P40400J16CR

1.6 Inches, 400xRGBx400, 64K colors



Modification Record

Date	Content
2026/06/23	First release

Features

- Support LVGL graphics library
- Support TTL/CMOS, the max baud rate is 921600bps
- Support avi-video
- Support offline batch download through SD-Card, which improves download efficiency and reduce requirements for operators;
- Support backlight brightness adjustment and automatic standby screen saver function;
- Support multi-language font library, picture, QR code display;
- Support number and English input, customizable keyboard interface;
- Support 90 degrees, 180 degrees, 270 degrees screen rotation, adjustable visual angle;
- Instant operation when power on without system load time;
- Excellent electromagnetic compatibility characteristics.

Display	
Color	64K (65536) colors,16 bit color 5R6G5B
Resolution	400 x RGB x 400
Panel Type	IPS,TFT-LCD
Viewing Angle	Full viewing Angle, typical value 85°/85°/85°/85°(L/R/U/D)
Brightness	400 cd/m² Without a touch
	350 cd/m² With the touch
Active area (A.A)	39.84mm(W)×39.84mm(H)
Backlight	LED ≥10000H (Continuous working with maximum brightness, time of brightness halves)
Life Time	20000H
Note: If the high contrast static display exceeds 30 minutes or more may cause LCD screen residual, it is recommended to increase the screensaver to avoid this problem.	

Voltage & Current						
Item		**Min.**	**Typ.**	**Max.**	**Unit**	**Notes**
Power Voltage		3	5	5.5	V	-
Current、Power	**Backlight on**	-	110	-	mA	-
		-	0.55	-	W	-
	Backlight off	-	50	-	mA	-
		-	0.25	-	W	-
Note: Recommended Power Supply +5V 1A DC						

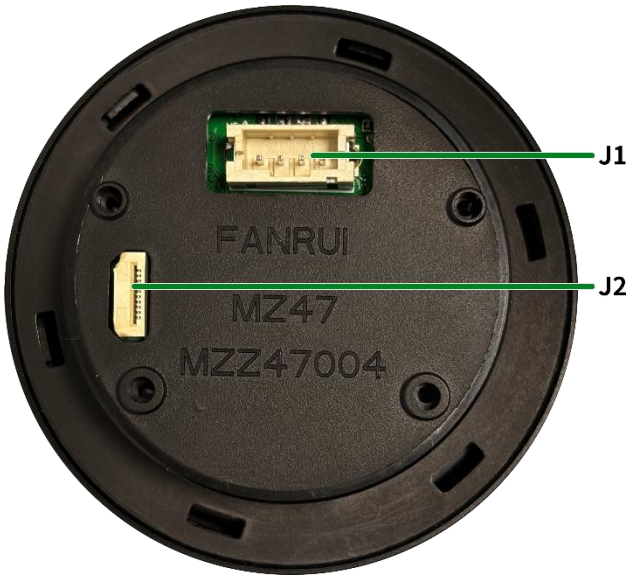
Interface					
Item	**Condition**	**Min.**	**Typ.**	**Max.**	**Unit**
Baud Rate	Standard	1200	—	921600	bps
Output	Output 1,Iout=1mA	3.0	3.3	—	V
	Output 0,Iout=-1mA	—	0	0.3	V
Input	Input 1, Iin=1mA	2.4	3.3	5.0	V
	Input 0, Iin=-1mA	0	—	0.5	V
Interface	Mode：8N1，TTL				
Socket	ZH1.5-4PLT				

System & Peripherals	
System	LVGL
Touchscreen Panel	Capacitive
Buzzer	Yes
RTC	-
Audio	-

SD Card	Yes (SD/SDHC, FAT32，4096) (Update the firmware, pictures, font, and other files)
Memory	
Flash	16Mbyte (128Mbits)
Other Info	
Working Temperature	-20℃~70℃
Storage Temperature	-30℃~80℃
Certification & Levels	IEC4,CE,RoHS
Dimension	59.00mm(W) x 59.00mm(H) x 26.30mm(MAX)

Proculus
Display Innovation

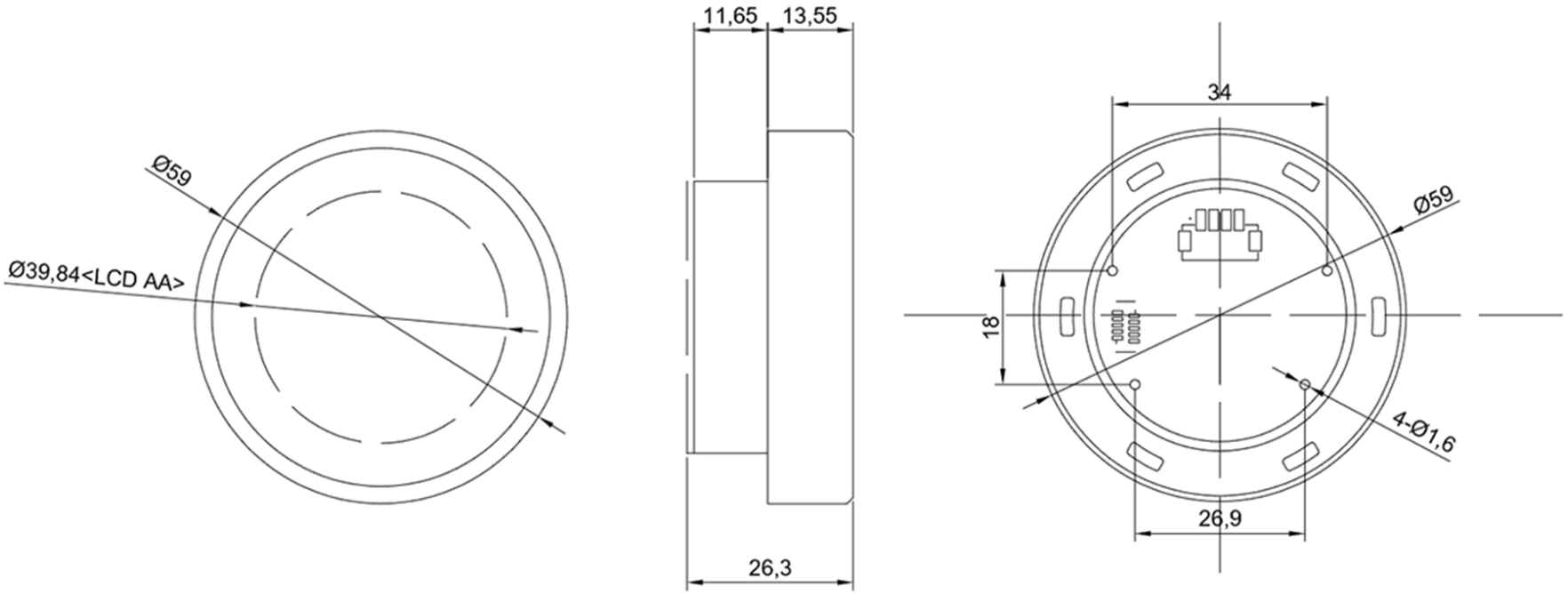
Interface Description



Item	Description
J1	Power & Serial interface: ZH1.5-4PLT
J2	SD card interface: FG-0.5S-LS-10PB

Power & Serial interface		
Pin	**Lead**	**Description**
1	GND	-
2	TX	-
3	RX	-
4	5V	-

SD card interface		
Pin	**Lead**	**Description**
1	SDC1_D2	Transmit data bit 2
2	SDC1_D3	Transmit data bit 3
3	SDC1_CMD	Transmit commands&responses
4	3.3V	-
5	SDC1_CLK	-
6	GND	-
7	SDC1_D0	Transmit data bit 0
8	SDC1_D1	Transmit data bit 1
9	SDC1_DET	SD card detection pin
10	NC	-



1.Location hole is used as position reference

2.Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Part No.	P40400J16CR					
Datasheet	A4	Drawn by	Proculus	Date		
Proportion	1:1	Verified by		Date		
Unit	mm	Confirmed by		Date		