

# AVNET EMBEDDED SPECIFICATION.

**Datasheet**  
JHD  
JM164A

## Specification of LCD Module type

### JM – 164A

#### **1. General Description**

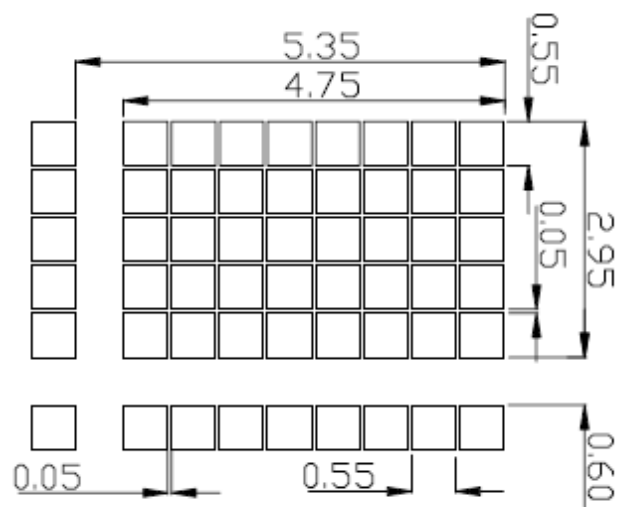
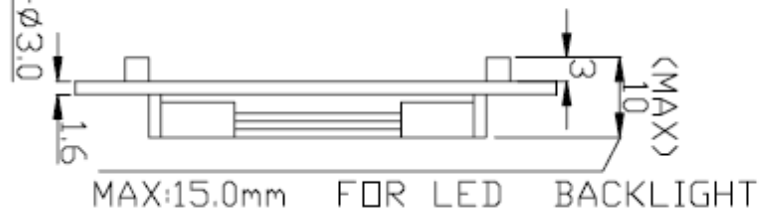
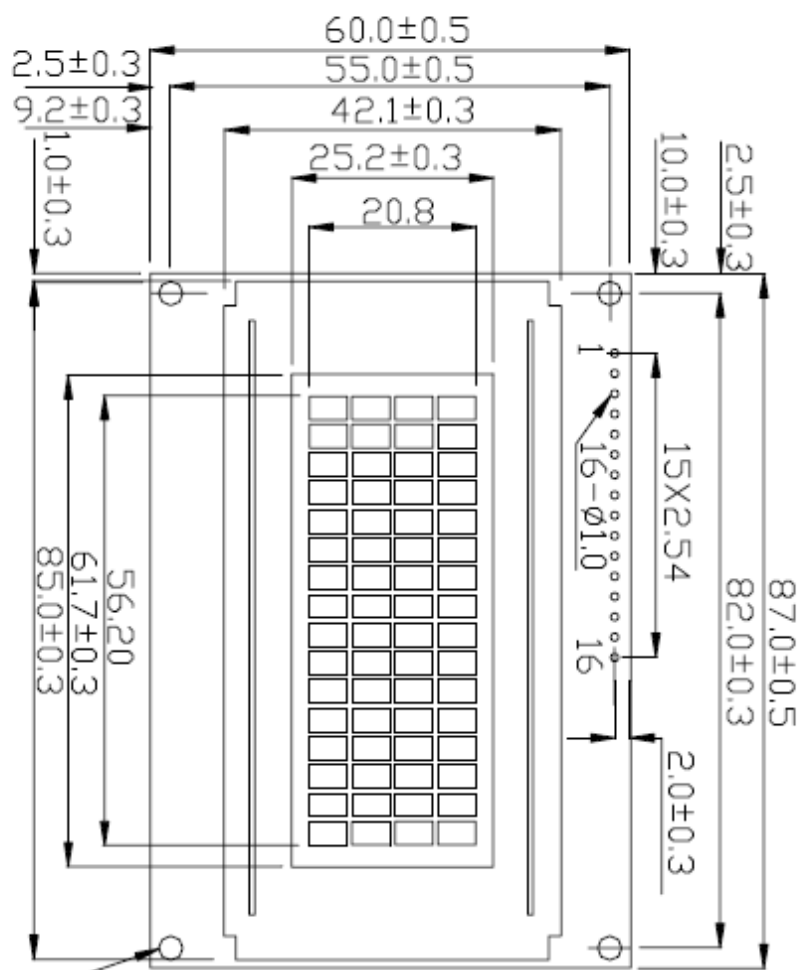
- 16 Characters (5 x 8 Pixels) X 4 Line
- Integral Controller/Driver type equivalent to HD44780/KS0066 (application note available on request)
- STN, FSTN\*\* Positive and Negative mode\*\*
- Optional LED Backlight (note including Backlight will increase height of module (see drawing))
- Variety of Backlight colours Green, White\*\*, Blue\*\*, Red\*\*, Amber \*\*
- Temperature Ranges 0 to 50°C, -20 to 70°C\*\*, -30 to 80°C\*\*
- View angle 6 o'clock other options on special request\*\*

\*\* Items marked are non standard options, and may carry factory MOQ. Please check with your local sales office for availability of the options.

#### **2. Mechanical Specifications**

Table 1

Parameter	Specifications	Unit
Outline Dimensions	87.0 (W) x 60.0 (H) x 15.0 (D) max <b>NOTE</b> Depth (D) is lower without Backlight	mm
View Area VA	61.7 (W) x 25.2 (H)	mm
Format	16 Characters x 4 Line	
Character Size	2.95 (W) x 4.75 (H) 5 x 8 Pixels	mm
Character Spacing	0.60 (W) x 0.60 (H)	mm
Character Pitch	3.55 (W) x 5.35	mm
Pixel Size	0.55 (W) x 0.55 (H)	mm
Pixel Spacing	0.05 (W) x 0.05 (H)	mm
Pixel Pitch	0.60 (W) x 0.60 (H)	mm



### 3. Interface Signals

Table 2

Pin No	Symbol	Description
1	Vss	Ground
2	Vdd	Power Supply for Logic (+5v)
3	Vo	Power Supply for LCD (Contrast)
4	R/S	Register Select Input 'High' for Data Register (for Read and Write) 'Low' for Instruction Register (for Write) Busy Flag, address counter (for Read)
5	R/W	Read/Write Signal 'High' for Read mode 'Low' for Write mode
6	E	Enable Start signal for Read/Write
7	DB0	Data input/output LSB
8	DB1	Data input/output
9	DB2	Data input/output
10	DB3	Data input/output
11	DB4	Data input/output
12	DB5	Data input/output
13	DB6	Data input/output
14	DB7	Data input/output MSB
15(A)	A	Anode of LED B/L
16(K)	K	Cathode of LED B/L

Typical ordering code JM164ASFYLY-NC-06

This is STN Display (S), Transflective (F), Green Mode (Y), Yellow Green LED Array style Backlight (LY), Temperature Range LV single 5v supply (NC), 6 o'clock View (06)

Full part number and full specification will be confirmed dependant on the option selected i.e.

Display type, LED Type and Colour, Temperature Range etc

END

## AVNET EMBEDDED OFFICES.

### DENMARK

Avnet Embedded  
Avnet Nortec A/S  
Ellekær 9  
2730 Herlev  
Phone: +45 3678 6250  
Fax: +45 3678 6255  
denmark@avnet-embedded.eu

### FINLAND

Avnet Embedded  
Avnet Nortec Oy  
Tiilenpolttajankuja 3 A B  
1720 Vantaa  
Phone: +358 207 499260  
Fax: +358 942 597446  
finland@avnet-embedded.eu

### FRANCE

Avnet Embedded  
Avnet EMG France SA  
Immeuble 154, Parc Chene 2  
5, allée du General Benoist  
69000 Bron  
Phone: +33 4 72 81 02 30  
Fax: +33 4 72 81 02 34  
bron@avnet-embedded.eu

Avnet Embedded  
Avnet EMG France SA  
6-8, rue Ambroise Croizat  
ZAE Les Glaises  
91127 Palaiseau Cedex  
Phone: +33 1 64 47 29 29  
Fax: +33 1 64 47 99 99  
palaiseau@avnet-embedded.eu

Avnet Embedded  
Avnet EMG France SA  
ZA la Hallerais le Semiramis  
2, allée du Communal  
35770 Vern sur Seiche  
Phone: +33 2 99 77 37 00  
Fax: +33 2 99 77 33 38  
rennes@avnet-embedded.eu

### GERMANY (AUSTRIA, CZECH REPUBLIC, HUNGARY, POLAND, SWITZERLAND)

Avnet Embedded  
Avnet EMG GmbH  
Gruber Straße 60c  
85586 Poing  
Phone: +49 8121 775 500  
Fax: +49 8121 775 550  
poing@avnet-embedded.eu

Avnet Embedded  
Avnet EMG GmbH  
Lötscher Weg 66  
41334 Nettetal  
Phone: +49 8121 775 500  
Fax: +49 8121 775 550  
nettetal@avnet-embedded.eu

### ITALY (PORTUGAL, SPAIN)

Avnet Embedded  
Avnet EMG Italy SRL  
Via Manzoni, 44  
20095 Cusano Milanino  
Phone: +39 02 66092 1  
Fax: +39 02 66092 498  
milano@avnet-embedded.eu

### NETHERLANDS (BELGIUM, LUXEMBOURG)

Avnet Embedded  
Avnet B.V.  
Takkebijsters 2  
4802 BL Breda  
Phone: +31 76 5722400  
Fax: +31 76 5722404  
benelux@avnet-embedded.eu

### SWEDEN (NORWAY)

Avnet Embedded  
Avnet Nortec AB  
Esplanaden 3 D  
172 67 Sundbyberg  
Phone: +46 8 564 725 50  
Fax: +46 8 760 01 10  
sweden@avnet-embedded.eu

### UNITED KINGDOM (IRELAND)

Avnet Embedded  
Avnet EMG Ltd.  
Pilgrims Court, 15/17 West Street  
Reigate, Surrey, RH2 9BL  
Phone: +44 1737 227800  
Fax: +44 1737 243872  
uk@avnet-embedded.eu

All trademarks and logos are the property of their respective owners. This document provides a brief overview only and is not intended to be complete or binding offer. Product information, including information related to a product's specifications, uses or conformance with legal or other requirements, is obtained by Avnet from its suppliers or other sources deemed reliable and is provided by Avnet on an „As Is“ basis. Avnet makes no representation as to the accuracy or completeness of the product information and Avnet disclaims all representations, warranties and liabilities under any theory with respect to the product information, including any implied warranties of merchantability, fitness for a particular purpose, title and/or non-refrangement. All product information is subject to change without notice.

### LOCAL AVNET EMBEDDED BUSINESSES:

**axess**  
technology

An Avnet Embedded Business

**tdc**

An Avnet Embedded Business

**trident**

An Avnet Embedded Business