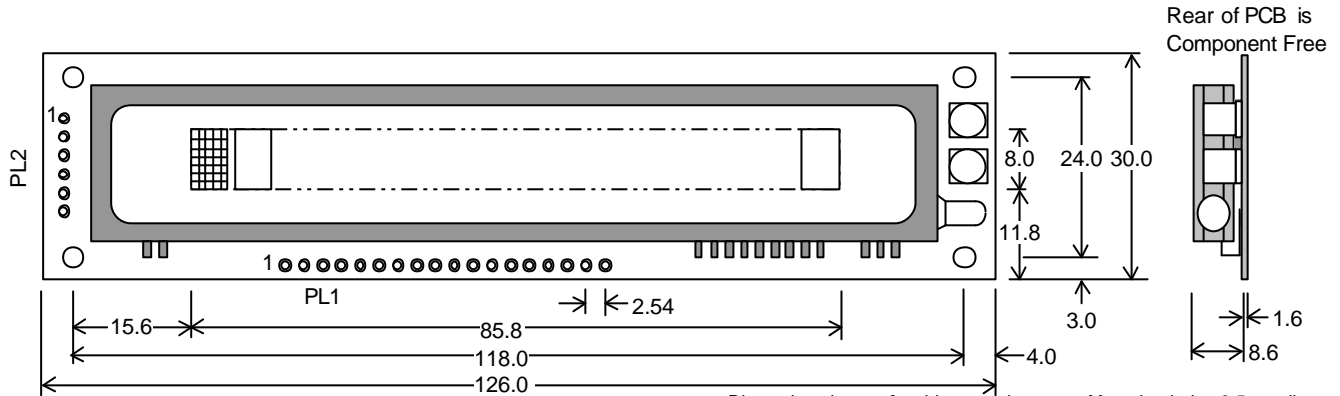


VACUUM FLUORESCENT DISPLAY MODULE CU1418SCP-B-KV90B

- ❑ 1 Lines of 14 Characters
- ❑ 8mm High 5 x 7 Dot Matrix Font
- ❑ Single 5V DC Supply
- ❑ High Brightness Blue Green Display
- ❑ ASCII + Extended Character Font
- ❑ Low Profile Construction
- ❑ Asynchronous Serial Interface
- ❑ User Defined Display Pixels

The module includes the VFD glass, VF drivers and micro-controller with refresh RAM, character generation and interface logic. The RS232 serial interface is suitable for connection to a host PC serial port and accepts baud rates up to 19,200 with or without parity. Optional user SPI & I/O interfaces. User defined characters can be downloaded to the display RAM allowing any character pattern to be shown. The module features a low profile design with numerous custom options available including special fonts, application specific commands and key scanning. Please send us your request.



Dimensions in mm & subject to tolerances. Mounting holes 3.5mm dia.

ELECTRICAL SPECIFICATION

Parameter	Symbol	Value	Condition
Power Supply Voltage	VDD	5.0VDC +/- 10%	GND=0V
Power Supply Current	IDB	260 mA DC Typ.	VDD=5V
RS232 Serial High Input	VIH	3.0VDC min.	
RS232 Serial Low Input	VIL	0.8VDC max.	
RS232 Serial High Output	VOH	8.0VDC min.	
RS232 Serial Low Output	VOL	-4.0VDC max.	

OPTICAL & ENVIRONMENTAL CHARACTERISTICS

Parameter	Value
Character Size/Pitch (XxY mm)	4.5 x 8.0 / 6.25
Dot Size/Pitch (XxY mm)	0.7 x 0.9 / 0.95 x 1.18
Luminance	1000 cd/m ² Typ
Colour of Illumination	Blue-Green (505nm)
Operating Temperature	-30°C to +80°C
Storage Temperature	-40°C to +85°C
Operating Humidity	20 to 85% RH @ 25°C

INTERFACE CONNECTORS

Pin	Signal	Function - PL2
1	EIN	RS232 Host Busy
2	EOUT	RS232 Module Busy
3	TXD	RS232 Transmit
4	GND	0V
5	RXD	RS232 Receive
6	VDD	+5V

PL1 LINK TABLE

Pin	Signal	Function
7	C3	Link for 19,200
8	C2	Link for 9,600
9	C1	Link for 4,800
10	C0	Link for 2,400
11	D0	No Parity
12	D1	Even Parity
13	D2	
14	D3	
15	D4	
16	D5	
17	D6	
18	D7	

Pin	Signal	Function - PL1
1	RES	Reset Input
2	MOSI	SPI Receive
3	MISO	SPI Transmit
4	SCK	SPI Clock
5	GND	0V
6	VDD	+5V

Link EIN & EOUT for XON/XOFF
Default: 19200, N, 8, 1

SOFTWARE COMMANDS

Command Name	Hex
Back Space	08
Horizontal Tab	09
Line Feed	0A
Cursor Home*	0C
Carriage Return	0D
Clear Display*	0E
XON (software handshaking)	11
Display Line Scroll	12
XOFF (software handshaking)	13
Cursor Increment +CR*	14
5x7 Block Cursor On	15
Cursor Off*	16
Escape	1B + >
> Report STATUS	+41
> Report RAM Check Sum	+43
> Position Cursor + 00-0D	+48 +
> Software Reset	+49
> Set Luminance to 50%	+4C
> Power Down (40mA typ)	+4D
> Report Version (01-FF)	+53
> Cursor Blink On	+54
Send 5 Font Bytes to cursor	1C +
Set to International Font*	1D
Set to Greek Font	1E
Set to Russian Font	1F
Selected Font Characters	20 -
Mixing Fonts is Permitted	FF

CHARACTER FONTS

	International														Katakana Font													
	00	10	20	30	40	50	60	70	80	90	A0	B0	C0	D0	E0	F0	80	90	A0	B0	C0	D0	E0	F0				
00																												
01			!	"	#	\$	%	&	'	()	*	+	,	-	.												
02			"	2	3	4	5	6	7	8	9	:	;	<	=	>												
03			#	3	4	5	6	7	8	9	:	;	<	=	>	?												
04			\$	4	5	6	7	8	9	:	;	<	=	>	?	!												
05			%	5	6	7	8	9	:	;	<	=	>	?	!	@												
06			&	6	7	8	9	:	;	<	=	>	?	!	@	#												
07			'	7	8	9	:	;	<	=	>	?	!	@	#	\$												
08			(8	9	:	;	<	=	>	?	!	@	#	\$	%												
09)	9	:	;	<	=	>	?	!	@	#	\$	%	&												
0A			*	:	;	<	=	>	?	!	@	#	\$	%	&	'												
0B			+	;	<	=	>	?	!	@	#	\$	%	&	'	(
0C			,	<	=	>	?	!	@	#	\$	%	&	'	()												
0D			-	=	>	?	!	@	#	\$	%	&	'	()	*												
0E			.	=	>	?	!	@	#	\$	%	&	'	()	*												
0F			/	=	>	?	!	@	#	\$	%	&	'	()	*												

* Reset Default

Russian Font

OPTIONAL FUNCTIONS

- ❑ 12 Way Matrix Keyscan
- ❑ 12 Way User I/O
- ❑ SPI Slave Expansion
- ❑ SPI Host
- ❑ Display Module as Host
- ❑ Default Message on Power Up
- ❑ Default Message on Time Out
- ❑ 12 input Canned Message System
- ❑ User Definable Commands

This module uses a unique low profile power supply for which a patent has been filed. It offers a non-inductive solution for critical applications.

Optical filters can provide violet, red, yellow, blue & green output.

CONTACT

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