

TC040C14U04 TC040C14W04

4.0 Inches, 480*RGB*480, 16.7M Colors, IPS screen, Thermostat with Speech recognition, Proximity sensor.



- **Display**

Item	Parameter	Description
Color	16.7M(16777216)colors	24 bit color 8R8G8B
Panel Type	IPS	IPS TFT LCM ,wide viewing angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best View: symmetrical
Active Area(A.A.)	71.86mm (W) * 67.96mm (H)	480*480
Resolution	480 * 480	Support 0°/90°/180°/270°rotated display
Backlight	LED	≥10000H(Continuous working with maximum brightness, time of brightness halves)
Brightness	250nit	TA system:64 levels adjustment; DGUS II system:100 levels adjustment (It's not recommend to set brightness to 1%~30% of the maximum, which may lead a flicker)

Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.

- **Voltage & Current**

Item	Condition	Min	Typ.	Max	Unit
Power Voltage	-	110	220	230	VAC

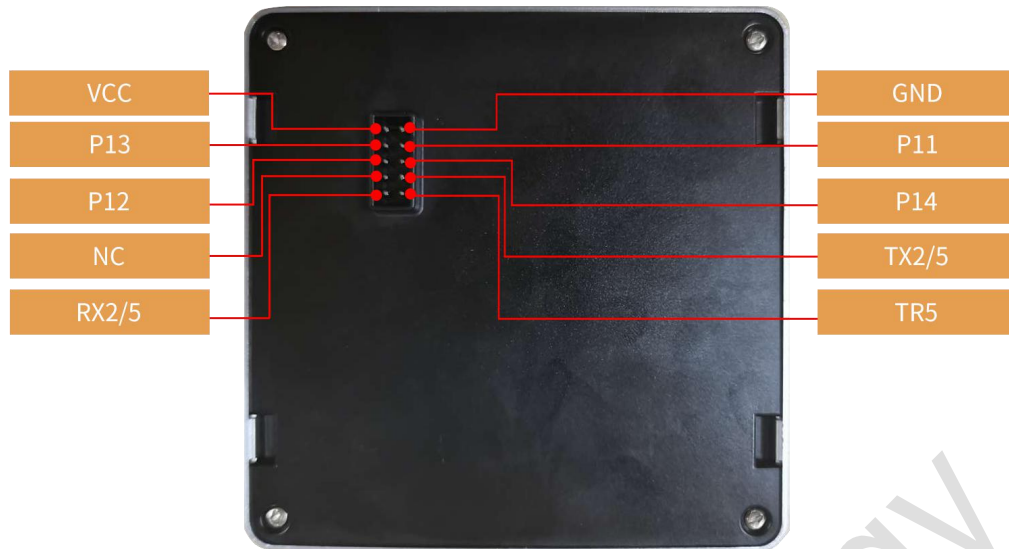
- **Operating Environment**

Item	Condition	Min	Typ.	Max	Unit
Working Temperature	60%RH at 220VAC Voltage	0	25	50	℃
Storage Temperature	-	-30	25	70	℃
Working Humidity	25℃	10%	60%	90%	RH
Protective Paint	-	-	None	-	-

● Interface



Item	Parameter	Corresponding Internal Pin
B	IO	485_TX
A		485_RX
O	O	P1.3 electric relay1 valve(IO3)
C		P1.1 electric relay 2 low(IO1)
L		P1.4 electric relay 3 middle(IO4)
M		P1.2 electric relay 4 high(IO2)
H	P	Zero line and live line
N		
L		
NC	—	Undefined



Item	Parameter	Description
1	VCC	Power input, 5V.
2	GND	GND
3	P13	P1.3 electric relay1 valve(IO3)
4	P11	P1.1 electric relay 2 low(IO1)
5	P12	P1.2 electric relay 4 high(IO2)
6	P14	P1.4 electric relay 3 middle(IO4)
7	NC	Undefined
8	TX2/5	UART2 and UART5 transmit data. (TX2 and TX5, logic AND)
9	RX2/5	UART2 and UART5 receive data. (RX2 and RX5 shorted)
10	TR5	Output for RS485 transmit/receive switching (TR5 and UART 2 self-transmit/receive control pin, logic OR)

● Interface Detail Value

Item	Condition	Min	Typ.	Max	Unit
Baud Rate	User Set	3150	115200	3225600	bps
(V_AB)	Output 1, Iout = 1mA	2.5	5.0	-	V
	Output 0, Iout = -1mA	-	-5.0	-2.5	V
(V_AB)	Input 1, Iin = 1mA	0	2.5	-	V
	Input 0, Iin = -1mA	-	-2.5	-0.2	V
Interface	RS485 (UART2&UART5 multiplexing)				
Socket	5.08mm Spacing connection terminal				
USB Interface	None				
SD Card Slot	Yes (SDHC/FAT32 file format)				
WIFI Module	TC040C14U04:None TC040C14W04:Yes				

● Memory

Item	Typical value	Features	Typical value	Unit	Description
FLASH (TA/DGUS II)	16Mbytes	Space of Font	4-12	Mbytes	A single font of 256Kbytes, store font, icon libraries, and other binary files
		Picture Storage (.ICL file)	12-4	Mbytes	JPEG format (Picture quantity relate to JPEG size, size of a single JPEG image file should not exceed 248 Kbytes)
RAM (DGUS II)	128Kbytes	Variable Storage Space	/	/	Data is not saved when power down
Nor Flash (DGUS II)	512Kbytes	User database	/	/	Data is saved when power down

● UI & Peripheral

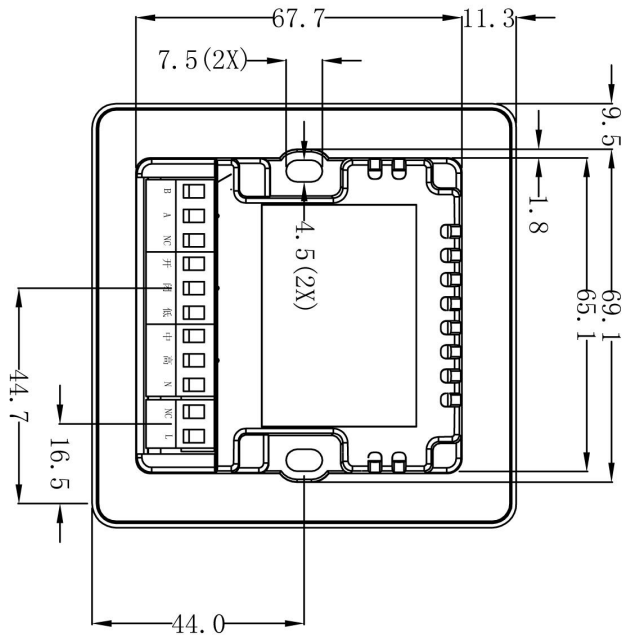
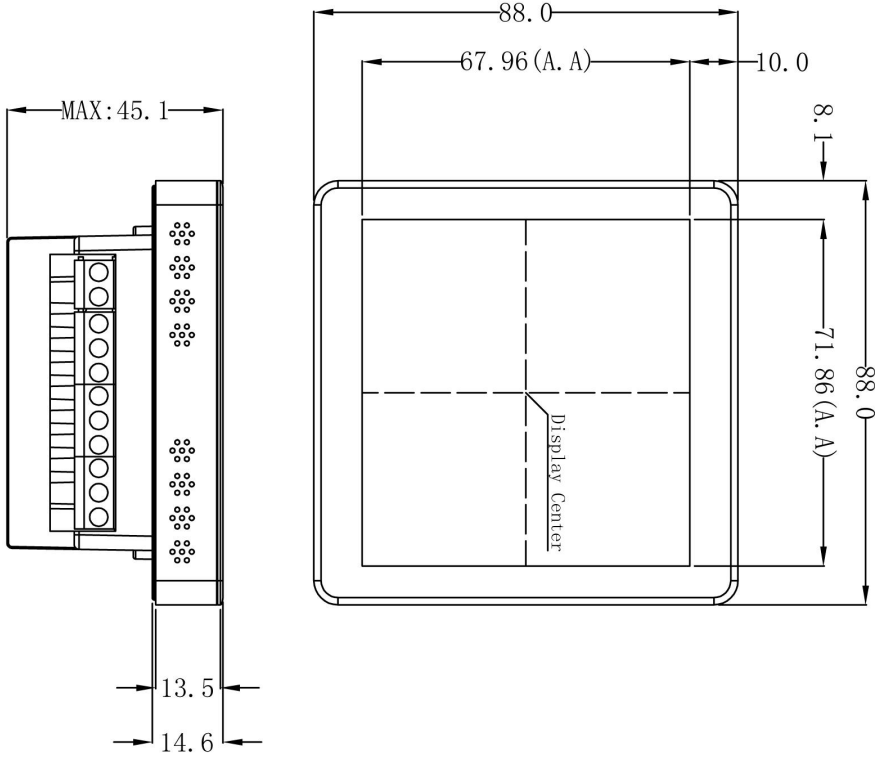
UI & Peripherals	
UI Version	TA / DGUS II (DGUS II pre-installed)
Peripherals	TC040C14U04: Capacitive touch screen, Built-in Speaker, Built-in Temperature sensor, Speech recognition, Proximity sensor TC040C14W04: Capacitive touch screen, Built-in Speaker, Built-in Temperature sensor, Built-in WIFI, Speech recognition, Proximity sensor

● Packing Capacity & Dimension

Dimension				
Dimension	88.0 (W) * 88.0 (H) * 45.1 (T)mm			
Net Weight	TC040C14U04:220g TC040C14W04:225g			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)*160mm(W)*47mm (H)	-	-	-
Carton2:	250mm(L)*200mm(W)*80mm (H)	1	2	2
Carton3:	320mm(L)*270mm(W)*80mm (H)	1	4	4
Carton4:	450mm(L)*350mm(W)*300mm(H)	-	-	-
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	40	40

Disclaimer: The product design is subject to alternation and improvement without prior notice.

Pin	Definition	Type	Description
B	1	485-	485-
A	2	485+	485+
NC	3	-	Not Defined
0	4	0	Normally Op AC Output
C	5	1	Normally Close AC Output
L	6	0	AC Output
M	7	0	AC Output
H	8	0	AC Output
N	9	P	(110~230V) Power Input
NC	10	-	Not Defined
L	11	P	110~230V) Power Input



Unmarked Tolerance is +/-0.3mm
Active area is marked in Dash lines

Model	TC040C14U04/W04		
Drawing	A 4	Drawn	DWIN
Scale	1:1	Review	
Unit	MM	Approve	
		Date	
			DWIN Technologies

Record of Revision

Version	Revise Date	Content	Editor
00	2023-02-24	First Edition	YML
01	2023-07-20	Add Pinout Definition	YML

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Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

Installation Schematic

