1. Printer connected to cloud server

Interface address

www.zywell.cloud:9001

WIFI Set instruction: 1F 1B 1F 28 13 14 10 03 39 30 30 31 2C 77 77 77 2E 7A 79 77 65 6C 6C 2E 63 6C 6F 75 64 00

Switch communication port: 1F 1B 70 71 13 02 0 // The last byte: 0 represents LAN, 1 represents WIFI

TCP Request Type

Port number: 9001

Login server data 64 bytes: (HEX)

	, ,		
Data IDX	data	Length	illustrate
		(bytes)	
0-6	1F 1B 10 55 01 02 00	7	Data Header
7-14	Firmware version number, in	8	Firmware version number,
	ASCII characters		ZY80-V10Z
15-26	Device ID, ASCII characters	12	Device ID
27-30	COUNTER	4	count
31-46	Login Password	16	Login Password
47-63	All Zeros	15	reserve

When the server receives this connection, it confirms that the password is correct and allows the printer to connect, otherwise it does not allow login.

2. Printer and Cloud Server LINK Package

After the printer successfully connects to the server, it will send a LINK packet every 20 seconds to determine whether the server is disconnected.

LINK Package

Data IDX	data	Length	illustrate
		(bytes)	
0-6	1F 1B 10 55 01 02 00	7	Data Header

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the server receives this LINK packet, it confirms that the printer is online.

3. Printer abnormal status report

After the printer is successfully connected to the server, when the printer status changes, such as out of paper, cover open, cutter error, cash drawer open, offline, or button pressed,

Actively report to the server when the buffer is full.

LINK Package:

Data IDX	data	Length (bytes)	illustrate
0-4	1F 1B 10 55 03	5	Data Header
5	Status	1	Status word
			bit0 = 1: paper out, =0: paper
			available
			bit1 = 1 to open the cover, =0 to
			close the cover
			bit2 = 1 Cutter error, = 0 No error
			bit3 = 1 cash drawer open, =0 cash
			drawer
			bit4 = 1 not online, =0 online
			bit5 = 1 : key pressed, = 0: no key
			pressed
			bit6 = 1 buffer full, =0 normal
			bit7 = 0 Reserved
6-9	00,00,00,00	4	data

4. Specify the print process ID response to achieve cloud printing without losing orders

process ID (d1, d2, d3, d4) is specified by a character string data format. When the character string is specified in ascending order ("0001" - "9999"),

Timing makes it easy to confirm the processing order. Print data for each order and assign a process ID to each order, such as printing three orders

(" 0001 ", " 0002 " and " 0003 "). (Each time an order is completed, the process ID of the current order is returned . When the host receives the process ID response the response is " 0003 ", the host can judge that "the three orders are printed")

This data is sent at the end of each print data.

The host sends:

Hex: 1D28 48 06 00 30 30 d1 d2d3 d4

 $d1=32\sim126\,$

 $d2 = 32 \sim 126$

 $d3 = 32 \sim 126$

 $d4 = 32 \sim 126$

Printer returns:

Hex: 37 22 d1 d2 d3 d4 00

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EXP:				
If the host sends the program ID:				
OUT:				
[Single data]				
[Single data]				
[Single data]				
1D 28 48				
06 00 30 30 30 30 30 31				
Printer Returns				
IN: 37 22 30 30 30 31 00				

The process prints the order "0001", printing is completed, the order number is incremented by 1, and the next order becomes "0002"