
C13A Technical Specifications

v1.0

1. Parameter table	错误！未定义书签。
2. Appearance	错误！未定义书签。
3. Hardware Interface	错误！未定义书签。
3.1 Performance Overview	错误！未定义书签。
3.2 Power connector	6
3.3 Extended Interface	7
4. Size Chart	错误！未定义书签。
4.1 Dimension	错误！未定义书签。
4.2 Installation method	9
Attachment: Packaging and physical dimensions	错误！未定义书签。

1. Parameter table

Product Specifications	
Model Description	C13A Standard type(RJ45+RS485 x 2) C13A-W Standard type with WIFI C13A-4 Standard type with 4G
CPU	ARM Quad-Core Processor, 1.3GHz
Local Storage	EMMC Flash, User Storage Space 3.2GB
Expanded Storage	TF Card
Ethernet	Wried x 1 10/100M
WIFI	WIFI 802.11 a/b/g/n(Optional)
4G	LTE Cat1, Standard SIM card (Optional)
Serial port	RS232 x 1(RS485 and RS232 multiplexing x 1) RS485 x 2
RTC	Real Time Clock
Lithium Battery	3.7V /3200mAh (Optional), Maintain 7-hour operating life in power outages
Power supply	8V~30V ;Standard 12V; <4W
Product Size	
Whole machine size	107.3×105.5×24.8mm

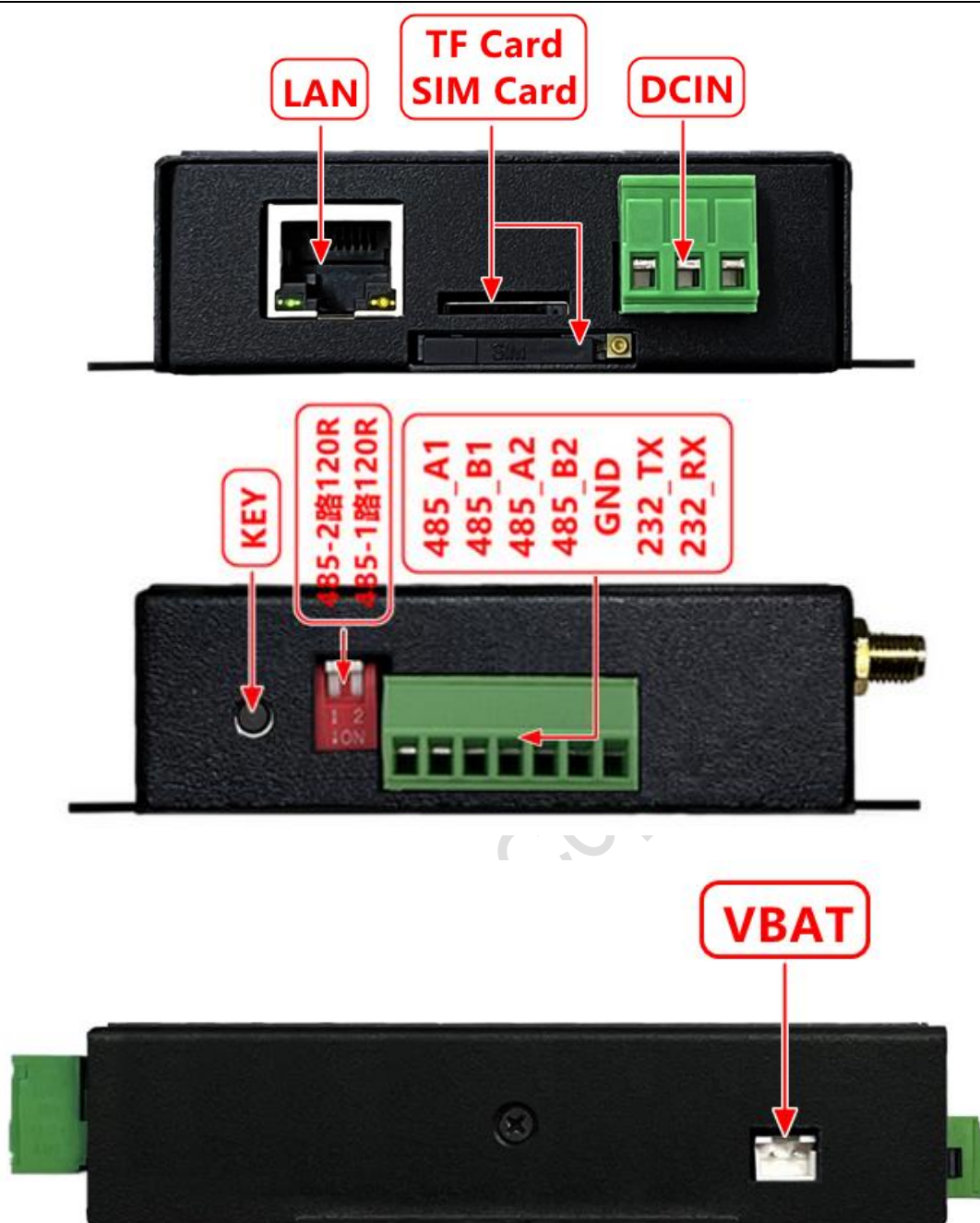
2. Appearance



Front view



Front view



3. Hardware Interface

3.1 Performance Overview

◆ electrical performance parameters

Properties	Conditions	Min	TYP	Max	Unit
Power Voltage	—	8.0	12.0	30	V
Operation Current	VCC=+12V, no external device operation	—	160	—	mA

◆ Operating environment and reliability parameters

Properties	Conditions	Min	TYP	Max	Unit
Working Temperature	60%RH at 12V voltage	-30	25	70	°C
Storage Temperature	—	-40	25	85	°C
Working Humidity	25°C	10%	60%	90%	RH
Protective Paint	—	—	None	—	—
ESD protection Level	Class 3				

◆ Interface performance parameters

Properties	Conditions	Min	TYP	Max	Unit
UART RS232 Baud rate	User set	300	-	115200	bps
Output Voltage	Output 1	—	-5.0	—	V
	Output 0	—	5.0	—	V
Input Voltage	Input 1	—	-5.0	—	V
	Input 0	—	5.0	—	V
UART 485_1, 485_2 Baud	User set	300	-	57600	bps

rate					
Serial port level V_AB	Output 1	2.5	5.0	—	V
	Output 0	—	-5.0	-2.5	V
Serial port level V_AB	Input 1	0	2.5	—	V
	Input 0	—	-2.5	-0.2	V

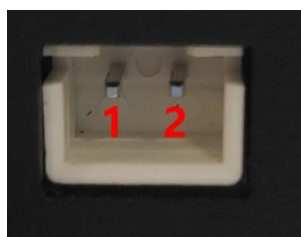
3.2 Power connector

- provides a 3PIN 5.08mm pitch terminal connection, the terminal model number is: KF2EDGK-5.08-3P. Recommended 12V DC power access, can support wide voltage range 8V~30V.



Pin	Description	Remark
1	DCIN (+)	12V Input(8-30V)
2	Power GND	
3	PE	GND

- provides one 2PIN 2.54mm pitch battery connector with 3.7V /3200mAh Li-ion battery



Pin	Description	Remark
1	GND	3.7V Lithium battery input
2	V+	

3.3 Extended Interface

- provides 1 way RS232 and 2 way RS485 connected via 7PIN 3.5mm pitch single layer Phoenix terminals.

The terminal model number is: KF2EDGK-3.5-7P



Pin	Description	Remark
1	RS485_A1	RS485-1
2	RS485_B1	
3	RS485_A2	RS485-2
4	RS485_B2	
5	GND	RS232
6	RS232_TX	
7	RS232_RX	

Note: RS232 and RS485_2 are using the same device node, only one port can be used for these two terminals, not both.

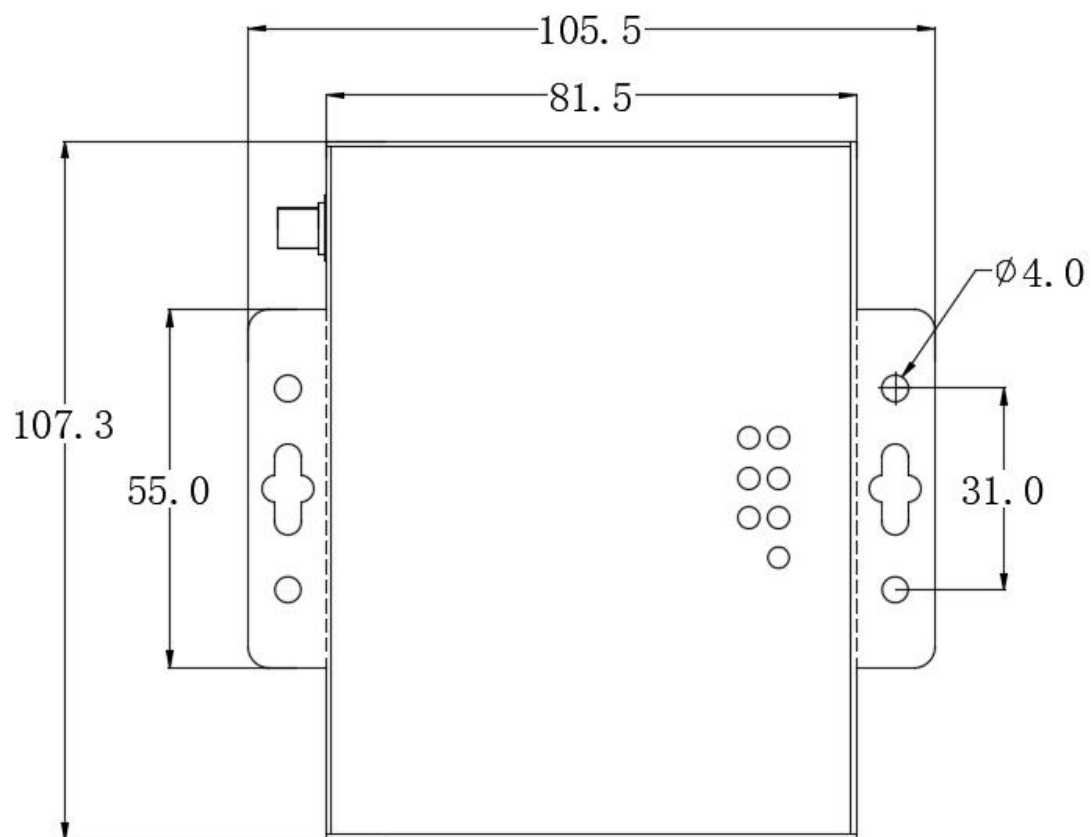
- 120R Terminal Matching Resistor

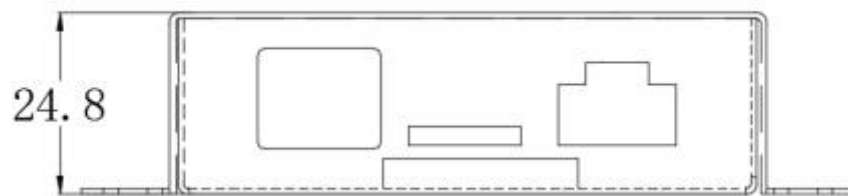


Pin	Dipswitch ON	Dipswitch OFF
1	485-1 with 120R Termination Resistor	485-1 without Termination Resistor
2	485-2 with 120R Termination	485-2 without Termination Resistor

4. Dimensional drawings

4.1 External dimensions

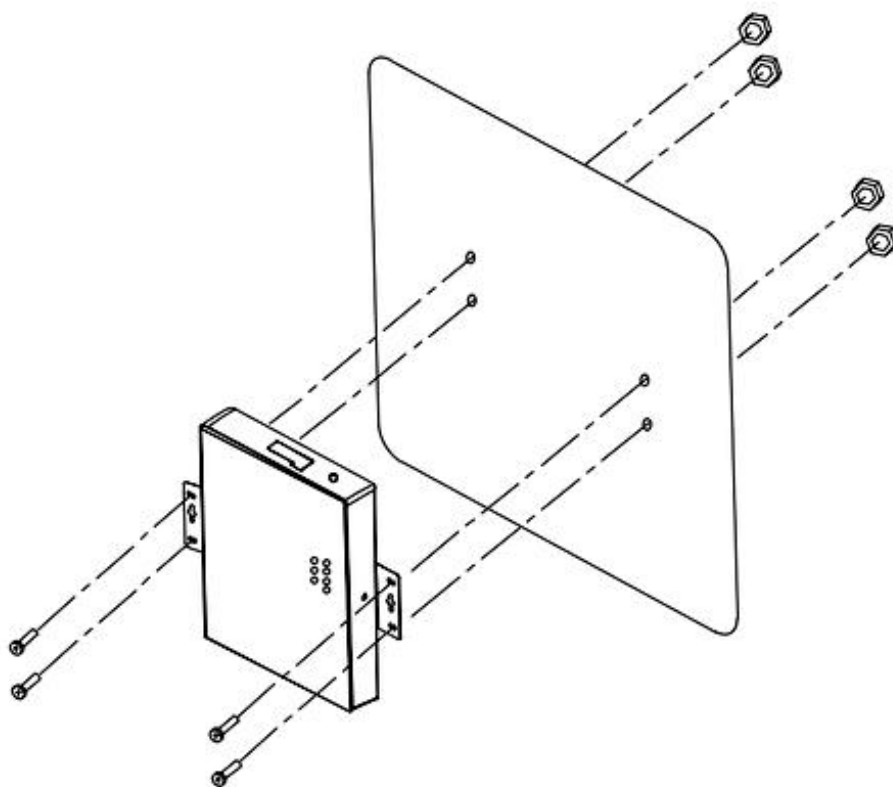


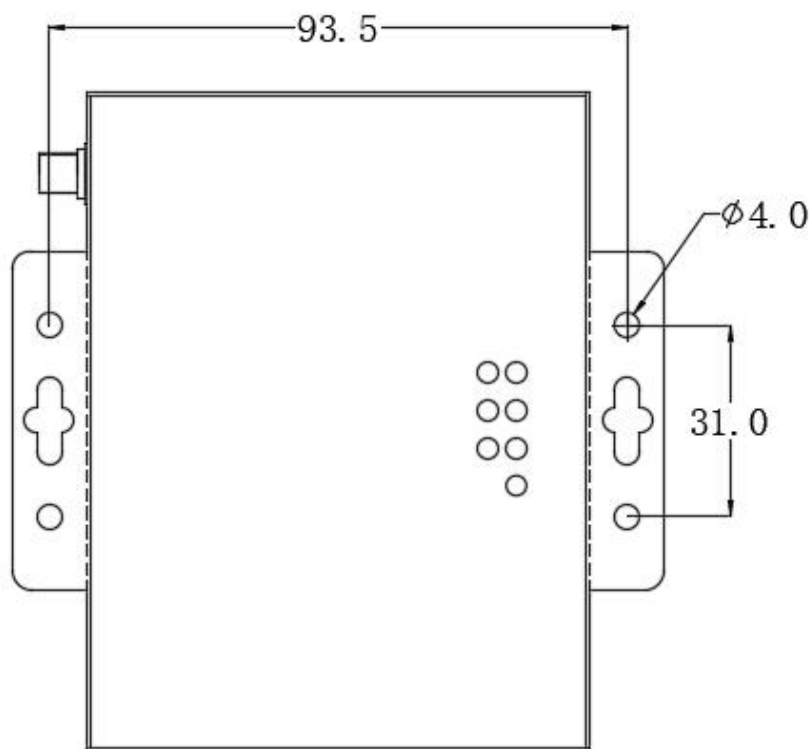


1. 单位: MM

2. 未注公差 $\pm 0.3\text{mm}$

4.2 Installation method





Attachment: Packaging and physical dimensions

Size				
Product Form Factor	107.3(L)x105.5(W)x24.8mm			
Product net weight	265g			
Packaging standards				
Box type	Box size	Number of storeys layers	Quantity/layers	Total
Aircraft Box	14cm(L)×13.3cm(W)×6.3cm(H)	1	1	1