

OPC001C/OPC002C User Manual

Overview :

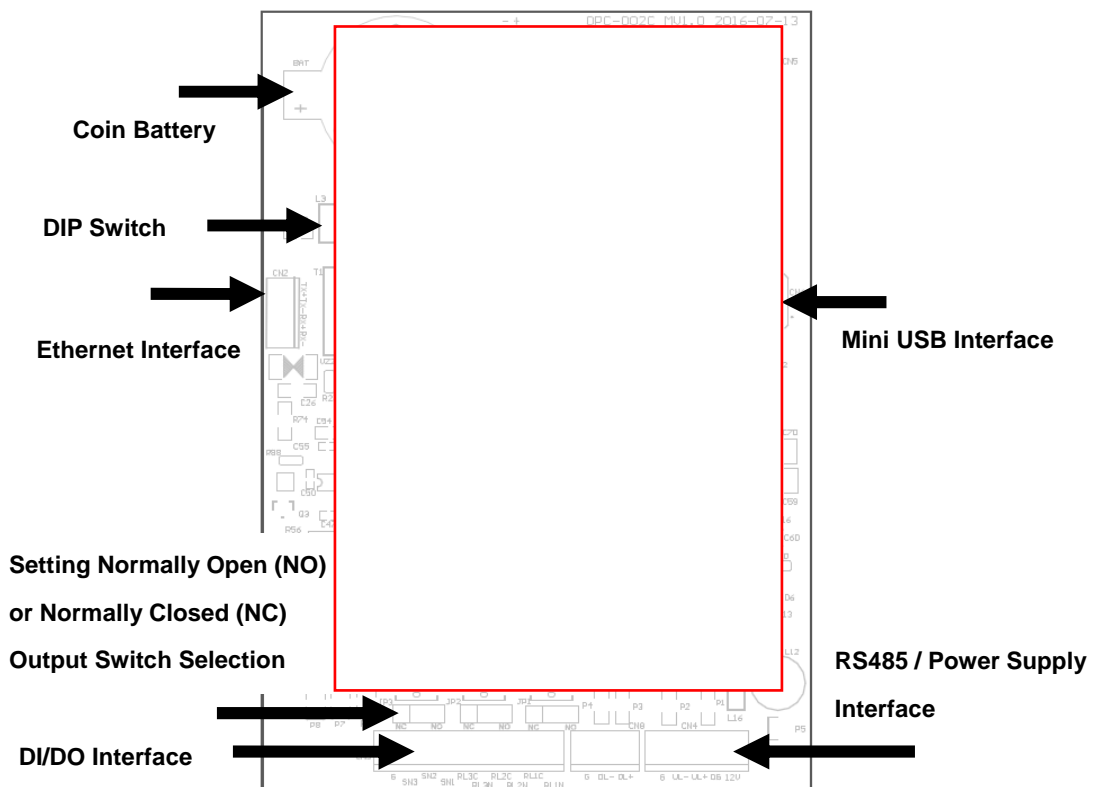
This product is designed for the RFID card reader which is used in access control management system. With RS485 or network communication function, a large amount of storage space can be used to store card information, according to the authority of the card to determine the door lock action.

Function Description :

- 1) Save card data and parameters in SRAM / Flash / EEPROM. Firmware updating operation can be completed through RS232 / Ethernet communication.
- 2) Two-color LED indicator :
 - Blue light is always on: Power status
 - Blue light flashes 1 time: read the card status is normal
 - Red light flash 3 times: read the card's status is abnormal
 - Flashing blue and red alternately: system error (e.g. communication error and device back cover open).
- 3) LCD Display :
 - Chinese / English LCD Display:
 - English message shows 4 row * 16 column
 - Chinese message shows 4 row * 8 column
 - Display Name: Company Name, Date, Card Identification Number, Operation Status, and Work / off work Status.
- 4) Support MIFARE card :
 - Support format ISO14443-A, ISO14443-B and so on
- 5) Built-in Storage Space :
 - EEPROM : Used for device parameter storage
 - SRAM : Used to store device parameters, card number and operation record
 - Flash : Used to save the card number, operation record and firmware update
- 6) Keypad :
 - A total of 16 keys :
 - 10 Number keys : 0 - 9
 - 6 Function keys : F1 、 F2 、 F3 、 F4 、 Cancel key 、 Enter key
- 7) Communication Interface :
 - RS-485 & Ethernet communication interface(10/100Base-T)
- 8) Input/Output Port :
 - Input Port : Door Sensor 、 Exit Button 、 Case Sensor
 - Output Port : Door Lock / Alarm or Siren

- 9) Date and Time Setting / Cover Open Detection / Buzzer / 3V Battery(CR2032) :
- Cover Open Detection : Prevent the machine from being damaged.
 - buzzer : With the use of the keypad pressing, card status, device communication anomalies, etc.
 - 3V Battery(CR2032) : External power is used to maintain time-clock operating and keep data in SRAM IC. Battery continuously works for six months.
- 10) DIP Switch :
- PIN #1 、 PIN #2 、 PIN #3 、 PIN #4 : Reserve
 - PIN #5 ; Switch On. Management card can be used to activate the access control card machine function settings.

Main Board Interface Description :



1) RS485 / Power supply Interface (Terminal Wire)

Define PIN (5-Pin)

	Name	Wire Color	Function Description
1	+12	Red	DC 12V INPUT
2	G	Black	GND
3	UL+	Blue	RS485 L+
4	UL-	White	RS485 L-
5	G	Brown	RS485 GND

Define PIN (3-Pin)

	Name	Wire Color	Function Description
1	DL+	Orange	RS485 L+
2	DL-	Brown	RS485 L-
3	G	Black	RS485 GND

2) DI/DO Interface(Terminal Wire)

	Name	Wire Color	Function Description
1	RL1NO	Blue	DO1 RELAY NO
2	RL1C	Blue	DO1 RELAY COM
3	RL2NO	Pink	DO2 RELAY NO
4	RL2C	Pink	DO2 RELAY COM
5	RL3NO	Green	DO3 RELAY NO
6	RL3C	Green	DO3 RELAY COM
7	SN1	Gray	DI1 Detect the input signal
8	SN2	Purple	DI2 Detect the input signal
9	SN3	Brown	DI3 Detect the input signal
10	G	Black	DI common ground

3)Ethernet interface (Terminal Wire)

	Name	Wire Color	Function Description
1	RX+	Green&White	Data reception +
2	RX-	Green	Data reception -
3	TX+	Orange&White	Data transmission +
4	TX-	Orange	Data transmission -

OPC-001C/2C Specification

Model No.	OPC-001C	OPC-002C
Read Format	ISO/IEC14443A/MIFARE	ISO/IEC14443A/MIFARE ISO/IEC 14443B, ISO/IEC 15693, JIS X 6319-4 (comparable with FeliCa)
Cardholders	16,000 (max)	20,000 (max)
Read Range	3-5 (max)	
Input Ports	3 Sensors	
Output Port	Relay x 3	
LED Indicator	Power / Comm.	
LCD Display	128 x 64 Dot. Graphic Display with backlight	
Keypad	16 Key (F1-F4, 0-9, Cancel, Enter)	
Real Time Clock	Yes	
Beep Tone	Buzzer	
Tamper switch	Yes	
Power Input	DC 12V / 1A	
Current Consumption	250mA(max)	
Comm. Interface	RS-485 / TCP/IP	
Comm. Baudrate	RS-485 : 9,600/19,200 bps-N-8-1, TCP/IP : 10/100 Mbps	
Operating Temp.	0° C ~ 55° C / 32° F ~ 131° F	
Relative Humidity	20% ~ 90%	
Dimension	150mm(L) , 100mm(W) , 30mm(H)	
Weight	260g	
Shell material	ABS	



Cautions to the user

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interference
- (2) This Device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guaranty that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.