### **Resistive HMI 4000 Series**

Module: VC4043C

#### Overview

- Plastic enclosure, low cost, high reliability.
- The main board is treated with a special coating (three anti-paint) to adapt to harsh environment.
- High resolution, high brightness, LED backlight, more energy saving and environmental protection.
- The USB host port supports U disk to storage and download data.
- 2-way serial port, more powerful expansion function.
- New configuration software, rich library, powerful features.

#### **Appearance**









## **Specifications**

Display				
Colors   24-bit		Display	4.3" 16:9 TFT LCD	
Brightness   360 cd/m²		Resolution(WxH)	480×272	
Backlight   LED		Colors	24-bit	
LCD Life   50000 hours		Brightness	360 cd/m <sup>2</sup>	
Touch Panel   4 wires resistive touch screen(Surface hardness 4H)		Backlight	LED	
Hardware Parameter None Popert*1,USB Host 2.0 Port*1  USB Slave 2.0 Port*1,USB Host 2.0 Port*1  Down! Assay Parameter Powl*1,USB Host 2.0 Port*1  Down! Assay Parameter Powl*1,USB Host 2.0 Port*1  USB Slave 2.0 Port*1,USB Host 2.0 Port*1  Down! Assay Parameter Powl*1,USB Parameter Powl*1,USB Parameter Powl*1,USB Parameter Powl*1,USB Parameter Powl*1,USB Parameter Powl*1,USB Parame		LCD Life	50000 hours	
Parameter    Memory   128M Flash + 128M DDR3		Touch Panel	4 wires resistive touch screen(Surface hardness 4H)	
RTC Built in  Ethernet None  USB Port USB Slave 2.0 Port*1,USB Host 2.0 Port*1  Download Project USB Slave Port/U-disk  COM Port COM1: RS232/RS485/RS422, COM3: RS232  LCD viewing angle (T/B/L/R)  Power Consumption Specifications  Power Protection Power Protection Power Down Allowed Smile (The Mark Specifications)  Electrical Specifications  Power Down Allowed Smile (The Mark Specifications)  Operating Temperature OrSDC  Storage Temperature -20~60C  Anti-UV Not suitable to work in strong ultraviolet light (such as direct sunlight)  Operating Humidity 10~90%RH(no condensate)  Vibration Endurance 10~25Hz (X,Y,Z direction 2G/30 minutes)  Oberse of Protection Front IP65 (with NEMA panel, Back IP20)  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm	Hardware	CPU	600MHz ARM Cortex-A8	
Ethernet None  USB Port USB Slave 2.0 Port*1,USB Host 2.0 Port*1  Download Project USB Slave Port/U-disk  COM Port COM1: RS232/RS485/RS422, COM3: RS232  LCD viewing angle (T/B/L/R) 50'/70'/70'  Input Power DC24V, Working range DC 9V~28V  Power Protection Protected from thunderstrike and surging Power Down Allowed <5mS  Complied with EN61000-6-2:2005, EN61000-6-4:2007, ROHS, Surge Immunity:±1KV, EFT:±2KV, ESD:4KV, Air:8KV  Operating Temperature 0~50C  Storage Temperature -20~60C  Anti-UV Not suitable to work in strong ultraviolet light (such as direct sunlight)  Operating Humidity 10~90%RH(no condensate)  Vibration Endurance 10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling Natural air cooling  Degree of Protection Front IP65 (with NEMA panel, Back IP20)  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm	Parameter	Memory	128M Flash + 128M DDR3	
USB Port   USB Slave 2.0 Port*1,USB Host 2.0 Port*1		RTC	Built in	
Download Project   USB Slave Port/U-disk   COM Port   COM1: R5232/R5485/R5422, COM3: R5232		Ethernet	None	
COM Port  COM1: RS232/RS485/RS422, COM3: RS232  LCD viewing angle (T/B/L/R)  Power Consumption < 5W  Input Power Power Protection Protected from thunderstrike and surging Power Down Allowed < 5mS  Complied with EN61000-6-2:2005, EN61000-6-4:2007, ROHS, Surge Immunity:±1KV, EFT:±2KV, ESD:4KV, Air:8KV  Operating Temperature 0~50C  Storage Temperature -20~60C  Anti-UV  Operating Humidity 10~90%RH(no condensate)  Vibration Endurance 10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling Natural air cooling  Degree of Protection Front IP65 (with NEMA panel, Back IP20)  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm		USB Port	USB Slave 2.0 Port*1,USB Host 2.0 Port*1	
COM Port   COM3: RS232		Download Project	USB Slave Port/U-disk	
COM3: RS232			COM1: RS232/RS485/RS422,	
T/B/L/R    S0'770'770'70'   Fower Consumption   C SW     Input Power   DC24V, Working range DC 9V~28V     Power Protection   Protected from thunderstrike and surging     Power Down Allowed   C SmS     Complied with EN61000-6-2:2005,     EN61000-6-4:2007, ROHS, Surge Immunity:±1KV,     EFT:±2KV, ESD:4KV, Air:8KV     Storage Temperature   O~50C     Storage Temperature   -20~60C     Anti-UV   Not suitable to work in strong ultraviolet light (such as direct sunlight)     Operating Humidity   10~90%RH(no condensate)     Vibration Endurance   10~25Hz (X,Y,Z direction 2G/30 minutes)     Cooling   Natural air cooling     Degree of Protection   Front IP65 (with NEMA panel, Back IP20)     Enclosure   ABS     Panel Cutout   120mm×93mm     Dimension   129.3mm×103.9mm×32mm		COM Port	COM3: RS232	
CT/B/L/R    Power Consumption   < 5W		LCD viewing angle	FOL/701/701	
Input Power   DC24V, Working range DC 9V~28V		(T/B/L/R)	50//0//0//0	
Power Protection   Protected from thunderstrike and surging		Power Consumption	< 5W	
Electrical Specifications  Power Down Allowed  CE & RoHS  Complied with EN61000-6-2:2005,  CE & RoHS  EN61000-6-4:2007, ROHS, Surge Immunity:±1KV,  EFT:±2KV, ESD:4KV, Air:8KV  Operating Temperature  O~50C  Storage Temperature  -20~60C  Anti-UV  Not suitable to work in strong ultraviolet light (such as direct sunlight)  Operating Humidity  10~90%RH(no condensate)  Vibration Endurance  10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling  Natural air cooling  Degree of Protection  Enclosure  ABS  Panel Cutout  Dimension  129.3mm×103.9mm×32mm		Input Power	DC24V, Working range DC 9V~28V	
Specifications  Power Down Allowed < 5mS  Complied with EN61000-6-2:2005, EN61000-6-4:2007, ROHS, Surge Immunity:±1KV, EFT:±2KV, ESD:4KV, Air:8KV  Operating Temperature 0~50C Storage Temperature -20~60C Anti-UV Not suitable to work in strong ultraviolet light (such as direct sunlight)  Operating Humidity 10~90%RH(no condensate) Vibration Endurance 10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling Natural air cooling  Mechanical Index  Mechanical Index  Panel Cutout 120mm×93mm Dimension 129.3mm×103.9mm×32mm	Flootrical	Power Protection	Protected from thunderstrike and surging	
Complied with EN61000-6-2:2005, EN61000-6-4:2007, ROHS, Surge Immunity:±1KV, EFT:±2KV, ESD:4KV, Air:8KV  Operating Temperature 0°50C Storage Temperature -20°60C Anti-UV Not suitable to work in strong ultraviolet light (such as direct sunlight) Operating Humidity 10°90%RH(no condensate) Vibration Endurance 10°25Hz (X,Y,Z direction 2G/30 minutes) Cooling Natural air cooling  Degree of Protection Front IP65 (with NEMA panel, Back IP20) Enclosure ABS Panel Cutout 120mm×93mm Dimension 129.3mm×103.9mm×32mm		Power Down Allowed	< 5mS	
Environmental Specifications  Mechanical Index    Degree of Protection   EFT:±2KV, ESD:4KV, Air:8KV	Specifications	CE & RoHS	Complied with EN61000-6-2:2005,	
Environmental Specifications  Poperating Temperature			EN61000-6-4:2007, ROHS, Surge Immunity:±1KV,	
Environmental Specifications  Anti-UV  Anti-UV  Degrating Humidity  Vibration Endurance  Cooling  Mechanical Index  Storage Temperature  -20~60C  Not suitable to work in strong ultraviolet light (such as direct sunlight)  10~90%RH(no condensate)  10~25Hz (X,Y,Z direction 2G/30 minutes)  Natural air cooling  Poegree of Protection  Front IP65 (with NEMA panel, Back IP20)  Enclosure  ABS  Panel Cutout  120mm×93mm  Dimension  129.3mm×103.9mm×32mm			EFT:±2KV, ESD:4KV, Air:8KV	
Environmental Specifications  Anti-UV  Operating Humidity  Operating Endurance  Cooling  Degree of Protection  Mechanical Index  Not suitable to work in strong ultraviolet light (such as direct sunlight)  10~90%RH(no condensate)  10~25Hz (X,Y,Z direction 2G/30 minutes)  Natural air cooling  Front IP65 (with NEMA panel, Back IP20)  Enclosure  ABS  Panel Cutout  120mm×93mm  Dimension  129.3mm×103.9mm×32mm		Operating Temperature	0~50C	
Environmental Specifications  Anti-UV  Operating Humidity  Operating Humidity  10~90%RH(no condensate)  Vibration Endurance  10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling  Natural air cooling  Degree of Protection  Front IP65 (with NEMA panel, Back IP20)  Enclosure  ABS  Panel Cutout  Dimension  129.3mm×103.9mm×32mm		Storage Temperature	-20~60C	
Specifications  Operating Humidity  Operating Humidity  10~90%RH(no condensate)  Vibration Endurance  10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling  Natural air cooling  Degree of Protection  Front IP65 (with NEMA panel, Back IP20)  Enclosure  ABS  Panel Cutout  120mm×93mm  Dimension  129.3mm×103.9mm×32mm	Environmental	Anti-UV	Not suitable to work in strong ultraviolet light (such as	
Operating Humidity 10~90%RH(no condensate)  Vibration Endurance 10~25Hz (X,Y,Z direction 2G/30 minutes)  Cooling Natural air cooling  Degree of Protection Front IP65 (with NEMA panel, Back IP20)  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm			direct sunlight)	
Cooling Natural air cooling  Degree of Protection Front IP65 (with NEMA panel, Back IP20)  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm		Operating Humidity	10~90%RH(no condensate)	
Degree of Protection Front IP65 (with NEMA panel, Back IP20)  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm		Vibration Endurance	10~25Hz (X,Y,Z direction 2G/30 minutes)	
Mechanical Index  Enclosure ABS  Panel Cutout 120mm×93mm  Dimension 129.3mm×103.9mm×32mm		Cooling	Natural air cooling	
Mechanical Index Panel Cutout 120mm×93mm Dimension 129.3mm×103.9mm×32mm		Degree of Protection	Front IP65 (with NEMA panel, Back IP20)	
Index         Panel Cutout         120mm×93mm           Dimension         129.3mm×103.9mm×32mm		Enclosure	ABS	
Dimension 129.3mm×103.9mm×32mm		Panel Cutout	120mm×93mm	
Woight About 420g		Dimension	129.3mm×103.9mm×32mm	
Weight   About 450g		Weight	About 430g	

# Wiring definition

Power Terminal (Pin1~Pin3 from left to right)						
		Pin1	FG			
	<b>ি</b>	Pin2	0V			
	_	Pin3	DC24V			
DB9 Serial Terminal (Pin1~Pin9 from left to right)						
		Pin1	Rx-(B)			
Pin1	Pin5	Pin2	RxD (COM1 RS232)			
		Pin3	TxD (COM1 RS232)			
	<b>—</b>	Pin4	Tx-			
		Pin5	GND			
		Pin6	Rx+(A)			
		Pin7	RxD (COM3 RS232)			
Pin6	Pin9	Pin8	TxD (COM3 RS232)			
1 110	1 117	Pin9	Tx+			
USB Host						
		USB Type A	Used to connect U disk, scan code gun and other peripherals			
USB Slave						
		Micro USB	Used to download programs and			
			debug			

