

3.5-Inch Rugged Smart Display

The Keetronics 3.5-Inch TFT LCD Display with 16 MB Flash Memory is a compact embedded display module designed for applications requiring an integrated graphical interface, onboard memory, and touchscreen functionality.

The module features a 3.5-inch TFT LCD with 480 × 320 pixel resolution, 65K colors with 8-bit RGB, and a white LED backlight providing 300 cd/m² brightness. A 32-bit ARM MCU manages the display functions, while the integrated 16 Mbit storage provides space for graphical content and interface resources.

The display supports UART/TTL communication, with RS232/TTL communication available and TTL as the default configuration. The module uses a PH1.25-6P connector and operates from a 5.0 V supply with approximately 0.5 W power consumption.

The built-in font library supports vector fonts and bitmap ASCII, GBK, and GB2312 characters. Image storage supports JPEG and PNG formats, along with image rotation and scaling functions. The module also incorporates a capacitive touch panel with approximately 80% light transmittance.

With its compact form factor and integrated processing, memory, display, and touch functions, this module is suitable for embedded HMI systems, industrial equipment, control interfaces, instrumentation, and other compact display applications.

Key Features :

- 3.5-inch TFT LCD with 480 × 320 resolution, 65K colors, and 300 cd/m² brightness
- Integrated 32-bit ARM MCU with 16 Mbit flash memory for embedded graphical applications
- Capacitive touchscreen with approximately 80% light transmittance for interactive HMI operation
- UART/TTL and RS232 communication support with JPEG/PNG image storage and built-in multilingual font support

Technical Specifications :

Product Code	KIPL 26-6508
Display Type	3.5-inch TFT LCD
Resolution	480 × 320 pixels
MCU Chipset	32-bit ARM MCU
Protocol Type	UART / TTL
Storage Space	16 Mbit Flash Memory
Color	65K, 8-bit RGB
Operating Voltage	5.0 V
Power Consumption	0.5 W
Communication Interface	Rs232 / TTL, Default: TTL
I/F Connector	PH1.25-6P
Module Size	108.71 (W) × 60.75 (H) × 15.0 (D) mm Max.
Active Size	73.44 (W) × 125.28 (H) mm*
Backlight Type	White LED
Brightness	300 cd/m^2
Contrast Ratio	400:1
Viewing Direction	45 / 20 / 45 / 45 (L/R/T/B)
Backlight Life	>20,000 hours
Touch Panel Type	Capacitive Touch Panel
Touch Panel Light Transmittance	80%
Font Library	Built-in vector font with edge anti-aliasing; bitmap ASCII, GBK and GB2312 support
Image Format Support	JPEG, PNG
Image Functions	Image storage, rotation and scaling
RTC	N/A
Add ons	Inhouse Optical Bonding with Protective Cover Glass| GUI development with functional testing | Micro USB Cable | AG / AR/ AF Coating | Custom Bezel / Mask/ Mechanical Integration i.e Custom metal/plastic bezel or mounting frame