LUMINEQ®

DISPLAYS BY BENEQ

EL320.240-FA3

Multi-color TFEL display

The EL320.240-FA3 is a multi-color TFEL 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 -50 to +85 °C
- Multi-color TFEL display
- Rugged design
- AMLCD-type 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

Technical specifications:

Technology	Thin Film Electroluminescence
Color	16 colors based on red and green. Sub-pixels and frame-dithering
Viewing angle	179°, any viewing directions
Response time	< 1 ms
Luminance	95 cd/m^2 typical areal
Contrast	1000:1 typical at 0 lux 2.5:1 typical at 20,000 lux 1.5:1 typical at 75,000 lux
Resolution	320 × 240 pixels
Pixel pitch	0.31 × 0.31 mm
Weight	198 g
Display size	150 × 105 × 20.6 mm
Active area	99.15 × 74.36 mm
Supply voltages	5 and 8…18 VDC
Power	4.7 W typical @ full brightness
MTBF	> 50,000 hours
Temperature	Operating: -50 to +85 °C Storage: -50 to +105 °C
Humidity	93% RH max oper. @ +40 °C IEC 60068-2-78
Altitude	18,000 m, oper., IEC 60068-2-13
Shock	100 g-force, 6 ms, IEC 60068-2-27, test Ea.
Vibration	5 to 500 Hz, 0.05 g^2/Hz random IEC 60068-2-64 test Fh.
Interface	TFT LCD parallel (4 modes) EL SGD timing (1 mode)

Ordering Information:

Product	Part number	Features
EL320.240-FA3	997-3377-00LF	Standard
EL320.240-FA3 CC	997-3377-01LF	FA3 + conformal coating