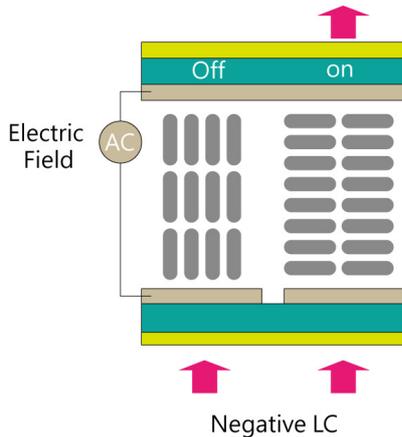


# Winstar introduces a new standard item in the WH1602B Series

Winstar Display Co., Ltd has released a new standard item in the WH1602B Series which features a VATN LCD. The Vertical Alignment (VA) display is a form of LCD in which the liquid crystals naturally align vertically to the glass substrates.

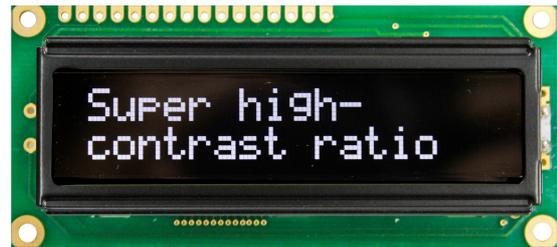


When no voltage is applied, the liquid crystals remain perpendicular to the substrate creating a black display between the crossed polarizer.

However, when voltage is applied the liquid crystals shift to a tilted position allowing light to pass through and create a gray-scale display depending on the amount of tilt generated by the electric field.

### Advantages of VA Displays:

- Super black background
- Super high contrast ratio
- Wide viewing angle
- Better performance, it can replace a black mask



### Product introduction – standard item

The newly released standard item in the WH1602B has a superb view angle and high contrast ratio. The display comes with a built-in controller IC which is available in either: 6800, 4 Line SPI or I2C Interface options. The display has the same outline size, VA size and pin out as other existing WH1602B modules but the key difference is the VA LCD.

Available VATN 16x2 standard Winstar part numbers are listed below:

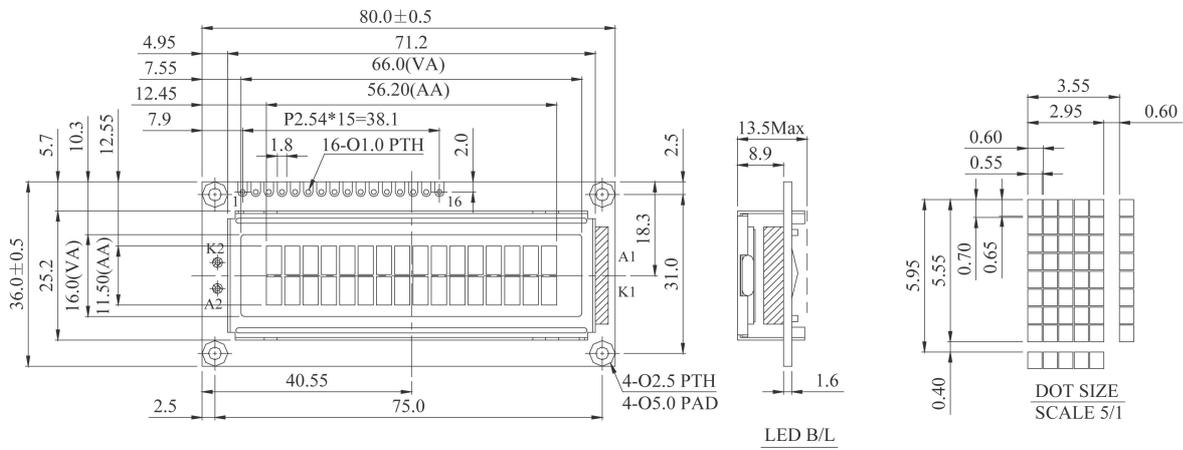
- WH1602B-SLL-JWV# – 6800 Interface
- WH1602B1-SLL-JWV# – 4 Line SPI Interface
- WH1602B3-SLL-JWV# – I2C Interface

### Basic Specifications:

- Two line (2x16) characters
- Driving method: 1/16 Duty & 1/5 Bias
- VDD: 5V
- VOP: 6.5V
- Outline Size: 80.00x36.00mm
- VA Size: 66.00x16.00mm
- Character Size: 2.95x5.55mm



Contour Drawing:



Datasheets and additional information can be found on [www.winstar.com.tw](http://www.winstar.com.tw)