

5.7-Inch VGA Resistive Touch CDU Display with Rugged Enclosure & Keypad

The KIPL 25-6393 is a 5.7-inch resistive touch CDU display designed for human-machine interface applications in military, defence and avionics environments. It combines a compact 640 × 480 VGA TFT LCD with a 5-wire resistive touch interface and rugged CDU bezel construction for reliable operator interaction in demanding applications.

The display delivers 1000 cd/m² brightness, a 1200:1 contrast ratio and 85° viewing angles in all directions. It supports 262K/16.7M colours, a 4:3 aspect ratio and a refresh rate of ≥60 Hz. The LED backlight has a specified MTBF of ≥50,000 hours.

The resistive touch screen supports operation with a stylus, finger or gloves and uses a USB touch interface compatible with Windows, Linux, Mac and other supported platforms. The touch surface uses tempered AG/AR strengthened glass with 25H surface hardness.

Optical bonding between the LCD and touch screen includes an anti-glare feature. An EMI protective mesh provides provision for 360-degree electrical grounding and 85% visibility. The display is designed for operation from -30°C to +80°C and storage from -40°C to +85°C, with EMI/EMC design to meet MIL-STD-461E/F.

Key Features :

- 5.7-inch VGA TFT LCD with 640 × 480 resolution, 1000 cd/m² brightness, 1200:1 contrast ratio and 85° viewing angles.
- 5-wire resistive touch with USB interface and support for stylus, finger and glove operation.
- Optically bonded display with anti-glare feature and EMI protective mesh providing 360° electrical grounding provision and 85% visibility.
- Rugged CDU bezel assembly designed for military, defence and avionics applications with -30°C to +80°C operation and MIL-STD-461E/F EMI/EMC design.

Technical Specifications :

Display Size	5.7 Inch Diagonal
Display Panel Type	TFT LCD
Resolution	640(H) × 480(V) Pixels, VGA
Display Interface	LVDS
Backlight	LED
Brightness	1000 cd/m^2
Contrast Ratio	1200:1
Aspect Ratio	4:3
Viewing Angle	85° / 85° / 85° / 85° (T/B/L/R)
Refresh Rate	≥60 Hz
Display Colour	262K / 16.7M
Active Area	115.2(H) × 86.4(V) mm
Response Time	30 ms (Typical)
Display Outer Dimensions	129.5(W) × 102.56(H) × 8.59(T) mm
Input Voltage	VDD = 3.3V @ max 80mA; LED forward voltage = 18V @ typical 80mA
LED Backlight MTBF	≥50,000 Hours
Touch Type	5-Wire Resistive Touch
Touch Interface	USB
Touch Driver Support	Windows, Linux, Mac, etc.
Touch Surface Hardness	25H
Touch Glass	Tempered Glass, AG/AR Strengthened
Touch Operation	Stylus / Finger / Gloves
Optical Bonding	LCD + Touch Screen
Optical Bonding Feature	Anti-Glare
EMI Mesh	EMI protective mesh with provision for 360° electrical grounding and 85% visibility
Operating Temperature	-30°C ±3°C to +80°C ±3°C
Storage Temperature	-40°C ±3°C to +85°C ±3°C

Humidity	10 to 90%, non-condensing
EMI/EMC	Designed to meet MIL-STD-461E/F
Bezel Type	Rugged CDU Bezel Assembly
Application	Military, Defence and Avionics HMI Applications