LUMINEQ

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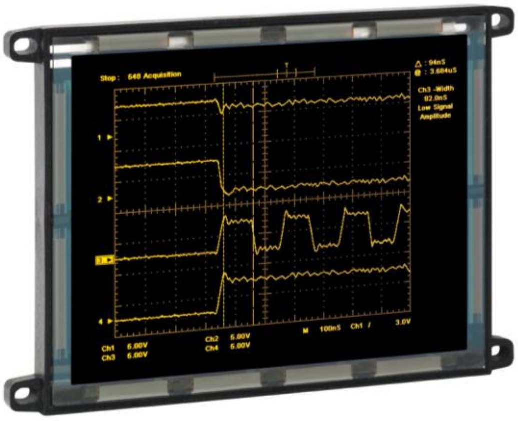
Technical data sheet

EL640.480-AF

ICEBrite™ TFEL display



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

Lumineq's 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
- Standard VGA
- Locking connector, conformal coating and analog dimming options

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-AF1	996-0270-00LF	Standard
EL640.480-AF1 AG	996-0270-01LF	AF1 with anti-glare film
EL640.480-AF1 ET	996-0270-05LF	Extended temperature range, locking connector, dimming

Technical specifications:

Technology	Thin Film Electroluminescence
Color	TFEL-yellow
Viewing angle	179°, any viewing directions
Response time	< 1 ms
Luminance	65 cd/m^2 typical areal @ 120 Hz
Contrast	50:1 typical at 500 lux
Resolution	640 × 480 pixels
Pixel pitch	0.202 × 0.202 mm
Weight	300 g
Display size	182 × 129 × 20 mm
Active area	129.3 × 97.0 mm
Supply voltages	5 and 12 VDC
Power	4.5 W typical @ 120 Hz
MTBF	> 50,000 hours
Temperature	Operating: -40 to +85 °C (ET) Operating: -5 to +55 °C (standard) Survival: -40 to +85 °C (ET) Survival: -20 to +65 °C (standard) Storage: -40 to +95 °C (ET) Storage: -40 to +75 °C (standard)
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, 0.05 g^2/Hz random IEC 68-2-36, test Fdb
Interface	8-bit dual panel
Options	Anti-glare film, locking connectors, dimming

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