

# Graphic VFD Module GU112x16G-7003

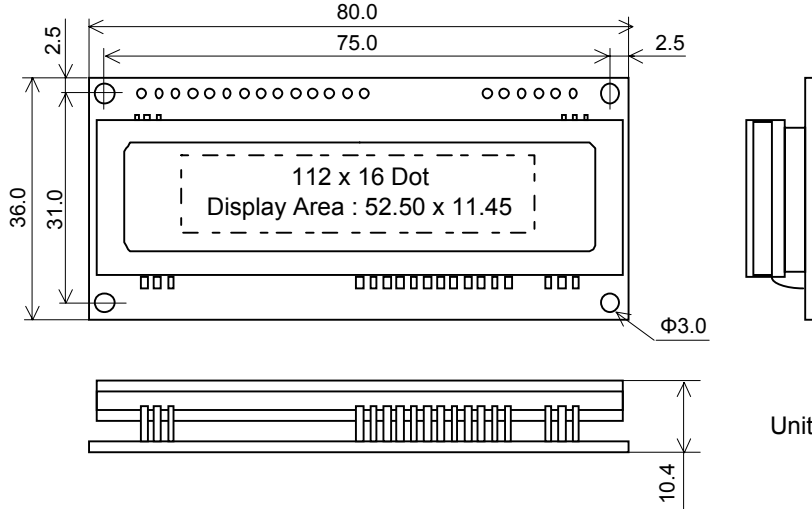
[CLICK HERE FOR COMMANDS LIST](#)

Ref: MC-015 Dec.02

- Character Graphic, Transformerless display
- Size compatible with LCD Module (U-Version)
- Single 5V power supply
- High Brightness Blue Green display
- Operating temp -40°C to +85°C
- Proportional and scalable fonts
- Screen saver & window definition function
- 8 level brightness control function
- CMOS serial Interface

The module includes the Vacuum Fluorescent Display glass, driver and micro-controller lcs with refresh RAM, character generator and interface logic. This module have CMOS sync or asyn serial interface. The module can simultaneously display graphic pattern and / or characters on screen.

**Sample software available**



Unit : mm

### ELECTRICAL SPECIFICATION

Parameter	Symbol	Value
Power Supply Voltage	VCC	5.0VDC
Power Supply Current	ICC	260mADC typ.
Logic High Input	VIH	0.8VDC min. Vcc max.
Logic Low Input	VIL	0VDC min. 0.2VDC max.
Logic High Output	VOH	3.5VDC min. 3.8VDC min.
Logic Low Output	VOL	0VDC min. 0.6 DC max.

### OPTICAL and ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
PCB Size (X x Y mm)	80.00 x 36.00
Display Area (X x Y mm)	52.5 x 11.45
Dot size / Pitch (X x Y mm)	0.33 x 0.58 / 0.47 x 0.73
Luminance	700 cd/m <sup>2</sup> Typ.
Color of Illumination	Blue Green (Filter for more colors)
Operating Temperature	-40°C to +85°C
Operating Humidity	20 to 80 % RH (non condensing)

### SOFTWARE COMMANDS - Popular codes, more includec

Command	Code
Write Character to Display	20H~FFH
Cursor Set	1FH 24H xL xH yL yH
Initialize Display	1BH 40H
Specify International Font	1BH 52H n
Vertical / Horizontal Scroll Mode	1FH 02H / 1FH 03H
Screen Saver	1FH 28H 61H 40H p
Display Blink	1FH 28H 61H 11H p t1 t2 c
Bit Image Display Group	1FH 28H 66H 11H xL xH
Font Magnified Display	1FH 28H 67H 40H x y
Brightness Level Setting	1FH 58H n

### COMMON FONT

	2	3	4	5	6	7
x0H	0	1	2	3	4	5
x1H	6	7	8	9	A	B
x2H	C	D	E	F	G	H
x3H	I	J	K	L	M	N
x4H	O	P	Q	R	S	T
x5H	U	V	W	X	Y	Z
x6H	[	\	^	_	~	
x7H						
x8H						
x9H						
xAH						
xBH						
xCH						
xDH						
xEH						
xFH						

### INTERNATIONAL FONTS

	8	9	A	B	C	D	E	F	n=0
x0H	0	1	2	3	4	5	6	7	
x1H	8	9	A	B	C	D	E	F	
x2H	G	H	I	J	K	L	M	N	
x3H	O	P	Q	R	S	T	U	V	
x4H	W	X	Y	Z	[	\	^	_	
x5H	~								
x6H									
x7H									
x8H									
x9H									
xAH									
xBH									
xCH									
xDH									
xEH									
xFH									

### CMOS Serial Interface - CN2

Pin	Asyn. Sig	Syn. Sig
1	Vcc	Vcc
2	SIN	SIN
3	GND	GND
4	SBUSY	SBUSY
5	NC	SCK
6	/RESET	/RESET

CN1 is not used on this Module

Please inquire for full specification.

\*\* Subject to change without notice \*\*