LUMINEQ®

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Technical data sheet

EL320.240.36-HB SPI

ICEBrite™ small graphics TFEL display



The EL320.240.36-HB SPI is a high-bright QVGA-display 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:

- Wide temperature range from -40 to +85 °C
- Sunlight readability: 150 cd/m^2
- Broad input voltage range: 8…18 VDC
- Analog dimming
- SAE J-1455 compliant
- SPI interface

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
EL320.240.36-HB SPI	996-0292-12LF	SPI interface

Technical specifications:

Technology	Thin Film Electroluminescence
Color	TFEL-yellow
Viewing angle	179°, any viewing directions
Response time	< 1 ms
Luminance	150 cd/m^2 typical areal @ 250 Hz
Contrast	90:1 typical at 500 lux 8:1 typical at 10,000 lux 2:1 typical at 50,000 lux
Resolution	320 × 240 pixels
Pixel pitch	0.36 × 0.36 mm
Weight	183 g
Display size	148 × 105 × 20 mm
Active area	115 × 86 mm
Supply voltages	5 and 8…18 VDC
Power	3.5 W typical @ 120 Hz 5.5 W typical @ 250 Hz
MTBF	> 50,000 hours
Temperature	Operating: -40 to +85 °C Survival: -50 to +95 °C 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^2/Hz random IEC 68-2-64, test Fh
Interface	SPI (Serial Peripheral Interface Bus)
Options	Conformal coating

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