



The EL240.128.45 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 RA8835A 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

##### 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 <sup>2</sup> 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 <sup>2</sup> /Hz random IEC 60068-2-64, test Fh.
Interface	8-bit microprocessor (standard)

##### 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

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