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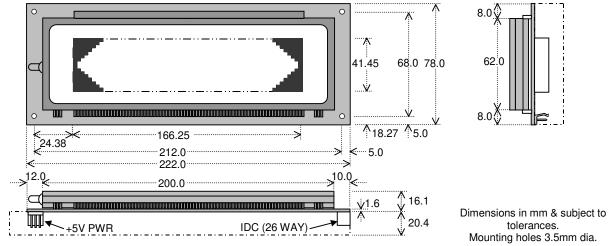
Dot Graphic VFD Module

GU256x64-372

- 256 x 64 Dot Graphic
- Operating Temp -0°C to +50°C
- Single 5V Supply.
- **High Brightness Blue Green Display**
- 8 bit High Speed Parallel Interface
- ASCII + Extended Character Font
- **Twin Graphic/Character RAM**
- **4 Level Brightness Control Function**

The module includes the Vacuum Fluorescent Display glass, driver and control ASIC, with refresh RAM, character generator and interface logic.

The high speed 8 bit parallel interface is 5V CMOS compatible suitable for connection to a host CPU bus. Brightness control and power down functions are provided. A full data sheet is available.



ELECTRICAL SPECIFICATION

SOFTWARE COMMANDS

Character/Graphic Screen 2

Set Screen 1/2 RAM Address

Screen On/Off Control

Auto Increment Cursor

Data Write/Data Read

Screen1/2 Merge Control

Screen Luminance Control

Set Cursor Address

INTERFACING

Function

Instruction

Parameter	Symbol	Value	Condition				
Power Supply Voltage	Vcc	5.0VDC +/- 5%	GND=0V				
Power Supply Current	lcc	2.0ADC typ.	Vcc=5V				
Logic High Input	VIH	2.2VDC min.	Vcc=5V				
Logic Low Input	VIL	0.8VDC max.	Vcc=5V				
Logic High Output	Vон	Vcc-0.8VDC min.	Iон = -40uA				
Logic Low Output	Vol	0.5VDC max.	IOL =1.6mA				
The power on rise time should be less than 100ms. The inrush current at power on can be 2 x lcc. OPTICAL and ENVIRONMENTAL SPECIFICATIONS							
Parameter		Value					
Display Area (XxY mm)		166.25 x 41.45					
Dot Size/Pitch (XxY mm)		0.5 × 0.5/0.65					
Luminance		515 cd/m ² (150 fL) Typ.					
Colour of Illumination		Blue-Green (Filter for colours)					
Operating Temperature		0°C to +50°C					
Storage Temperature		-20°C to +70°C					
Operating Humidity (non o	condensing)	20 to 80% RH @ 2	5°C				

D0-D4

00H-03H

04H-05H

06H-07H

08H-09H

0AH-0DH

0EH-0FH

10H-12H

18H-1BH

/RD C//D /BL

IDC DATA CONNECTOR

Sig

D7

D6

D5

D4

D3

D2

D1

D0

WR

C/D

RD

CS

FRP

Pin

2

4

6

8

10

12

14

16

18

20

22

24

26

Sig

GND

BL

Pin

1

3

5

7

9

11

13

15

17

19

21

23

25

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POWER CONNECTOR TIMING PARAMETERS (min)																

POWER CON	TIMING PA			
Pin	Sig	Write Pulse		
1	Vcc (5V)	Hold after		
2	NC	FRP Cycle		
3	GND	FRP Pulse		

SCREEN COMBINATIONS

CHARACTER FONT

The display memory (RAM) has the capacity of producing two display screens for graphic, plus graphic and ASCII characters. This enables up 4 different display combinations, via software commands.

ARAMETERS (min)

	Write Pulse Width	100ns				
)	Hold after Write	20ns				
	FRP Cycle Time	10.4ms				
	FRP Pulse Width	81µs				

CONTACT

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Subject to change without notice. IUK Doc Ref:00925 Iss:4 6Sept00

Command Write 0 0→1 1 1 0 0→1 Data Setting 1 0 Display Data Read 0 1 0 0 Display Blanking 0

/CS /WR

As no BUSY signal is available between the processor and module, accessing time between

data is required to be greater than 2µs.

NORITAKE ITRON VFD MODULES

256 x 64 Dot Graphic