

27-Inch FHD Rugged LCD Display with Backlight Driver

The Keetronics 27-Inch FHD Rugged LCD Display with Backlight Driver is a high-brightness display solution designed for demanding industrial, defence, transportation and mission-critical applications. It features a 27-inch TFT LCD with 1920 × 1080 Full HD resolution, 16.7 million colours and a 16:9 aspect ratio for clear and detailed visual information.

With 1000 cd/m² luminance after optical bonding, a 3000:1 contrast ratio and a 12 ms typical response time, the display delivers bright, responsive and high-contrast visuals. The 89° viewing angle in all directions supports clear viewing across a wide range of operating positions.

The display incorporates optical bonding, strengthened anti-glare glass and an EMI protective mesh with provision for 360° electrical grounding. The EMI shielding design is intended to support MIL-STD-461E/F requirements, while the overall construction is designed with demanding environmental conditions in mind, including dust, shock and vibration requirements.

The solution is supplied as an assembled 27-inch FHD LCD display along with two backlight driver boards, an LVDS cable and a backlight cable, providing the essential components for system integration.

Key Features :

- 27-inch Full HD display with 1920 × 1080 resolution, 16.7M colours and 3000:1 contrast ratio.
- High-brightness 1000 cd/m² display with optical bonding and 3 mm AG strengthened glass for demanding viewing environments.
- EMI-protected rugged design with 360° electrical grounding provision and design support for MIL-STD-461E/F requirements.
- Designed for harsh environments, with provisions for dust, shock and vibration requirements and a wide operating temperature range.

Technical Specifications :

Product Code	KIPL 26-6512
Display Size	27 Inch
Resolution	1920 × 1080 pixels, Full HD
Display Type	TFT LCD
Display Colour	16.7M, True 8 Bit
Aspect Ratio	16:9
Luminance	1000 cd/m^2, after optical bonding
Contrast Ratio	3000:1
Response Time	12 ms (Typical)
Viewing Angle	89° / 89° / 89° / 89°
Interface	2-Channel LVDS
Active Area	597.6 (H) × 336.15 (V) mm
Pixel Pitch	0.31125 × 0.31125 (H × V)
Cover Glass	3 mm AG strengthened glass
Optical Bonding	Yes
EMI Mesh	EMI protective mesh with 360° electrical grounding provision and 85% visibility
Overall Dimensions	644.20 × 388.40 × 14.00 mm (±0.6 mm)
LED Life	50,000 hours
Operating Temperature	-20°C to +55°C
Storage Temperature	-30°C to +70°C
Humidity	90% @ 60°C, non-condensing
EMI/EMC	EMI protective mesh with 360° electrical connectivity design to meet MIL-STD-461E/F*
Dust	Designed to meet JSS 55555, Test No. 14, Duration: 1 hour*
Shock	Designed to meet MIL-STD-810D*
Vibration	Designed to meet MIL-STD-810E*
Deliverables	Assembled 27-inch FHD LCD Display, 2 × Backlight Driver Boards, LVDS Cable, Backlight Cable