



VFD Filters



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 outdoor filter. The regular filters are a less expensive solution for an indoor VFD, but still can be used in the out doors. This, however, will not provide the same protection as the gray ones. Prices are listed below. All of the filters are available in the 2x20 and the 4x20 sizes.

Product	Size	Description
GRY202	2X20	Circular Polarized and hard coated Gray
GRY204	4X20	
BLU202	2X20	Standard Blue Filter
BLU204	4X20	
GRN202	2X20	Standard Green Filter
GRN204	4X20	
RED202	2X20	Standard Red Filter
RED204	4X20	

Graphic LCD's



GLK12232-25-SM Serial Graphical Display

This compact versatile display allows you to draw your own pictures or characters. The thin single board graphic LCD offers simultaneous text and graphic capabilities. You can upload fonts in any size, style or language.

Product Specifications:

Pixels: 122 x 32 pixels (20 char. x 4 lines) ·
Display size: 60.2mm(L) x 18.0mm(W) · White backlight
interface: RS232 or I2C communications·
Supply Voltage: 5VDC · **Total Current:** 43mA typical
Keypad: 25-key keypad

Available options:

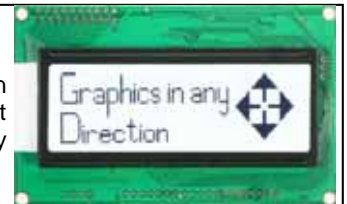
- Extended temperature (-E)
- Wide Voltage(-V)
- Wide Voltage & Extended Temperature(-V-E)

Model	GLK12232-25-SM(Silver)	GLK12232-25-SM(Black)	GLK12232-25-SM-WB (Silver)	GLK12232-25-SM-WB (Black)
Backlight Color	White	White	Blue	Blue
Text Color	Blue	Blue	White	White

GLK12232-25-FGW

Graphic Serial LCD with Keypad Interface - 122 x 32 Pixels

This 122X32 pixel, single board graphic LCD offers simultaneous text and graphic capabilities. You can upload fonts in any size, style or language. This display is the same size as our 20X4 character display but with graphics. The crisp new FFSTN color with **black** text, **grey/white** background is perfect for clearly displaying your information.



Product Specifications:

Pixels: 122 x 32 pixels (20 char. x 4 lines) ·
Display size: 76mm(L) x 25.2mm(W)
Interface: RS232 or I2C communications·
Supply Voltage: 5VDC · **Total Current:** 128mA typical
Keypad: 25-key keypad

Available options:

- Extended temperature (-E)



GLK12232-25-WBL

Graphic Serial LCD with Keypad Interface - 122 x 32 Pixels

The WBL is every bit as versatile as the SM with an attractive display on a single board. This unit is ideal for those wanting the use of a 20 by 4 character display and to have graphics displayed at the same time. As with our LK units, the GLK12232-25-WBL also gives you the ability to easily use with a 25 key keypad. This product is an idea fit for industrial fax and printer machines.

Product Specifications:

Pixels: 122 x 32 pixels (20 char. x 4 lines) ·
Display size: 76mm(L) x 25.2mm(W)
interface: RS232 or I2C communications·
Supply Voltage: 5VDC · **Total Current:** 128mA typical
Keypad: 25-key keypad

Available options:

- Extended temperature (-E)



Graphic LCD's



GLC24064
Pixels: 240x64
Display Size: 132.2 x 39.2mm
Interface: RS232 and I2C
Supply Current: 191mA
Keypad: Not Supported

Available options:

- Extended temperature (-E)
- Wide Voltage(-V)
- Wide Voltage & Extended Temperature(-V-E)
- Efficient Power Regulator(-VPT)
- Power Regulator & Extended Temperature(-VPT-E)

Model	Base	-WB	-GW
Backlight Color	Yellow/Green	Blue	Grey/White
Text Color	Black	White	Blue

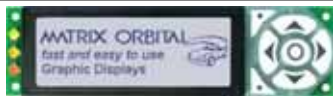


GLK24064-16-1U
Pixels: 240x64
Display Size: 112 x 28mm
Interface: RS232, RS232TTL, I2C
Supply Current: 159mA
Keypad: 16 key Interface

Available options:

- Extended temperature (-E)
- Low Voltage Power(-LV)
- Low Voltage & Extended Temperature(-LV-E)
- Wide Voltage(-V)
- Wide Voltage & Extended Temperature(-V-E)
- Efficient Power Regulator(-VPT)
- Power Regulator & Extended Temperature(-VPT-E)

Model	-WB	-TC
Backlight Color	Blue	TriColor
Text Color	White	Black



GLK19264-7T-1U
Pixels: 192x64
Display Size: 82.0 x 28.4mm
Interface: RS232, RS232TTL, I2C
Supply Current: 215mA
Keypad: 7 keys

Available options:

- Extended temperature (-E)
- Low Voltage Power(-LV)
- Low Voltage & Extended Temperature(-LV-E)

Model	-WB	-GW
Backlight Color	Blue	Grey/ White
Text Color	White	Light Blue



GLK19264-7T-1U
Pixels: 192x64
Display Size: 82.0 x 28.4mm
Interface: USB
Supply Current: 230mA
Keypad: 7 keys

Available options:

- Extended temperature (-E)

Model	-WB	-GW
Backlight Color	Blue	Grey/ White
Text Color	White	Light Blue



GLK24064-25
Pixels: 240x64
Display Size: 132 x 39mm
Interface: RS232 and I2C
Supply Current: 191mA
Keypad: 25 key Interface

Available options:

- Extended temperature (-E)
- Wide Voltage(-V)
- Wide Voltage & Extended Temperature(-V-E)
- Efficient Power Regulator(-VPT)
- Power Regulator & Extended Temperature(-VPT-E)

Model	Base	-WB	-GW
Backlight Color	Yellow/Green	Blue	Grey/White
Text Color	Black	White	Blue



GLK240128-25
Pixels: 240x128
Display Size: 114 x 64mm
Interface: RS232, RS232TTL, I2C
Supply Current: 287mA
Keypad: 25 key Interface

Available options:

- Extended temperature (-E)
- Low Voltage Power(-LV)
- Low Voltage & Extended Temperature(-LV-E)
- Wide Voltage(-V)
- Wide Voltage & Extended Temperature(-V-E)
- Efficient Power Regulator(-VPT)
- Power Regulator & Extended Temperature(-VPT-E)

Model	Base	-WB	-GW
Backlight Color	Yellow/Green	Blue	Grey/White
Text Color	Black	White	Blue



Graphic LCD's



MOP-GL12232B
Pixels: 122x32
Display Size: 80 x 36mm
Controller: SED1520
Voltage: 5.0V
Keypad: Not Supported

Model	-BGFW
Backlight Color	White
Text Color	Grey



MOP-GL12232D
Pixels: 122x32
Display Size: 53.64 x 14.04mm
Controller: SED1520
Voltage: 5.0V
Keypad: Not Supported

Model	-BBTW	-BGFW
Backlight Color	Blue	Grey/ White
Text Color	White	Light Blue



MOP-GL12864F
Pixels: 128x64
Display Size: 60 x 32.6mm
Controller: SED1520
Voltage: 5.0V
Keypad: Not Supported

Model	-BBTW
Backlight Color	Blue
Text Color	White



MOP-GL240128D
Pixels: 240x128
Display Size: 114 x 64mm
Controller: T6963
Voltage: 5.0V
Keypad: Not Supported

Model	-BBTW	-BGFW	-BYFY
Backlight Color	Blue	Grey/White	Yellow/Green
Text Color	White	Blue	Black



MOP-GL24064A
Pixels: 240x64
Display Size: 132.2 x 39.2mm
Controller: T6963
Voltage: 5.0V
Keypad: Not Supported

Model	-BYFY	-BGFW	-BBFB
Backlight Color	Yellow/Green	Grey/White	Blue
Text Color	Black	Blue	White



MOP-GL24064R
Pixels: 240x64
Display Size: 112 x 28mm
Controller: T6963
Voltage: 5.0V
Keypad: Not Supported

Model	-BSST	-BBFB
Backlight Color	TriColor	Blue
Text Color	Black	White



GLT240128
Pixels: 240x128
Display Size: 114 x 64mm
Interface: RS232, RS232TTL, I2C
Supply Current: 420mA
Keypad: Touch keypad

Available options:

- Wide Voltage(-V)
- Efficient Power Regulator(-VPT)

Model	Base	-WB	-GW
Backlight Color	Yellow/Green	Blue	White
Text Color	Black	White	Grey



GLT240128-USB
Pixels: 240x128
Display Size: 114 x 64mm
Interface: USB
Supply Current: 420mA
Keypad: Touch keypad

Model	Base	-WB	-GW
Backlight Color	Yellow/Green	Blue	White
Text Color	Black	White	Grey



Character LCD's



LCD0821
Characters: 8x2
Display Size: 38.00 x16.00 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 99mA
Keypad: Not Supported

Model	Base	-GW	-WB	-IY	-R
Backlight Color	Yellow/Green	White	Blue	Black	Black
Text Color	Black	Blue	White	Yellow	Red

LCD0821
LCD0821-V (8-15 Volts)
LCD0821-E (extended temperature)
LCD0821-V-E (Extended Temperature, Wide voltage)



LK162-12
Characters: 16x2
Display Size: 64.50 x15.50 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 129mA
Keypad: 12 key Interface

Model	Base	-GW	-WB	-IY	-R
Backlight Color	Yellow/Green	White	Blue	Black	Black
Text Color	Black	Blue	White	Yellow	Red

LK162-12
LK162-12-V (8-15 Volts)
LK162-12-E (extended temperature)
LK162-12-V-E (Extended Temperature, Wide voltage)



LK202-25
Characters: 20x2
Display Size: 83.0 x18.6 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 112mA
Keypad: 25 key Interface

Model	Base	-GW	-WB	-R	-FG	-FA	-FB	-FW	-FY
Backlight Color	Yellow/Green	White	Blue	Black	Black	Black	Black	Black	Black
Text Color	Black	Blue	White	Red	Green	Amber	Blue	White	Yellow

LK202-25
LK202-25-V (8-15 Volts)
LK202-25-E (extended temperature)
LK202-25-V-E (Extended Temperature, Wide voltage)



LK204-24-USB
Characters: 20x4
Display Size: 76.0 x25.2 mm
Interface: RS232TTL,USB
Supply Current: 203mA
Keypad: 24 key Interface

Model	Base	-GW	-WB	-IY	-R
Backlight Color	Yellow/Green	White	Blue	Black	Black
Text Color	Black	Blue	White	Yellow	Red



LCD2041
Characters: 20x4
Display Size: 76.00 x25.20 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 67mA
Keypad: Not Supported

Model	Base	-GW	-WB	-IY	-R
Backlight Color	Yellow/Green	White	Blue	Black	Black
Text Color	Black	Blue	White	Yellow	Red

LCD2041
LCD2041-V (8-15 Volts)
LCD2041-E (extended temperature)
LCD2041-V-E (Extended Temperature, Wide voltage)
LCD2041-VPT (with wide voltage efficient power regulator)
LCD2041-VPT-E (Extended Temperature, Wide voltage efficient power regulator)



LK202-24-USB
Characters: 20x2
Display Size: 83.0 x18.6 mm
Interface: RS232TTL,USB
Supply Current: 169mA
Keypad: 24 key Interface

Model	Base	-GW	-IY	-R
Backlight Color	Yellow/Green	White	Black	Black
Text Color	Black	Blue	Yellow	Red



LK202-25-USB
Characters: 20x2
Display Size: 79.0 x18.0 mm
Interface: USB
Supply Current: 235mA
Keypad: 25 key Interface

Model	Base	-GW	-WB	-R	-FG	-FA	-FB	-FW	-FY
Backlight Color	Yellow/Green	White	Blue	Black	Black	Black	Black	Black	Black
Text Color	Black	Blue	White	Red	Green	Amber	Blue	White	Yellow

LK202-25
LK202-25-E (extended temperature)



LK204-25
Characters: 20x4
Display Size: 76.0 x25.2 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 94mA
Keypad: 25 key Interface

Model	Base	-GW	-WB	-IY	-R
Backlight Color	Yellow/Green	White	Blue	Black	Black
Text Color	Black	Blue	White	Yellow	Red

LK204-25
LK204-25-V (8-15 Volts)
LK204-25-E (extended temperature)
LK204-25-V-E (Extended Temperature, Wide voltage)
LK204-25-VPT (with wide voltage efficient power regulator)
LK204-25-VPT-E (Extended Temperature, Wide voltage efficient power regulator)



Character LCD's



LK204-25-USB

Characters: 20x4
Display Size: 76.3x25 mm
Interface: USB
Supply Current: 235mA
Keypad: 25 key Interface

Model	Base	-GW	-WB	-IY	-R
Backlight Color	Yellow/Green	White	Blue	Black	Black
Text Color	Black	Blue	White	Yellow	Red

LK204-25

LK204-25-E (extended temperature)



LK402-25

Characters: 40x2
Display Size: 154.5x17 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 201mA
Keypad: 25 key Interface

LK402-25

LK402-25-V (8-15 Volts)

LK402-25-E (extended temperature)

LK402-25-V-E (Extended Temperature, Wide voltage)

LK402-25-VPT (with wide voltage efficient power regulator)

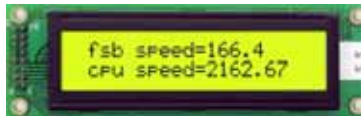
LK402-25-VPT-E (Extended Temperature, Wide voltage efficient power regulator)



MOI-AL162A

Characters: 16x2
Display Size: 64.5 x15.5 mm
Interface: I2C
Supply Current: 183mA
Keypad: Not Supported

Model	-WB	-BW	-XR	-XY	-YX
Backlight Color	White	Blue	Black	Black	Yellow
Text Color	Blue	White	Red	Yellow	Black



MOI-AL202C

Characters: 20x2
Display Size: 83.0 x18.6 mm
Interface: I2C
Supply Current: 237mA
Keypad: Not Supported

Model	-WB	-BW	-XR	-XY	-YX	-FG	-FA	-FB	-FW
Backlight Color	White	Blue	Black	Black	Yellow	Black	Black	Black	Black
Text Color	Blue	White	Red	Yellow	Black	Green	Amber	Blue	White



MOS-AL162A

Characters: 16x2
Display Size: 64.5 x15.5 mm
Interface: RS232TTL
Supply Current: 183mA
Keypad: Not Supported

Model	-WB	-BW	-XR	-XY	-YX
Backlight Color	White	Blue	Black	Black	Yellow
Text Color	Blue	White	Red	Yellow	Black



MOS-AL202C

Characters: 20x2
Display Size: 83.0 x18.6 mm
Interface: RS232TTL
Supply Current: 237mA
Keypad: Not Supported

Model	-WB	-BW	-XR	-XY	-YX	-FG	-FA	-FB	-FW
Backlight Color	White	Blue	Black	Black	Yellow	Black	Black	Black	Black
Text Color	Blue	White	Red	Yellow	Black	Green	Amber	Blue	White



MOS-AL162F

Characters: 16x2
Display Size: 47.56 x11.00 mm
Interface: RS232, RS232TTL
Supply Current: 88mA
Keypad: Not Supported

Model	-YX
Backlight Color	Yellow/Green
Text Color	Black



MOU-AL202C

Characters: 20x2
Display Size: 83.0 x18.6 mm
Interface: USB
Supply Current: 157mA
Keypad: Not Supported

Model	-WB	-BW	-XR	-XY	-YX	-FG	-FA	-FB	-FW
Backlight Color	White	Blue	Black	Black	Yellow	Black	Black	Black	Black
Text Color	Blue	White	Red	Yellow	Black	Green	Amber	Blue	White



MOU-AL162A

Characters: 16x2
Display Size: 64.5 x15.5 mm
Interface: USB
Supply Current: 148mA
Keypad: Not Supported

Model	-WB	-BW	-XR	-XY	-YX
Backlight Color	White	Blue	Black	Black	Yellow
Text Color	Blue	White	Red	Yellow	Black



LCD242-BK

Characters: 24x2
Display Size: 88.3 x11.5 mm
Interface: MINI-MAX
Supply Current: 2mA
Keypad: Not Supported



Character LCD's



LK204-7T-1U
Characters: 20x4
Display Size: 82.0 x28.4 mm
Interface: RS232, RS232TTL, I2C
Supply Current: 215mA
Keypad: 7 key tactile keypad

Model	-GW	-WB	-YG	-TCI
Backlight Color	Grey/White	Blue	Yellow / Green	Black
Text Color	Blue	White	Black	Tri-Color

LK204-7T-1U
LK204-7T-1U-E (extended temperature)
LK204-7T-1U-LV (Low Voltage Power)
LK204-7T-1U-LV-E (Low Voltage, Extended Temperature)



LK204-7T-1U-USB
Characters: 20x4
Display Size: 82.0 x28.4 mm
Interface: USB
Supply Current: 230mA
Keypad: 7 key tactile keypad

Model	-GW	-WB	-YG	-TCI
Backlight Color	Grey/White	Blue	Yellow / Green	Black
Text Color	Blue	White	Black	Tri-Color

LK204-7T-1U
LK204-7T-1U-E (extended temperature)



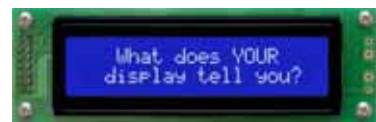
MOP-AL204A
Characters: 20x4
Display Size: 76 x25.2 mm
Controller: S6A0069
Supply Current: 70mA
Keypad: Not Supported

Model	-BYFY	-BBTW	-BGFW	-BBTR	-BTTY
Backlight Color	Yellow/Green	Blue	Grey/White	Black	Black
Text Color	Black	White	Blue	Red	Yellow



MOP-AL082B
Characters: 8x2
Display Size: 38 x16 mm
Controller: S6A0069
Supply Current: 65mA
Keypad: Not Supported

Model	-BYFY	-BBTW	-BGFW	-BBTR	-BTTY
Backlight Color	Yellow/Green	Blue	Grey/White	Black	Black
Text Color	Black	White	Blue	Red	Yellow



MOP-AL202C
Characters: 20x2
Display Size: 83 x18.6 mm
Controller: S6A0069
Supply Current: 120mA
Keypad: Not Supported

Model	-BYFY	-BBTW	-BGFW	-BBTR	-BTTY	-BFTY	-BFTB	-BFTW	-BFTA	-BFTG
Backlight Color	Yellow/ Green	Blue	Grey/ White	Black	Black	Black	Black	Black	Black	Black
Text Color	Black	White	Blue	Red	Yellow	Yellow	Blue	White	Amber	Green



MOP-AL162A
Characters: 16x2
Display Size: 64.5 x15.5 mm
Controller: S6A0069
Supply Current: 160mA
Keypad: Not Supported

Model	-BYFY	-BBTW	-BGFW	-BBTR	-BTTY	-BYRN
Backlight Color	Yellow / Green	Blue	Grey/ White	Black	Black	N/A
Text Color	Black	White	Blue	Red	Yellow	Black



MOP-AL404C
Characters: 40x4
Display Size: 148.0x30.3 mm
Controller: S6A0069
Supply Current: 510mA
Keypad: Not Supported

Available Model: MOP-AL404C-BYFY (Yellow/Green Backlight)



MOP-AL402A
Characters: 40x2
Display Size: 154.5x17.0 mm
Controller: S6A0069
Supply Current: 120mA
Keypad: Not Supported

Available Model: MOP-AL402A-BYFY (Yellow/Green Backlight)

GX Series



GX24064 LCD display with black aluminum bay insert.
Pixels: 240x64
Display Size: 98.0x28.4 mm
interface: USB
Supply Current: 311mA

Available options:

- BBI (3ft A to B Mini USB cable include)
- MCE (MCE remote include)

Model	-WB	-TC
Backlight Color	Blue	TriColor
Text Color	White	Black