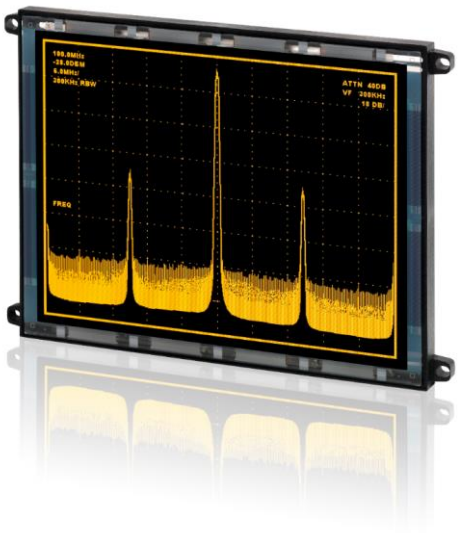
LUMINEQ®

DISPLAYS BY beneq

Technical data sheet

EL640.480-AG LVDS

ICEBrite™ TFEL display



EL640.480-AG LVDS is a VGA-display for use in extreme operating conditions.

Instant-on performance from -60 °C to +105 °C (from -76 °F to +221 °F).

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:

- Very wide temperature range from -60 to +105 °C
- LVDS Interface
- Standard VGA resolution
- Locking connector
- Grayscale support: 4 to 5 gray scales

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

Ordering Information:

Product	Part number	Features
EL640.480-AG LVDS	EL00033900	LVDS interface
EL640.480-AG LVDS CC	EL00033901	LVDS interface, Conformal coating

Technical specifications:

Technology	Thin Film Electroluminescence
Color	TFEL-yellow
Viewing angle	179°, any viewing directions
Response time	< 1 ms
Luminance	60 cd/m^2 typical areal
Contrast	35:1 typical at 500 lux
Resolution	640 × 480 pixels
Pixel pitch	0.258 × 0.258 mm
Weight	400 g
Display size	218 × 156 × 20 mm
Active area	165.1 × 123.8 mm
Supply voltage	12 VDC
Power	6.7 W typical
MTBF	>50,000 hours
Temperature	Operating survival: -60 to +105 °C Operating, continuous use: -60 to +85 °C Storage: -60 to +110 °C
Relative humidity	93 % RH, oper. @ +40 °C, IEC 60068-2-78
Altitude	18,000 m, operating, IEC 60068-2-13
Damp heat	25-55 °C, 95 % RH, non–operating. IEC 60068-2-30
Shock	100 g-force, 4 ms, IEC 60068-2-27, test Ea.
Vibration	5 to 500 Hz, 0.05 g^2/Hz random IEC60068-2-64, test Fh
Interface	LVDS Interface
Options	Anti-glare film, Conformal coating

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