### Full Color TFT Displays

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Resolution</th>
<th>Interface</th>
<th>Touch Cap.</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL082B</td>
<td>8 x 2</td>
<td>RS232/2, TTL, I2C</td>
<td>Yes</td>
<td>140.00 x 38.00 x 21.95</td>
<td>70.08 x 22.34</td>
</tr>
<tr>
<td>AL082C</td>
<td>16 x 2</td>
<td>RS232/2, 2, I2C, SPI</td>
<td>Yes</td>
<td>140.00 x 38.00 x 19.55</td>
<td>95.04 x 22.93</td>
</tr>
<tr>
<td>AL204B</td>
<td>8 x 2</td>
<td>RS232/2, 2, SPI</td>
<td>Yes</td>
<td>140.00 x 80.00 x 17.10</td>
<td>95.04 x 30.88</td>
</tr>
<tr>
<td>AL204C</td>
<td>16 x 2</td>
<td>RS232/2, 2, SPI</td>
<td>Yes</td>
<td>140.00 x 80.00 x 17.00</td>
<td>108.00 x 64.80</td>
</tr>
<tr>
<td>AL204D</td>
<td>4 x 2</td>
<td>RS232/2, 2, SPI</td>
<td>Yes</td>
<td>180.00 x 65.00 x 20.00</td>
<td>127.15 x 33.91</td>
</tr>
</tbody>
</table>

### Character LCD

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characters X Lines</th>
<th>Interface</th>
<th>Keypad (Max keys)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD02B1</td>
<td>8 x 2</td>
<td>RS232/2</td>
<td>N/A</td>
<td>27.80 x 11.50</td>
<td>XX, WB, GY, Y</td>
<td>E, V</td>
</tr>
<tr>
<td>CD04A1</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>N/A</td>
<td>70.40 x 20.80</td>
<td>XX, WB, GY, Y</td>
<td>E, L-V, V-P/T</td>
</tr>
<tr>
<td>KE16D</td>
<td>16 x 2</td>
<td>RS232/2</td>
<td>4</td>
<td>48.20 x 8.90</td>
<td>XX, WB, GY, Y</td>
<td>E, V, V-P/T</td>
</tr>
<tr>
<td>KE16G</td>
<td>16 x 2</td>
<td>RS232/2</td>
<td>7</td>
<td>56.20 x 11.50</td>
<td>XX, WB, GY, Y</td>
<td>E, V</td>
</tr>
<tr>
<td>KE20D</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>25</td>
<td>73.50 x 11.50</td>
<td>XX, WB, GY, Y</td>
<td>E, V, V-P/T</td>
</tr>
<tr>
<td>KE20E</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>25</td>
<td>70.40 x 20.80</td>
<td>XX, WB, GY, Y</td>
<td>E, V, V-P/T</td>
</tr>
<tr>
<td>KE20F</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>25</td>
<td>73.50 x 11.50</td>
<td>XX, WB, GY, Y</td>
<td>E, V, V-P/T</td>
</tr>
<tr>
<td>KE20G</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>25</td>
<td>147.50 x 11.50</td>
<td>E, X</td>
<td>E, V, V-P/T</td>
</tr>
</tbody>
</table>

### Economy Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characters X Lines</th>
<th>Interface</th>
<th>GPOs</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOS-AL162A</td>
<td>16 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>80.00 x 36.00 x 25.60</td>
<td>56.20 x 15.00</td>
<td>E, V</td>
</tr>
<tr>
<td>MOS-AL162B</td>
<td>16 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>69.00 x 21.50 x 23.00</td>
<td>47.56 x 11.00</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL202A</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>3</td>
<td>116.00 x 37.00 x 26.10</td>
<td>73.50 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL202B</td>
<td>20 x 4</td>
<td>RS232/2</td>
<td>3</td>
<td>146.00 x 62.50 x 26.60</td>
<td>118.84 x 38.47</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL202C</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL422A</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL422B</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL422C</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL424A</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL424B</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOS-AL424C</td>
<td>24 x 2</td>
<td>RS232/2</td>
<td>3</td>
<td>118.00 x 36.00 x 27.50</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
</tbody>
</table>

### Parallel Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characters X Lines</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP-AL08B</td>
<td>8 x 2</td>
<td>58.00 x 32.00 x 14.00</td>
<td>27.81 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL08A</td>
<td>16 x 2</td>
<td>80.00 x 36.00 x 14.00</td>
<td>56.20 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL202A</td>
<td>20 x 2</td>
<td>116.00 x 37.00 x 14.50</td>
<td>73.50 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL202B</td>
<td>20 x 2</td>
<td>98.00 x 60.00 x 15.00</td>
<td>70.40 x 20.80</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL202C</td>
<td>20 x 2</td>
<td>146.00 x 62.50 x 13.00</td>
<td>118.84 x 38.47</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL242A</td>
<td>24 x 2</td>
<td>118.00 x 36.00 x 14.00</td>
<td>88.30 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL402A</td>
<td>40 x 2</td>
<td>182.00 x 33.50 x 13.00</td>
<td>147.50 x 11.50</td>
<td>E</td>
</tr>
<tr>
<td>MOP-AL402C</td>
<td>40 x 4</td>
<td>190.00 x 54.00 x 14.00</td>
<td>140.45 x 23.16</td>
<td>E</td>
</tr>
</tbody>
</table>

### Graphic OLED

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Cols x Rows</th>
<th>Interface</th>
<th>Keys</th>
<th>GPOs</th>
<th>Module Size W x H x T (mm)</th>
<th>Pixel Size</th>
<th>Display Size W x H (mm)</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOK12832A</td>
<td>128 x 32</td>
<td>RS232/2</td>
<td>25</td>
<td>86.10 x 35.10 x 17.70</td>
<td>95.04 x 22.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOK12832B</td>
<td>256 x 32</td>
<td>RS232/2</td>
<td>25</td>
<td>140.00 x 38.00 x 21.95</td>
<td>95.04 x 22.93</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Available Options:**
- **-LV**: Low Voltage 3.3Vdc
- **-VS**: Super Wide Voltage 5-15Vdc
- **-E**: Extended Temperature -40° to +80°C
Graphic LCD

### Intelligent Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Resolution</th>
<th>Interface</th>
<th>Keypad (Max keys)</th>
<th>GPOs</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLK1223A-25-SM</td>
<td>122 x 32</td>
<td>● ● ● ●</td>
<td>25</td>
<td>2</td>
<td>86.10 x 35.10 x 23.02</td>
<td>53.64 x 15.64</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>GLK1223-25</td>
<td>122 x 32</td>
<td>● ● ● ●</td>
<td>25</td>
<td>2</td>
<td>98.00 x 60.00 x 20.10</td>
<td>69.50 x 20.50</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>GLK19264A-7T-1U</td>
<td>192 x 64</td>
<td>● ● ● ●</td>
<td>7</td>
<td>6</td>
<td>142.00 x 38.00 x 34.40</td>
<td>74.85 x 24.93</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>GLK240128-25</td>
<td>240 x 128</td>
<td>● ● ● ●</td>
<td>25</td>
<td>6</td>
<td>144.00 x 104.00 x 29.70</td>
<td>107.95 x 57.55</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>GLK24064-25</td>
<td>240 x 64</td>
<td>● ● ● ●</td>
<td>25</td>
<td>6</td>
<td>180.00 x 65.00 x 30.90</td>
<td>127.16 x 33.88</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>GLK24064R-25U</td>
<td>240 x 64</td>
<td>● ● ● ●</td>
<td>25</td>
<td>6</td>
<td>138.00 x 38.00 x 28.21</td>
<td>93.57 x 24.93</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
</tbody>
</table>

**Color Ext. XX (No Extension)** | **WB** | **FGW** | **YG** | **TCI** | **GW** |
----------------------------------|--------|--------|--------|--------|--------|
Text                              | Black  | White  | Grey   | Grey/White | Black |
Background                        | Yellow/Green | Blue | Grey/White | Black |

**Available Options:**
- **VS:** Super Wide Voltage 5-15Vdc
- **Others (as previous products)**

### Parallel Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Resolution</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP-GK1223D</td>
<td>122 x 32</td>
<td>65.00 x 27.00 x 12.00</td>
<td>60.20 x 18.00</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>MOP-GK12064</td>
<td>128 x 64</td>
<td>75.00 x 52.70 x 9.00</td>
<td>60.00 x 32.00</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>MOP-GK240128D</td>
<td>240 x 128</td>
<td>144.00 x 104.00 x 15.00</td>
<td>114.00 x 64.00</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>MOP-GK24064A</td>
<td>240 x 64</td>
<td>180.00 x 65.00 x 16.00</td>
<td>132.20 x 39.20</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>MOP-GK24064R</td>
<td>240 x 64</td>
<td>112.00 x 38.00 x 31.00</td>
<td>98.00 x 28.40</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
</tbody>
</table>

**Color Ext.** | **Text** | **Background** |
----------------|----------|---------------|
BYFY            | Black    | Yellow/Green  |
BBTW            | Blue     | Blue          |
BGFW            | Grey     | Grey/White    |
BWFW            | Blue     | Grey          |
BSSX            | Tri-Color| Black         |

### Graphic Touch LCD

#### Intelligent Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Columns x Rows</th>
<th>Interface</th>
<th>USB</th>
<th>RS 422</th>
<th>RS 232</th>
<th>GPOs</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLT1223A-SM</td>
<td>122 x 32</td>
<td>● ● ● ●</td>
<td>2</td>
<td></td>
<td></td>
<td>86.10 x 35.10 x 23.02</td>
<td>53.64 x 15.64</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>GLT24064</td>
<td>240 x 64</td>
<td>● ● ● ●</td>
<td>6</td>
<td></td>
<td></td>
<td>180.00 x 65.00 x 30.90</td>
<td>127.16 x 33.88</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>GLT24064R-1U</td>
<td>240 x 64</td>
<td>● ● ● ●</td>
<td>6</td>
<td></td>
<td></td>
<td>144.00 x 104.00 x 29.70</td>
<td>107.95 x 57.55</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
<td></td>
</tr>
</tbody>
</table>

**Available Options:**
- **LV:** Low Voltage 3.3Vdc
- **VS:** Super Wide Voltage 5-15Vdc
- **VPT:** Efficient Wide Voltage - 9-35Vdc

#### Parallel Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Resolution</th>
<th>Module Size(mm)</th>
<th>Display Size(mm)</th>
<th>Color Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP-GT34128D</td>
<td>240 x 128</td>
<td>144.00 x 104.00 x 16.53</td>
<td>114.00 x 64.00</td>
<td>-BWTW,-BGFW,-BYFY</td>
</tr>
</tbody>
</table>

### Character OLED

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characters x Lines</th>
<th>Interface</th>
<th>Keypad (Max Keys)</th>
<th>GPOs</th>
<th>Module Size W x H x T (mm)</th>
<th>Display Size W x H (mm)</th>
<th>Color Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK204-25</td>
<td>8 x 2</td>
<td>● ● ● ●</td>
<td>N/A</td>
<td>1</td>
<td>58.00 x 32.00 x 22.40</td>
<td>38.00 x 16.00</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>OK162-12</td>
<td>16 x 2</td>
<td>● ● ● ●</td>
<td>12 Key</td>
<td>7</td>
<td>80.00 x 36.00 x 25.10</td>
<td>68.00 x 16.00</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>OK202-5</td>
<td>20 x 2</td>
<td>● ● ● ●</td>
<td>25 Key</td>
<td>6</td>
<td>116.00 x 37.00 x 25.00</td>
<td>85.00 x 16.80</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
<tr>
<td>OK204-5</td>
<td>20 x 4</td>
<td>● ● ● ●</td>
<td>25 Key</td>
<td>6</td>
<td>98.00 x 60.00 x 26.10</td>
<td>77.00 x 25.20</td>
<td>● ● ● ● ● ●</td>
<td>● ● ● ● ● ●</td>
</tr>
</tbody>
</table>

**Available Options:**
- **E:** Extended Temperature -40° to +80°
- **LV:** Low Voltage 3.3Vdc
- **VS:** Super Wide Voltage 5-15Vdc
- **VPT:** Efficient Wide Voltage - 9-35Vdc

### Character VFD

#### Intelligent Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Chars x Lines</th>
<th>Interface</th>
<th>GPOs</th>
<th>Module Size (mm)</th>
<th>Display Size (mm)</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>VFD2041</td>
<td>20 x 4</td>
<td>-1T, -TTL</td>
<td>3</td>
<td>98.00 x 37.00</td>
<td>70.80 x 29.00</td>
<td>-</td>
</tr>
<tr>
<td>VK162-12</td>
<td>16 x 2</td>
<td>● ● ● ●</td>
<td>12</td>
<td>80.00 x 27.70</td>
<td>51.40 x 11.40</td>
<td>-</td>
</tr>
<tr>
<td>VK202-5</td>
<td>20 x 2</td>
<td>● ● ● ●</td>
<td>25</td>
<td>116.00 x 37.00</td>
<td>70.80 x 11.50</td>
<td>-</td>
</tr>
<tr>
<td>VK204-5</td>
<td>20 x 4</td>
<td>● ● ● ●</td>
<td>25</td>
<td>98.00 x 60.00</td>
<td>70.80 x 20.90</td>
<td>-</td>
</tr>
</tbody>
</table>

**Available Options:**
- **E:** Extended Temperature -40° to +80°C
- **LV:** Low Voltage 3.3Vdc
- **VPT:** Efficient Wide Voltage - 9-35Vdc

#### Economy Series

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Chars x Lines</th>
<th>Interface</th>
<th>GPOs</th>
<th>Module Size (mm)</th>
<th>Display Size (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOU-AV202C</td>
<td>16 x 2</td>
<td>-1T, -TTL</td>
<td>3</td>
<td>98.00 x 37.00</td>
<td>70.80 x 11.50</td>
</tr>
</tbody>
</table>

**Available Options:**
- **VFD Filters are available for the 20x2 and 20x4**

---

**Page 24**
Two types enclosures to meet your needs, a lightweight durable plastic (GRN202A) and a rugged metal (HTT77A). Available options:
- GRY202A
- RED202A

The EVE/EVE2/EVE3 controller allows fast development of SPI TFT and QSPI TFT displays to almost any micro-controller to create HMI/GUI systems.

VFD Filters
A VFD will wash out in direct sunlight. The advantage of a filter is to provide better contrast and protection for the VFD. There are two main types: Circular and regular polarized. Circular polarized come in gray and are hard coated providing the ultimate protection. The regular filters are a less expensive solution for indoor VFD’s, but still can be used outdoors. This, however, will not provide the same protection as the gray ones. All filters are available in 2 x 20 and the 4 x 20 sizes.

Enclosed Display
Two types enclosures to meet your needs, a lightweight durable plastic (-PL) and a rugged metal (-MT). Control of these LCD displays has been simplified to a set of commands delivered by RS232 or USB. 7 key tactile keypad and 3 tri-color indicator LED’s.

GX Series
GX24064 LCD display with black aluminum bay insert
- Pixels: 240 x 64
- Active Area: 93.57 x 24.93 mm
- Interface: USB
- Supply Current: 311 mA

Available options:
- BBI (3ft A to B Mini USB cable)
- MCE remote