

**March, 2017**

Thanks for reading Winstar Newsletter issue no.99. In this issue, we announced an important Notice regarding LED backlight brightness issue and we will introduce one 1.54 inch new OLED COG Graphic modules WEO012864A as well.

### **Notice: LED Backlight Brightness Increased for Winstar LCD Modules**

Due to the LED production technology rapid advancement during these years, the LED brightness and luminous efficiency performance improved a lot. Because of the phenomenon of LED production technology improvement, LED backlight brightness on the LCD modules has been increased a lot. None of the LCD module manufacturers can resist the change since it the trend of the LED industry in the market. The manufacturing technology of all LED dices has been improved and having much better performance. This is an issue to almost LCD module manufacturers not only to Winstar Display. We need our customers' understanding and cooperation to the above captioned issue. Thank you in advance.

#### **Affected Items:**

All Winstar LCD modules which are having LED backlights.

#### **Appearance:**

Since each Winstar LCM item has various LED dices and designs, the performance will not be the same. Generally, the brightness of the LCD modules will increase around 10% to 40%. The LCD negative mode will be more obviously on brightness. Below photos are some comparison examples as reference.

Please note, the LED backlight will having much improvement on brightness but the mechanical sizes of the modules will not be affected. The electrical characteristics will retain the same as Winstar product datasheet for each individual item.

#### **Recommend Action:**

We recommend the users increasing the value of the current limiting resistor to adjust the LED brightness. This action will reduce the power consumption and lower the LED brightness.



## Product Introduction -1.54 inch OLED WEO012864A

Winstar OLED Display WEO012864A is made of 128x64 pixels, diagonal size 1.54 inch. This graphic display is having the module dimension of 42.04 x 27.22 mm and AA size of 35.05 x 17.51 mm; it is built in with SSD1309ZC controller IC and it communicates via 6800/8080 8-bit parallel, I2C and 4-wire serial interface. This WEO012864A OLED display is based on a chip-on-glass technology and therefore it is very thin, only 1.45 mm in depth. The standard color for this item is available in white, yellow and amber. If you require other emitting colors, please contact us.

WEO012864A is a COG structure OLED display this OLED module is lightweight, low power and very thin, it is suitable for wall / meter devices, home applications, POS system, Cloud/IoT system, handheld instruments, intelligent technology devices, energy systems, automotive, communication systems, medical instrument, etc. WEO012864A OLED module can be operating at temperatures from -40°C to +80°C; its storage temperatures range from -40°C to +80°C.

Item-WEO012864A	Dimension
Dot Matrix	128 x 64 dots
Size	1.54 inch
Module dimension	42.04 × 27.22 × 1.45 mm
Active Area	35.05 × 17.51 mm
Pixel Size	0.249 × 0.249 mm
Pixel Pitch	0.274 × 0.274 mm
Display Mode	Passive Matrix
Display Color	Available: White, Yellow, Amber
Drive Duty	1/64 Duty
IC	SSD1309ZC
Interface	I2C, SPI, 6800, 8000

