

10.4-Inch XGA Rugged Resistive Touch Display Module

The KIPL 26-6433 10.4-Inch Rugged Resistive Touch Display Module is a high-brightness smart display designed for demanding applications and harsh operating environments. It features a 10.4-inch TFT LCD with 1024 × 768 XGA resolution, 16.7M true 8-bit colours, 1000 cd/m² brightness and a 1000:1 contrast ratio.

The display integrates a 5-wire resistive touchscreen, strengthened glass with AG/AR/AF coating, optical bonding and an EMI protective mesh with provision for 360-degree electrical grounding. Its compact, low-weight and fanless design supports easy mounting and reduced maintenance requirements.

The integrated computer platform features an Intel® Quad Core™ i7-6822EQ processor, Intel® HD Graphics 530, 16 GB DDR4 RAM and a 256 GB SSD. The system provides multiple serial, CAN, USB, Ethernet and video interfaces for integration with mission and industrial systems.

Designed for rugged applications, the module supports MIL-STD-461E/F EMI/EMC design, IP67 ingress protection, MIL-STD-810G environmental requirements, vibration and shock testing, and operation up to 40,000 ft altitude. A rugged temperature option with heater supports operation from -40°C to +65°C.

Key Features :

- 10.4-inch XGA rugged display with 1024 × 768 resolution, 1000 cd/m² brightness and 16.7M true 8-bit colours.
- 5-wire resistive touchscreen with strengthened >6H glass, AG/AR/AF coating and optical bonding.
- Integrated rugged computing platform with Intel® Quad Core™ i7-6822EQ, 16 GB DDR4 RAM and 256 GB SSD.
- Military and environmental protection with IP67, MIL-STD-461E/F, MIL-STD-810G and operating altitude up to 40,000 ft.

Technical Specifications :

Product Code	KIPL 26-6433
Display Type	10.4-Inch Rugged TFT LCD
Resolution	1024 × 768 pixels (XGA)
Display Colours	16.7M (True 8 Bit)
Brightness	1000 cd/m^2
Contrast Ratio	1000:1
Viewing Angle	±88° Horizontal and Vertical
Aspect Ratio	4:3
Response Time	25 ms (Typical, On/Off)
Active Area	210.4(H) × 157.8(V) mm
Touchscreen Type	5-Wire Resistive Touch
Touch Glass	Strengthened Glass >6H with AG/AR/AF Coating
Optical Bonding	Yes
EMI Mesh	EMI protective mesh with provision for 360° electrical grounding
System Processor	Intel® Quad Core™ i7-6822EQ, 4 × 2.0 GHz, 8 MB Smart Cache
Graphics	Intel® HD Graphics 530
RAM	16 GB, 1 × 16 GB DDR4 SODIMM, 2133 MT/s
Storage	256 GB SSD, 6 Gb/s SATA Interface
Operating System	BSP for CentOS, Windows, Linux
Power Consumption	39 W typical, <200 W maximum while heating
Module Dimensions	286.0(H) × 254.0(V) × 67.4(D) mm ±0.5 mm
Bezel Keypad	32-Key Illuminated Keypad, Green Backlight
Control Keys	4 × control keys for Day/Night mode, TS On/Off, Brightness and Power
Function Keys	28 × function keys with dimmable green backlight
LED Indicators	Power, Fault, Day/Night Mode and TS On/Off
Serial Ports	4 × RS-232/422/485
CAN Bus	2 × CAN Bus
General Purpose I/O	8 × General Purpose Inputs, 3 × General Purpose Outputs

Video Output	1 × VGA
USB	4 × USB 2.0
Ethernet	2 × Gigabit Ethernet
Video Inputs	4 × RS-170, PAL/NTSC Video Inputs
Push-to-Talk	1 × Push-to-Talk Control
Audio Interfaces	1 × Audio Line In, 1 × Microphone In, 1 × Audio Line Out
Input Voltage	28 VDC Nominal
Connectors	MIL-DTL-38999/3
Power Compliance	Designed to meet MIL-STD-1275E
Cooling	Passive
Standard Operating Temperature	-20°C to +65°C
Standard Storage Temperature	-30°C to +70°C
Rugged Operating Temperature	-40°C to +65°C with Heater
Rugged Storage Temperature	-40°C to +70°C with Heater
Humidity	10–90%, Non-Condensing
Vibration	Designed to meet MIL-STD-810G; Random vibration, tracked vehicle - AECTP400
Shock	Designed to meet MIL-STD-810G, 40 g, 23 ms, 6 shocks/axis
EMI/EMC	Designed to meet MIL-STD-461E/F
Ingress Protection	Designed to meet MIL-STD-461E/F
Altitude	Up to 40,000 ft operating
Sand & Dust / Salt Fog	Designed to meet MIL-STD-810G
Environmental Test	Designed to meet JSS 55555-2012 or later
Fanless Design	Yes
Weight	Not specified in the provided source