 130 cd/m ² typical areal @ 240 Hz |
| Contrast | 97:1 typical @ 500 lux @ 240 Hz 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 5.8 W typical @ 240 Hz |
| MTBF | > 100,000 hours |
| Temperature | Operating: -40 to +70 °C Survival: -40 to +85 °C Storage: -50 to +105 °C |
| Humidity | 93% RH max @ 40 °C, oper., IEC 60068-2-78 |
| Altitude | 18,000 m, oper., IEC 60068-2-13 |
| Shock | 100 g-force, 6 ms, IEC 60068-2-14, test Ea. |
| Vibration | 5 to 500 Hz, 0.02 g ² /Hz random IEC 60068-2-64, test Fh. |
| Interface | 8-bit microprocessor (standard) |

Ordering Information:

| Product | Part number | Features |
|--------------------|---------------|--|
| EL240.128.45-EC | 996-0301-05LF | Built-in Epson S1D13700 controller, locking connector, dimming |
| EL240.128.45-EC CC | 996-0301-06LF | EL240.128.45-EC with Conformal Coating |

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