

Full-Graphic Displays for Difficult Lighting Conditions

Electronic Assembly has developed the EA DIP122-5 line of displays with LED background illumination for extreme lighting conditions. The line covers indoor and outdoor applications as well as use in direct sunlight.

The EA DIP122-5 is available in three colors: amber, green/yellow, and blue/white. The yellow/green (EA DIP122-5HNLED) and amber (EA DIP122J-5NLA) variants are particularly well suited to the outdoors and extreme lighting conditions such as direct sunlight, while efficient LED background illumination facilitates operation in lower-light settings.

The contrast-optimized blue/white variant is ideal for indoor applications, with or without artificial light, and when low energy consumption is vital.

All three variants are equipped with an automatic temperature compensation device for an enhanced temperature range of -20 to +70 °C. This eliminates the need to adjust the contrast during operation. These variants (EA DIP122-5HNLED, EA DIP122B-5NLW, and EA DIP122J-5NLA) also feature superfast liquid technology to ensure a sufficient response time (2 seconds on average) when exposed to extremely low temperatures.

The EA DIP122-5 line of full-graphic displays offers a resolution of 122 x 32 pixels. Two built-in controllers (type PT6250 or compatible) regulate the display, whereby each controller is assigned to 61 columns. All displays use an 8-bit processor interface for external communication and require a contrast voltage of +5 V and -4 V. An external series resistor or constant current source is all that is needed for the LED background illumination.

The displays are easily soldered to the printed circuit board (no socket required), or socket connectors can be used. Additional modules with the same casing and pinout but a different dot matrix (1 x 8, 2 x 16, and 4 x 20) are also available.

