The EL320.256-F is a TFEL 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.

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### 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

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### Lumineq Thin Film Electroluminescent Display

**Product highlights:**
- Broad input voltage range: 11...30 VDC
- High-bright display

**Technical specifications:**
- **Technology:** Thin Film Electroluminescence
- **Color:** TFEL-yellow
- **Viewing angle:** 179°, any viewing directions
- **Response time:** < 1 ms
- **Luminance:**
  - 7.7 cd/m² typical area (–F6)
  - 25 cd/m² typical area (–FD6)
  - 55 cd/m² typical area (–FD7)
  - 81 cd/m² typical area (–FD7 HB)
  - 105 cd/m² typical area (–FD8 V2)
- **Resolution:** 320 x 256 pixels
- **Pixel pitch:** 0.30 x 0.36 mm
- **Weight:**
  - 260 g (–F6 and –FD6)
  - 310 g (–FD7, –FD7 HB, FD8 V2)
- **Display size:**
  - 130 x 110 x 31.1 mm (–FD6 and –FD6)
  - 130 x 110 x 33.0 mm (–FD7 and –FD7 HB)
  - see oper. manual for –FD8 V2
- **Active area:** 95.9 x 76.7 mm
- **Supply voltages:** 5 and 11...30 VDC
- **Power:**
  - 6.0 W, typical (–F6, –FD6, –FD7)
  - 7.5 W, typical (–FD7 HB)
  - 9.0 W, typical (–FD8 V2)
- **MTBF:**
  - > 50,000 hours (–F6, –FD6, –FD7, –FD7 HB)
  - > 30,000 hours (–FD8 V2)
- **Temperature:**
  - –F6, –FD6, –FD7, –FD7 HB:
    - Operating: -25 to +65 °C
    - Survival: -40 to +70 °C
    - Storage: -40 to +85 °C
  - –FD8 V2:
    - Operating (low): -25 °C
    - Survival (low): -40 °C
    - Storage: -40 to +75 °C
- **Humidity:** 93% RH, oper., IEC 68-2-3
- **Altitude:** 15,000 m, oper., above sea level
- **Shock:** 100 g-force, 4 ms, IEC 68-2-27
- **Vibration:** 20 to 500 Hz, 0.05 g²/Hz random
- **Interface:** EL standard, 1 bit/clock

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**Ordering Information:**

<table>
<thead>
<tr>
<th>Product</th>
<th>Part number</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL320.256-F6</td>
<td>996-5076-00LF</td>
<td>Non-ICEBrite™</td>
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<tr>
<td>EL320.256-FD6</td>
<td>996-5087-00LF</td>
<td>ICEBrite™</td>
</tr>
<tr>
<td>EL320.256-FD7</td>
<td>996-5089-00LF</td>
<td>ICEBrite™, high-bright</td>
</tr>
<tr>
<td>EL320.256-FD7 HB</td>
<td>996-5089-03LF</td>
<td>ICEBrite™, high-bright plus</td>
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<tr>
<td>EL320.256-FD8 V2</td>
<td>996-5091-00LF</td>
<td>Special mounting</td>
</tr>
</tbody>
</table>

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