

MODEL NO. : LCD-256

☐ **SPECIFICATION** ☐

◆ DISPLAY SCREEN	SCREEN SIZE	2.5" LCD-SCREEN
	ACTIVE AREA	49.2(H)×38.142(V) mm
	ELEMENT	COLOR TFT LCD
	RESOLUTION	480(W)×234(H)
	DOT PITCH	0.1025(W)×0.163(H)
◆ VIDEO SYSTEM	NTSC or PAL System	
	NTSC	f_H : 15.75 KHz
		f_V : 60 Hz
		f_C : 3.58 MHz
	PAL	f_H : 15.625 KHz
		f_V : 50 Hz
		f_C : 4.43 MHz
◆ POWER SOURCE	DC 5 V	
◆ POWER CONSUMPTION	270 mA , 1.35W Max.	
◆ OPERATING TEMPERATURE	0°C ~ 60°C	
◆ STORAGE TEMPERATURE	-25°C ~ 80°C	
◆ LCD SCREEN	59.9(W)×50.4(H)× 4.2(D) (mm)	
◆ DRIVER BOARD	60.0(W) x 50.5 (H) X 7 (D)	
◆ BRIGHTNESS	250 nit	
◆ CONTRAST	150	
◆ VIEWING ANGLE	Vertical + 10° / - 30°	
	Horizontal ± 45° .	
◆ WEIGHT	TBD	

☐ **FEATURES** ☐

1. Video Inputs
2. LEFT & RIGHT, UP/DOWN Reverse Image
3. Low Power Consumption.
4. 5V Drive for handhold , Battery operated items

□ ELECTRICAL DETAILS □

◆ J201 : AU LCD PANEL I/O TERMINALS (FPC 30 pin, below contact type)

PIN NO	SYMBOL	I/O	Description	REMARK
1	GND	-	Ground for logic circuit	
2	VCC	-	Supply voltage of logic control circuit for scan driver	
3	VGL	I	Negative power for scan driver	
4	VGH	I	Positive power for scan driver	
5	STVR	I/O	Vertical start pulse	
6	STVL	I/O	Vertical start pulse	
7	CKV	I	Shift clock input for scan driver	
8	U/D	I	Up / down scan control input	
9	OEV	I	Output enable input for scan driver	
10	VCOM	I	Common electrode driving signal	
11	VCOM	I	Common electrode driving signal	
12	GLLED1		Led module 1 cathode	
13	VLED1		Led module 1 anode	
14	VLED2		Led module 2 anode	
15	GLLED2		Led module 2 cathode	
16	R/L	I	Left / right scan control input	
17	Q1H	I	Analog signal rotate input	
18	QEH	I	Output enable input for data driver	
19	STHL	I/O	Start pulse for horizontal scan line	
20	STHR	I/O	Start pulse for horizontal scan line	
21	CPH3	I	Sampling and shifting clock pulse for data driver	
22	CPH2	I	Sampling and shifting clock pulse for data driver	
23	CPH1	I	Sampling and shifting clock pulse for data driver	
24	DVDD		Supply voltage of logic control for data driver	
25	DVSS		Ground for logic circuit	
26	VA	I	Alternated video signal input(red)	
27	VB	I	Alternated video signal input(green)	
28	VC	I	Alternated video signal input(blue)	
29	AVDD		Supply voltage for analog circuit	
30	AVSS		Ground for analog circuit	

Note : About TFT-LCD Panel detail information please refer AU A025CN02 specification.

◆ J301 : PIN ASSIGNMENT (Pitch 1.25 mm, side entry type)

PIN NO	SYMBOL	I/O	DESCRIPTION	REMARK
1	+5V	I	+5V Voltage DC Input	
2	GND	I	Signal Ground	
3	GND	I	Signal Ground	
4	VIDEO	I	Composite video input	
5	+5VA	O	+5V Voltage DC Output	Note1
6	BRIGHT	I	Brightness control	
7	CONTRAST	I	Contrast control	
8	LRC	I	Left / Right reverse	Note2
9	UDC	I	Up / Down reverse	Note2
10	COLOR	I	Color control	
11	TINT	I	Tint control	
12	DIMMER	I	Backlight Brightness Control	
13	ENABLE	I	Enable signal for inverter	Note3

Note1: The +5V power supply external control circuit.(Max. output is 5mA)

Note2: Default is low for normal scanning and high or floating is for reversed scanning.

Please to do force this pin to ground for normal scan.

Note3: 5V or floating to enable; 0V to shunt down

◆ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT	REMARK
INPUT VOLTAGE	V _{in}	+3.3	+7	V	
VIDEO INPUT SIGNAL	Video in	0.5	2.0	V _{p-p}	@75Ω
DIGITAL INPUT SIGNAL	TTL	+0.3	+5.3	V	
OPERATING TEMPERATURE		-10	+60	°C	
RELATIVE HUMIDITY		5	85	%RH	
STORAGE TEMPERATURE		-25	80	°C	
RELATIVE HUMIDITY		0	85	%RH	

◆ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	I/O	MIN	TYP	MAX	UNIT	REMARK
Input Voltage	V _{in}	I	+3.5	+5	+6.5	V	
Total Current	I _{in}	I		270		mA	
Power Consumption		I		1.35		W	@+5V
Video Input Signal	Video in	I		1.0		V _{p-p}	@75Ω
Output Voltage	+5V _A	O		+5V		V	
Brightness Adjust	Bright	I	1.6	1.9	2.2	V	
Contrast Adjust	Contrast	I	3.2	2.75	2.3	V	
Color Adjust	Color	I	2.2	2.9	3.6	V	
Tint Adjust	Tint (NTSC only)	I	2.4	3.0	3.6	V	
Video Auto Detect	NTSC/PAL	O		TTL		V	
Screen Reverse	Left/ Right	I		TTL		V	
Screen Reverse	Up / Down	I		TTL		V	
Backlight Control	Dimmer	I	0.3	-	1.2	V	

◆ SAMPLE TEST DATA

	White Window	RED	BLUE	GREEN	REMARK
S/N : 001 x y L TC	0.2776	0.5691	0.1426	0.2889	±15%
	0.2923	0.3320	0.1124	0.5229	
	197.9				
	10112				

NOTE : 1. LUMINANCE : BM-7 FAST(TOPCON)

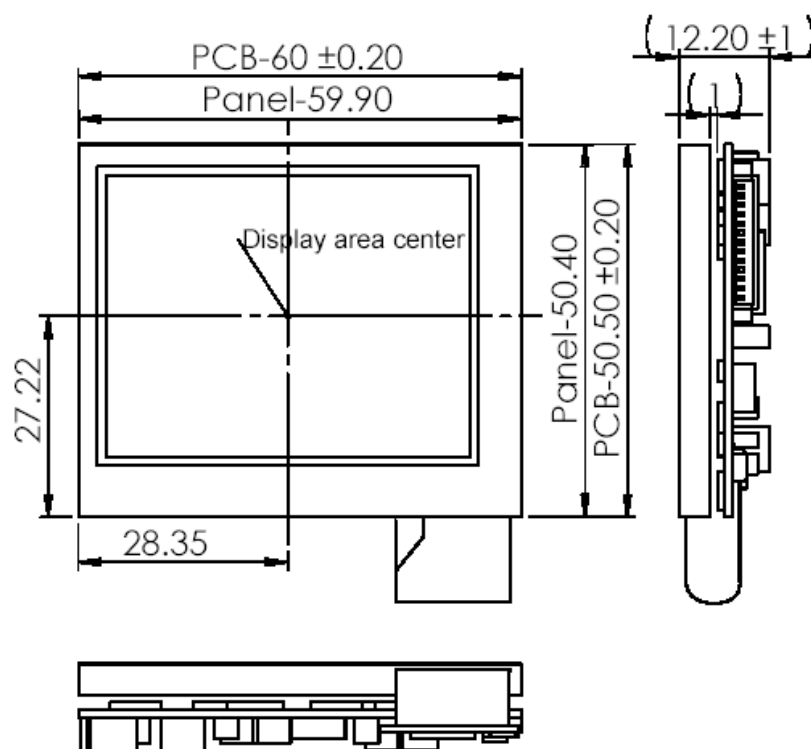
2. MEASUREMENT DISTANCE : 500mm±50mm

3. TOPCON BM-7 LUMINANCE METER 2° FIELD OF VIEW IS USED IN THE TESTING (AFTER 10min ~20min OPERATION)

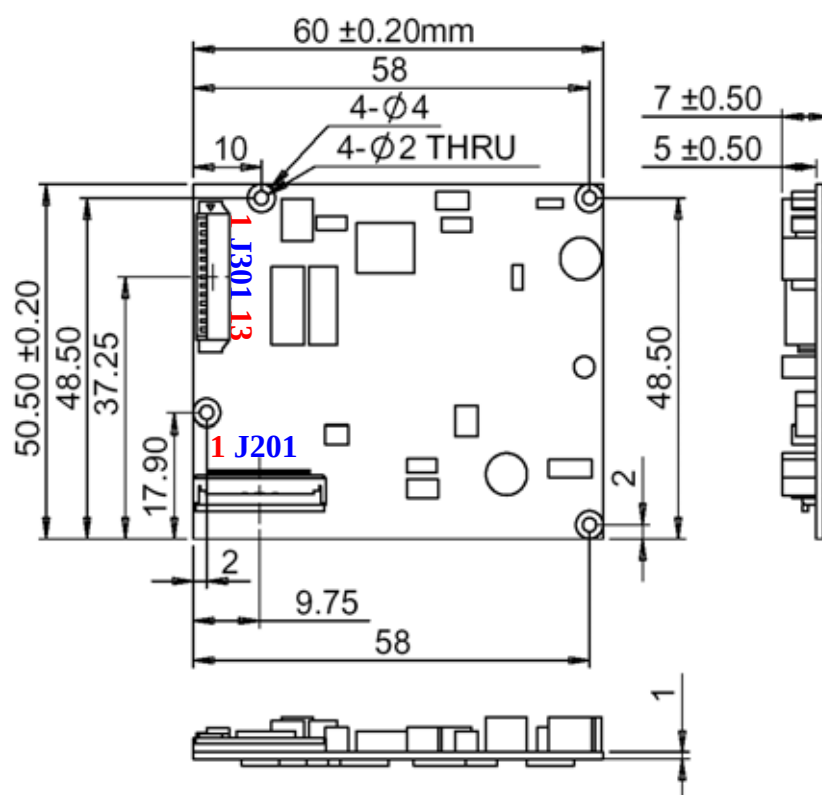
4. PATTERN GENERATOR : FLUKE PM54200

MODULE AND DRIVER BOARD DIMENSION

MODULE



DRIVER BOARD



General tolerance is ± 0.50

□ APPLICATION CIRCUIT □

