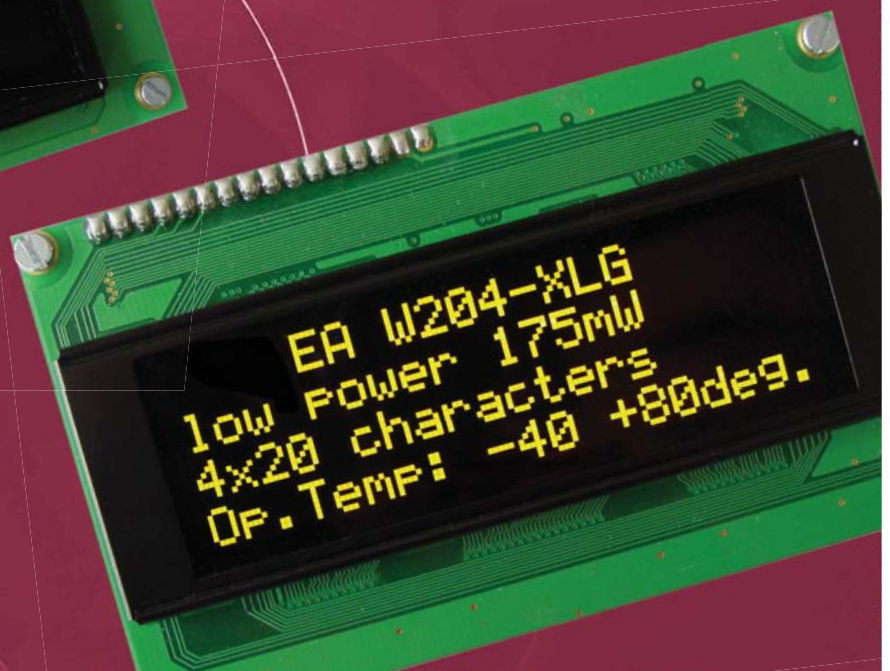


ELECTRONIC ASSEMBLY

new display design

OLED Displays 2x8 ... 4x20 Character

- Excellent Contrast
- 4-Bit / 8-Bit Bus compatible
- Different Character Sets:
English/European/Cyrillic
- Superfast also at -40°C ($t_r/t_f = 10\mu\text{s}$)
- 2x8 .. 4x20 Character

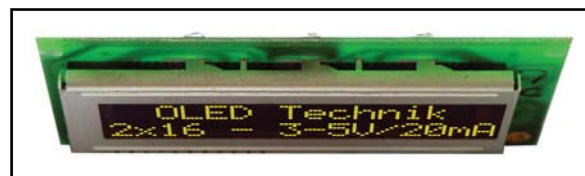


OLED for the Industry

Excellent Contrast

Contrast ratio 2000:1

The new OLED technology provides a contrast ratio of minimum 2000:1 because of its real black background and the active technology. The convincing viewing angle delivers a view of near 180°. Because of that these displays are perfect for applications that do require a good visibility even at an adverse angle.



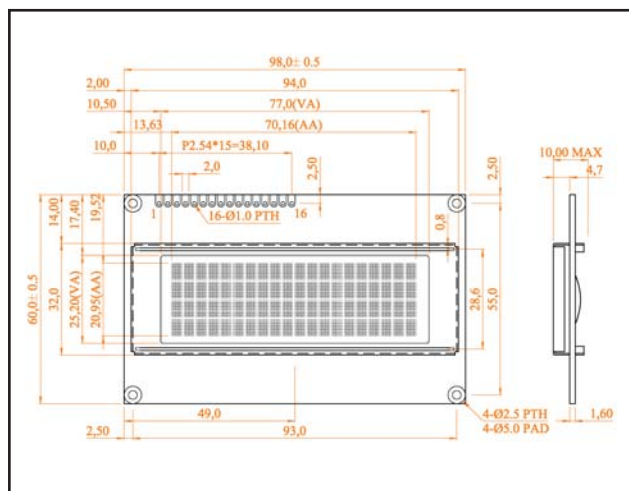
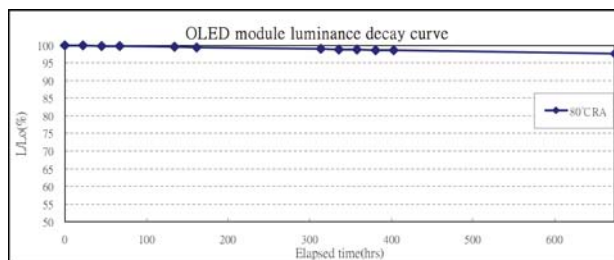
Operating temperature range $t_{op.} = -40..+80^{\circ}C$

More and more does the required temperature range exceed the possibilities of a typical LCD module. Above all things at low temperatures the new OLED displays does win every competition with standard LCD modules:

- * perfect functionality down to $-40^{\circ}C$
- * full contrast even down to $-40^{\circ}C$
- * extrem fast response time: $10\mu s$ (!)
- * no contrast adjustment necessary
- * no limitation in viewing angle

Continous operation without problems

At last the new OLED displays from ELECTRONIC ASSEMBLY are suitable for industrial applications. Thanks to the new patent OLED technology the displays do reach a life time of 14 khours, even at the maximum operating temperature of $+80^{\circ}C$ (life time ends at half brightness). The probable life time at room temperature is 100,000 hours and more!



Englisch, Japanese, European, Cyrillic

The new OLED displays do provide the most important character sets as a standard already: English, Japanese, European (8 bit interface only) and Cyrillic. Especially for the cold eastern European countries the new OLED displays are the perfect solution: full functionality in combination with cyrillic characters. They also do provide a very fast display response time, even at icy temperatures with $-40^{\circ}C$. And the low temperatures is even positive to the life time.

Character displays 2x8..4x20

With it's well-known 4 bit and 8 bit parallel interface, the new OLED displays are similar to the HD44780 standard. The standard command set was extended with some commands for the various character sets and a power-down-mode.

All OLED displays at a glance									
Partnumber	Row x Column	Char height	Module size			Viewing Area		Accessorie Bezel	Hints
			B	H	T	B	H		
EA W082-XLG	2x8	5.5	58.0	32.0	10.0	38.0	16.0	---	yellow/green
EA W162-X3LW	2x16	5.5	80.0	36.0	10.0	66.0	16.0	EA 017-2U	icewhite
EA W162-X3LG	2x16	5.5	80.0	36.0	10.0	66.0	16.0	EA 017-2U	yellow/green
EA W162-X9LG	2x16	5.5	85.0	36.0	10.0	66.0	16.0	EA 017-2U	yellow/green
EA W162-XLG	2x16	5.5	84.0	44.0	10.0	66.0	16.0	EA 017-2U	yellow/green
EA W162-XBLW	2x16	8.9	122.0	55.0	10.0	99.0	24.0	EA 017-12U	icewhite
EA W162-XBLG	2x16	8.9	122.0	44.0	10.0	99.0	24.0	EA 017-12U	yellow/green
EA W202-XLG	2x20	5.5	116.0	37.0	9.8	85.0	18.6	EA 017-7U	yellow/green
EA W204-XLG	4x20	5.5	98.0	60.0	10.0	70.0	25.2	EA 017-9U	yellow/green

5V / 3.3V

The new OLED are at home in both worlds: single supply operation with 5V and 3.3V - without any modification. The current consumption is, depending to the display size and content, between 15 and 50mA (typ.). The highest brightness can be reached with 5V operation. There's no contrast adjustment necessary. This simplifies the electronic design. As an accessory there are black bezels with and without window available.

