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Communication format

1.1 UART parameters

Start bit：1 bit

Data bits：8 bit

Parity completion：1 bit （Even parity）

Stop bit：1 bit

1.2 Baud rate:

The factory default baud rate is 9600, which can be set

1.3 Frame Checking

A checksum CRC 16 is formed across the entire telegram

Data Address	Meaning	NO.3 Meaning （READ）	NO.6 Meaning （WRITE）
10001(0x2711)	Station Number	0XFF:Broadcast station number	The settable range is 1~254, the factory default is 0
10002(0x2712)	EC FAN SWITCH	Read switch status	1: Turn on; 0: Turn off
10003(0x2713)	EC fan speed control percentage	READ speed control percentage	Writable speed control data is 0~100
10004(0x2714)	Fan failure status	1: failure, 0: no failure	Invalid
10005(0x2715)	EC fan speed data	EC fan station 1 feedback speed	Invalid
10006(0x2716)	EC fan speed data		EC fan station 1 set speed

Remarks: 1. The broadcast command does not need to be returned, and the command sent by the station address must be returned immediately. 2. When the speed is set by the address 10006 command, the read status 10003 address returns the speed control percentage as invalid data, please ignore it.

FOR EXEMPLE：

1. The host controls the operation of the FFU fan-write data (assuming that the address of the fan controller is 1, and the data is in hexadecimal)

STATION ADDRESS （FAN ADDRESS）	Function code	Register data address		DATA		CRC VERIFY		Remarks
01	06	27	12	00	01	CRCL	CRCH	EC FAN TURN ON
01	06	27	12	00	00	CRCL	CRCH	EC FAN TURN OFF
01	06	27	13	00	32	CRCL	CRCH	Write EC fan speed control data as 50%
01	06	27	16	03	20	CRCL	CRCH	Write EC fan speed as 800rpm

2. The host sets the FFU controller address-write address data (assuming that the fan controller address is 1, the data is hexadecimal, and the address is set to 2)

STATION ADDRESS （FAN ADDRESS）	Function code	Register data address		DATA		CRC VERIFY		Remarks
01	06	27	11	00	02	CRCL	CRCH	Address 1 is set to 2
FF	06	27	11	00	02	CRCL	CRCH	The broadcast address is set to 2

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3. The host queries the running status of the fan-read a single data (assuming that the address of the fan controller is 1, and the data is in hexadecimal)

STATION ADDRESS (FAN ADDRESS)	Function code	Register data address		Number of read registers		CRCL	CRCH	
01	03	27	12	00	01	CRCL	CRCH	The host sends query data to the wind turbine controller
01	03	02	00	00	CRCL	CRCH		FFU returns to the fan switch state

4. The host queries the operating status of the fan-read multiple data (assuming that the address of the fan controller is 1, and the data is in hexadecimal)

STATION ADDRESS (FAN ADDRESS)	Function code	read data bytes numbers		DATA		CRC VERIFY		
01	03	27	12	00	04	CRCL	CRCH	The host sends query data to the wind turbine controller
01	03	08	00	01	00	00		
STATION ADDRESS (FAN ADDRESS)	Function code	Length	Power on/off state		Speed control percentage			BACK TO DATA
	00	00	00	00	CRCL	CRCH		
	Fault state		Actual speed		VERIFY CODE			

A few notes about the communication protocol :

1 . Communication protocol : adopt Mod BUS- RTU communication protocol

2 . Communication parameters: baud rate/9600, data bit/8, parity check/none, stop bit/1

3 . Data check : CRC check

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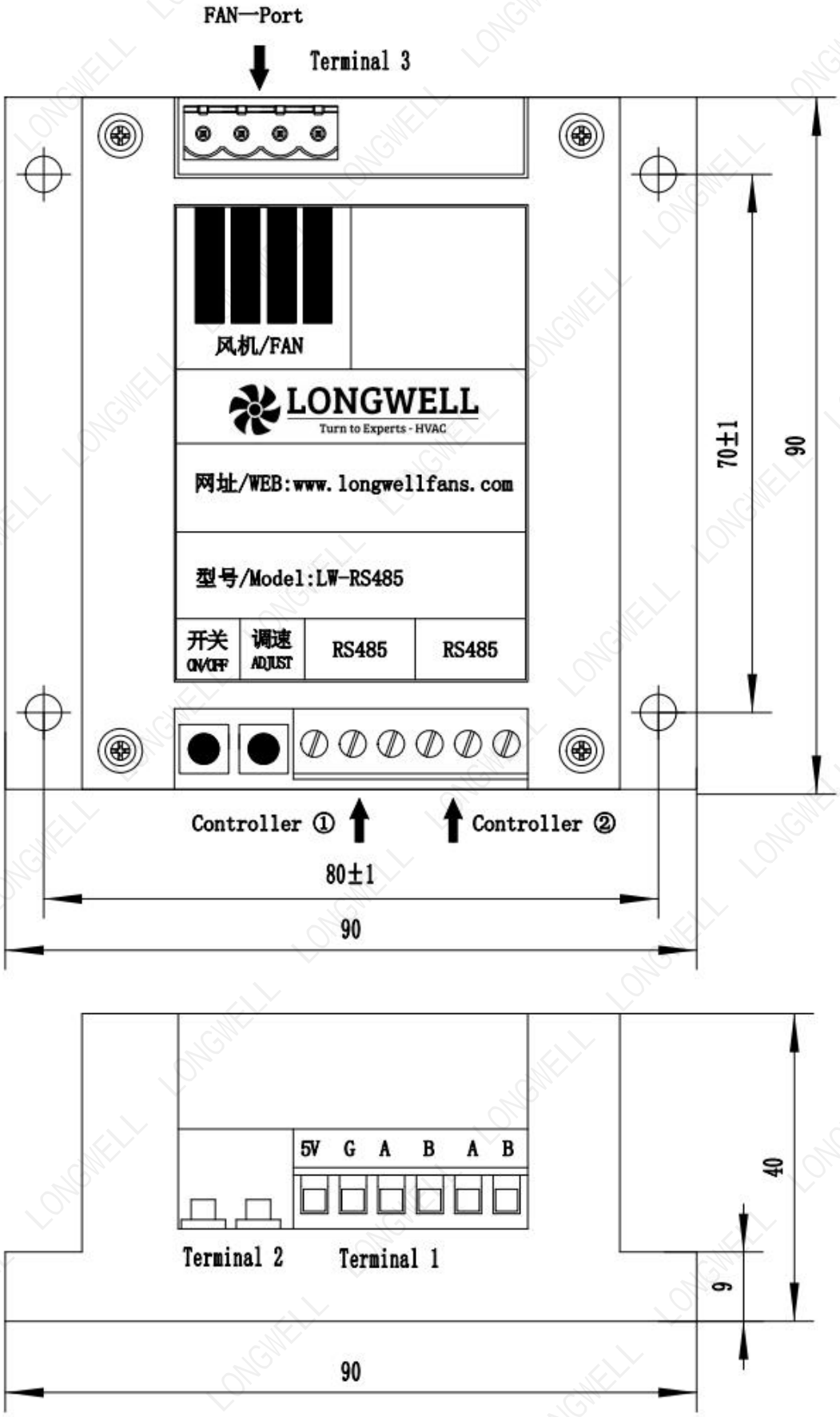

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Terminal number	Description	symbol	Function	remark
1	FAN	+	VPP	Fixed voltage output 10VDC，The color is red
		-	GND	Ground reference end of control signal，The color is blue
		speed control	VSP	Speed regulation signal input terminal,PWM，The color is yellow
		feedback line	FG	Velocity feedback pulse output，The color is white
2	AB interface	1	5V	Fixed voltage output 5VDC
		2	G	Ground reference end of control signal
		3、5	A	Bus connection RS485; RSA; MODBUS RTU
		4、6	B	Bus connection RS485; RSB; MODBUS RTU
3	button	switchellong push button	switch	Turn on/off the motor. The last data input is the default when the motor is turned on
		Speed control key	speed control	Each press increases by 5%

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CUSTOMER APPROVAL

CUSTOMER SIGNATURE:	**DATE :**

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