

Compact OLED displays break new ground in their range of uses

With a wide range of extremely compact OLED displays, ELECTRONIC ASSEMBLY has paved the way for new fields of use. The monochromatic display elements now come in a variety of designs featuring different sizes, profiles, resolutions and colours to suit various uses – even where it has not been possible to integrate a screen until now. Examples include wearables, pocket instruments and generally devices which involve a very compact design combined with low energy requirements.

The low-power OLED displays by ELECTRONIC ASSEMBLY come in round, square and rectangular designs. The diagonal size of the smallest display unit is hardly 0.66" (just under 1.7 cm). Their extremely flat construction (starting at 2.05 mm) allows all display elements to be fitted neatly into miniaturised devices. A further strength of the OLED displays made by ELECTRONIC ASSEMBLY is their versatility: as full-screen graphic displays with up to 16,384 pixels, they allow graphical and alphanumeric elements to be combined on the screen. All versions have a built-in graphics controller which can optionally be ordered with an SPI or I²C bus interface and a 3.3 volt logic operating voltage.

All displays are designed for operating temperatures between -40°C and +80°C. This huge temperature range allows them to be used both outdoors in winter temperatures and in extremely hot industrial environment. Other universal features include the large viewing angle of 170 degrees and the high contrast ratio of 2000:1, which together make the displays extremely good to read. The displays also respond very quickly even at low temperatures; a typical value is 10 microseconds, even at -40° C! Thanks to the patented OLED technology, the displays also have a possible lifetime of 50,000 to 100,000 operating hours, depending on the colour and ambient temperature. The display elements are available in yellow, white and blue.