

V8.10



400-180-0125
177-0644-7070
www.hangtu-china.com



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1. GCP 03
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2011

"

"

"

"

31

2000

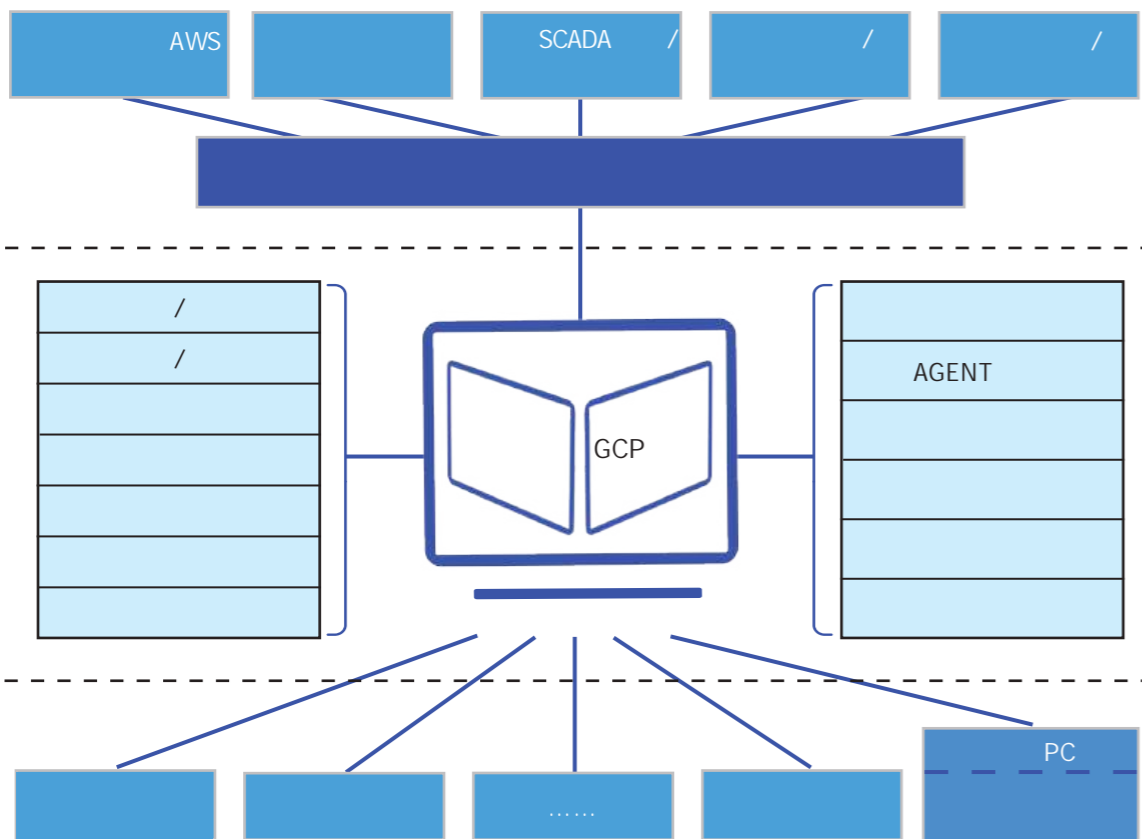
ISO9001



GCP

GCP

GCP



GCP

1

2

SQLite MySQL SQL Server

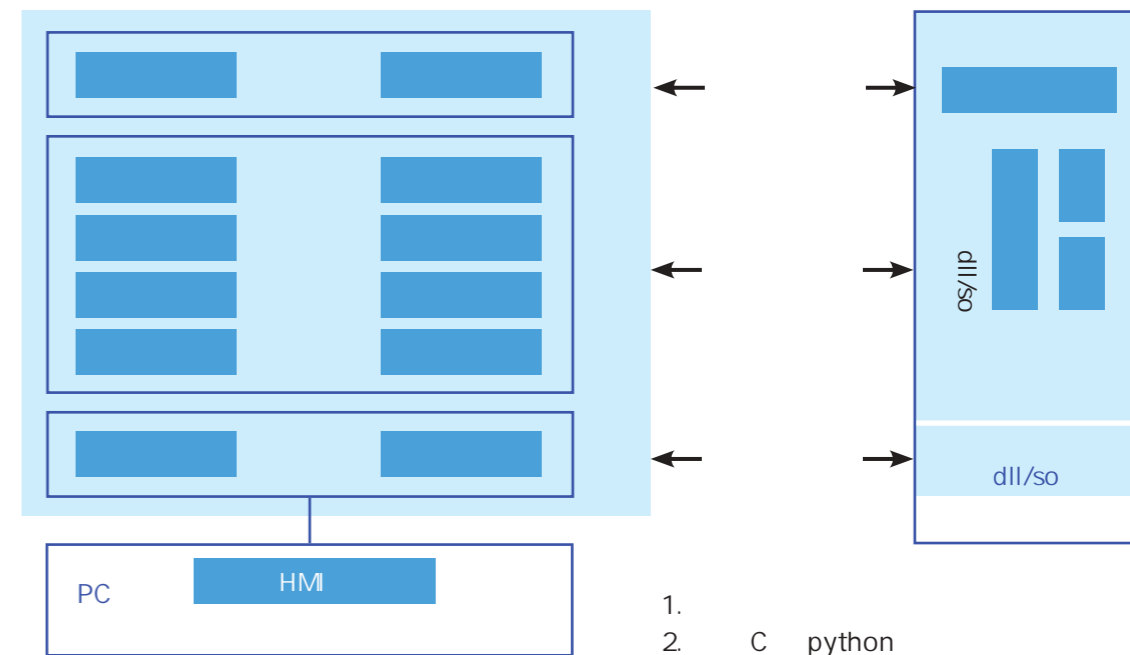
Oracle

3

I/O

4

API



- 1.
- 2. C python

GCP

50

500

Modbus RTU/TCP
CDT DL451 DISA XT9702
IEC60870-5-101 DL/T634.5101
IEC60870-5-102 DL/T719
IEC60870-5-103 DL/T667
IEC60870-5-104 DL/T634.5104
DL/T273
DL/T476
IEC61850 DL/T860MMS GOOSE
DL/T860CMS
DL/T645
Q/GDW1376.1
103/104
103
103

GB/T26865.2
Q/GDW11354
Syslog
NTP/SNTP
IRIG-B
SNMP
DGJ08-2068
FTP/TFTP
DNP3.0
YD/T1363
/
E
MQTT
http/https
Webservice



GCP

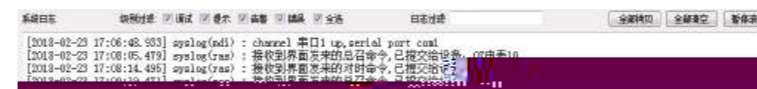
50

GCP

1.



2



- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

3

IP



GCP

GCP V5.0

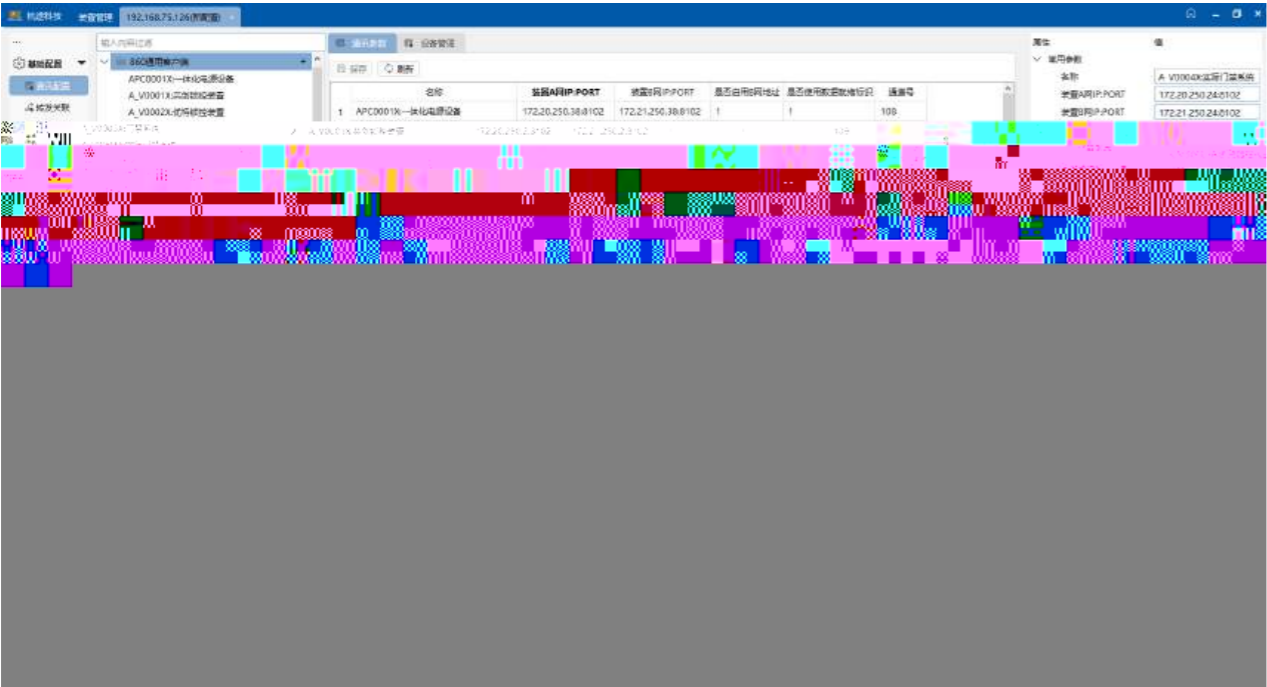
GCP

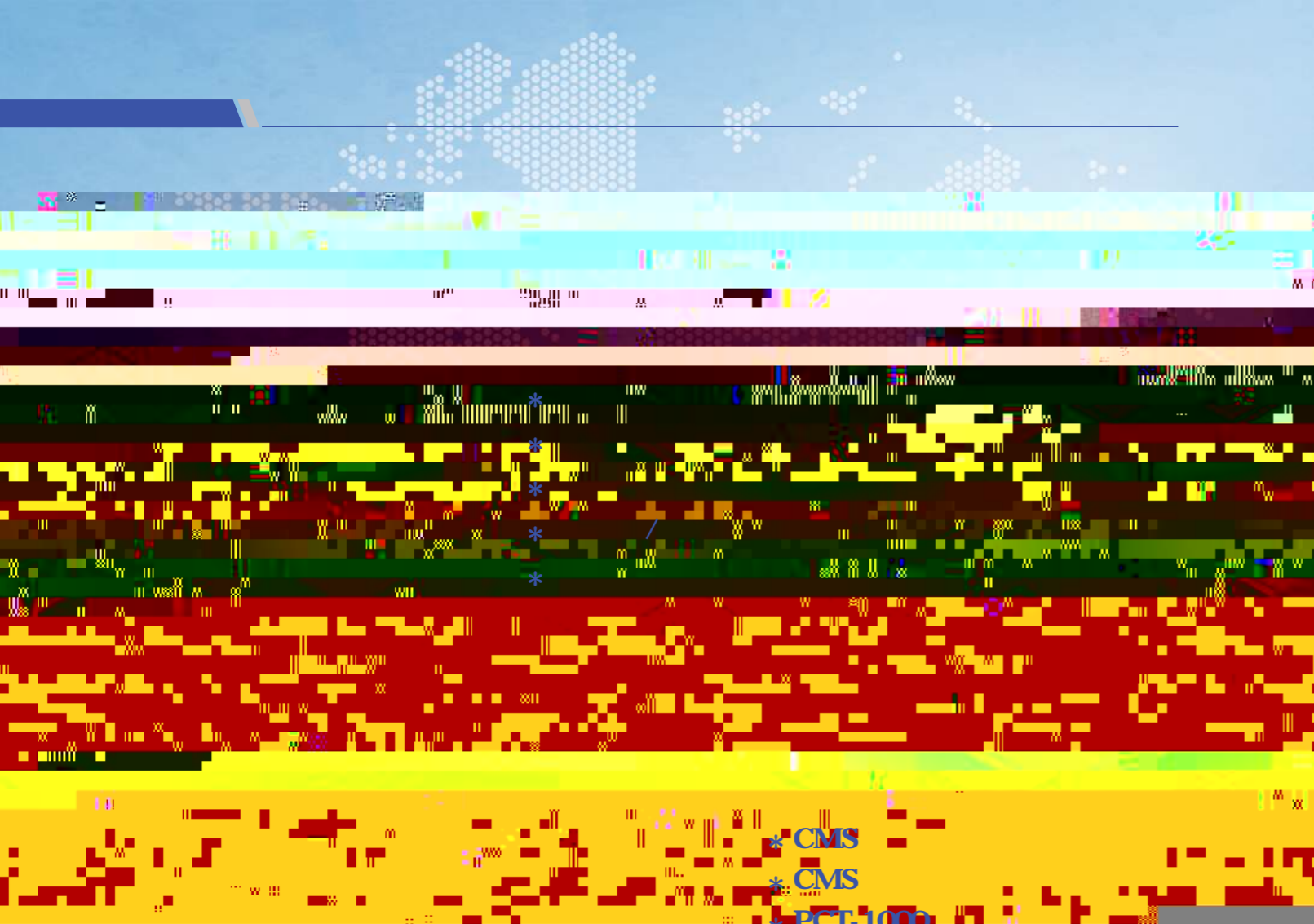
GCP V5.0

GCP V5.0

1.

- 1.
- 2.
- 3.





* CMS
* CMS
* PCT-1000

*

*
* / /
*
* I

*
*



» GCP

Debian Ubuntu CentOS Linux Windows win7

»

1.

CPU GCP

2.

RTC PHY
UART TCP GCP
IEC61850

3.

RTC RJ45 GCP
UART TCP RJ45

»

1.

ARM X86 + Linux
2 2 16 32

2.

GCP

»

/





» **iHT-C22/24/24S**



» iHT-COM60



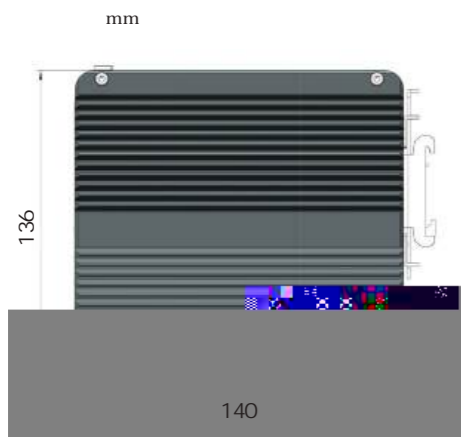
» iHT-C62



- 1.
2. 61850



1. UPS
2. NVME
- 3.



USB
HDMI
USB2
1
USB3
2



	24~48V DC	<15W
CPU	ARMA55	4x 1.8GHz
	4GB	
	16GB eMMC	
	2 RJ45	10/100/1000Mbps
	TYPE C	
USB	3x USB	
	HDMI	

	512GB
(mm)	136x 140 154 x 54.60
	-40 ~ +70
	5% ~95%
	4
	5M
	1500V 500V
	± 5kV ± 1kV 1.2/50us 3

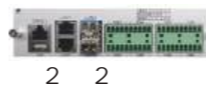
» iHT-E110



1. / / /
- 2.
3. 10000



USB 2 RJ45 SFP 2 RJ45 2 RJ45
8x 232/485 6x 232/485 +2x 485+2x CAN



	AC/DC 110/220V	<10W
CPU	ARMA7	800MHz
	512MB	
	4GB	
	4 10/100Mbps	2x RJ45+ 2x RJ45 SFP
	8x RS232/485	6x RS232/485 +2x RS485+2x CAN
	RJ45	RS232
USB	1	
	2	/DI/DO/AI

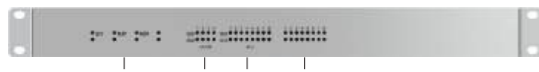
	1U 19"
(mm)	440x 300x 44.5
	-40 ~ +70
	5% ~95%
	4
	5M
	1500V 500V
	± 5kV ± 1kV 1.2/50us 3

» iHT-E120



1. / / /
- 2.
- 3.

50000



USB 2 RJ45
 2 RJ45 SFP
 8x 232/485 6x 232/485 +2x 485+2x CAN



2 2 8 16 8ADI8DO 8DI4DO

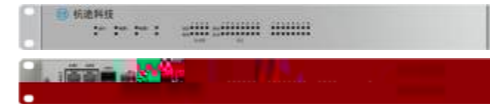


	AC/DC 110/220V
CPU	ARMA7 4x 1.5GHz
	2GB
	8GB eMMC
	4 10/100Mbps 2x RJ45+ 2x RJ45 SFP
	8x RS232/485
	RJ45 RS232
USB	1

	1/4U 19"
	1U -40 ~ +70 4U -25 ~ +55
	5% ~95%
	4
	5M
	1500V 500V
	± 5kV ± 1kV 1.2/50us 3

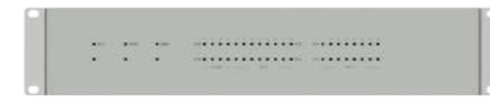
» iHT-E130/230/430

1 E130 1U



1. / / / /

2 E230 2U



2. /



3. 1M



- 4.



- 5.



- 6.



7. +

50000

3 E430 4U



- 1.
- 2.
3. Ubuntu



16



8



8DI4DO



8ADI8DO



	AC/DC 110/220V
CPU	ARMA55 4x 1.8GHz
	4GB
	16GB eMMC
	4 10/100/1000Mbps 2 Combo SFP LC 100M/1000Mbps
	8x RS232/485 1 IRIG-B RS485
	TYPE C

	1/2/4U 19"
	-40 ~ +70
	5% ~95%
	4
	5M
	1500V 500V
	± 5kV ± 1kV 1.2/50us 3

>> iHT-S818/818D

1 S818 1U



1. / / / /

2. /

3.

4. +

5. ||

100000

2 S818D 2U



- 1.
2. Ubuntu



	AC/DC 110/220V <30W
CPU	ARMA73(2.2GHz)× 4 + A53(1.8GHz)× 2
	4GB
	16GB
	8× RJ45 10/100/1000Mbps
	RJ45 RS232
USB	3
	IRIG-B RS485
	HDMI VGA

	1/2U 19"
	-25 ~ +55
	5% ~95%
	4
	5M
	1500V 500V
	± 5kV ± 1kV 1.2/50us 3

>> iHT-S3100/3200

1 S3100 1U



1. / / / /

2. /

3.

4. 1M

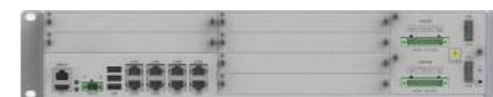
5. +

100000

2 S3200 2U



- 1.
- 2.
3. Ubuntu



	AC/DC 110/220V <50W
CPU	RK 3588J 8 ARM
	8GB 16GB
	64GB eMMC
	8× RJ45 10/100/1000Mbps
	RJ45 RS232
USB	3
	IRIG-B RS485
	HDMI VGA

	1/2U 19"
	-25 ~ +55
	5% ~95%
	4
	5M
	1500V 500V
	± 5kV ± 1kV 1.2/50us 3



» iHT-S2110/S2210



	AC/DC 110/220V <50W
CPU	KX-6000G 4× 2.6GHz



ZK

iHT-AUX-FI-TCU-ZK

iHT-AUX-SD-SD-ZK

iHT-S2210-S2-

iHT-AUX-

PE-PED-ZK

PCT-1000

GCP-860ZK

iHT-SPET300



iHT-SPET300 Q/
GDW11204-2025



DL/T 645 DL/T 698.45 IEC 61850 DL/T
2811(CMS) DL/T 719 RS485 TCP/IP

4G/5G

iHT-SPET300

RK3568J CPU

KylinSecOS 3.4-4



4G/5G

MODEM



	AC/DC 110/220V
CPU	RK3568J CPU, ARMA55 4 4× 1.8GHz
	4GB
	64GB eMMC
	1024*600
	7 RJ45 10/100/1000Mbps
	24 RS485
	RS232

B	IRIG-B DC
	KylinSecOS 3.4-4
	4G 5G
	2 SFPLC10/100M/1000Mbps 1 TF (microsd)
MODEM	1 RJ11
	+
USB	1 USB 2.0



iHT-SPET3000



ARMA55 4 4× 1.8GHz

KylinSecOS 3.4-4

FLASH

MODEM

1024× 600

110V/220V

4



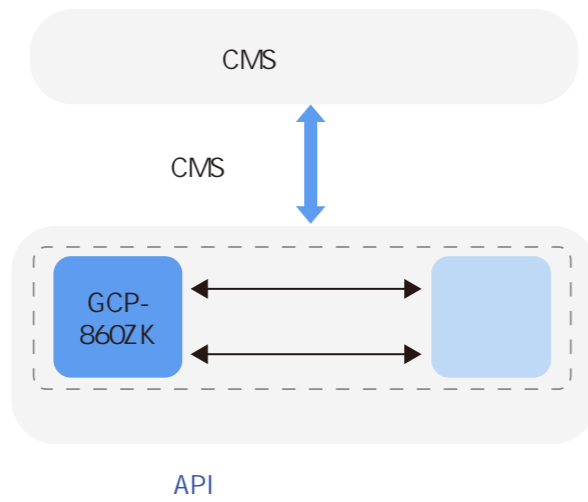
GCP-860ZK

CMS GCP-860ZK

CMS — IEC61850 MMS

1 API

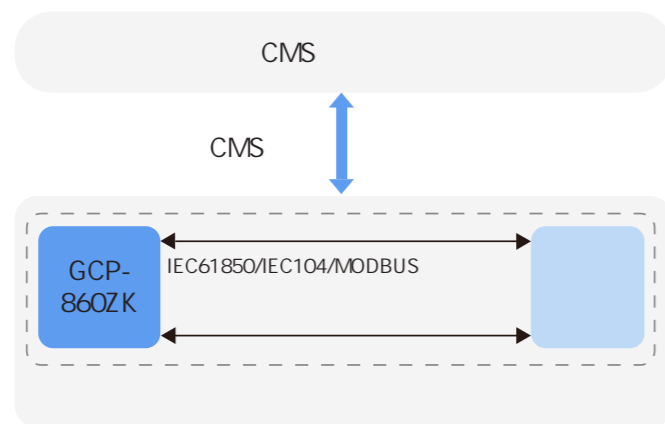
CMS GCP-860ZK API CMS



2

CMS GCP-860ZK GCP-860ZK GCP-860ZK

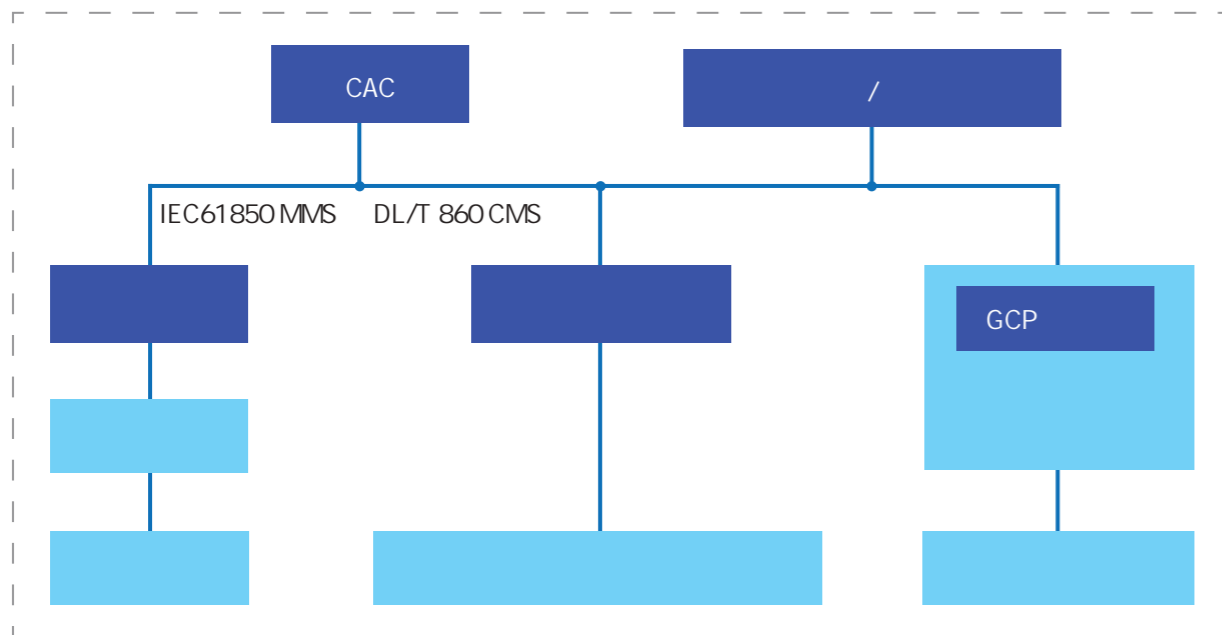
CMS CMS



MMS CMS

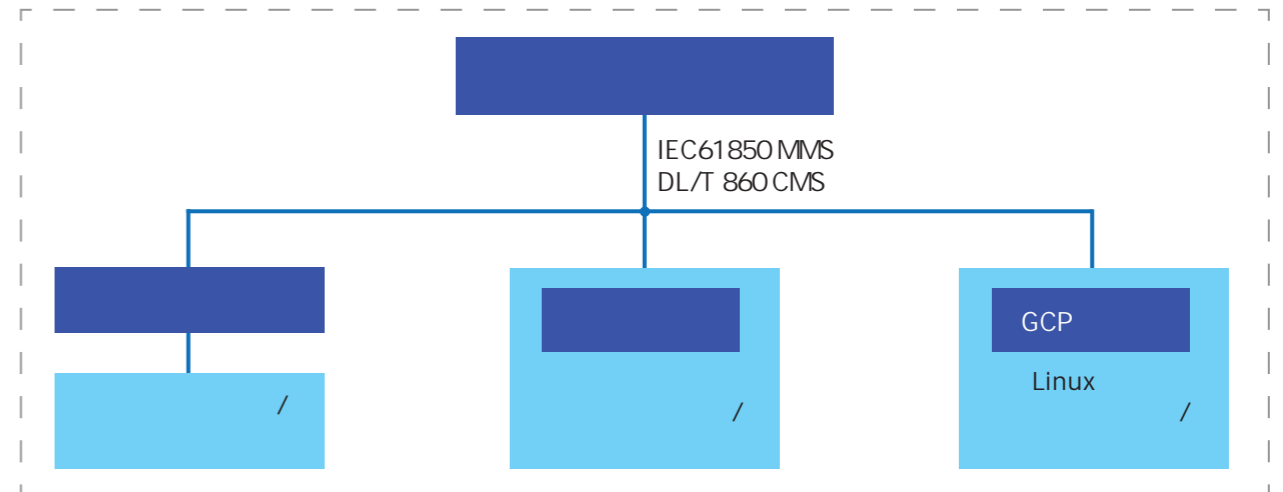
1. / 61850 MMS DL/T 860 CMS
2. 61850 MMS DL/T 860 CMS
3. 61850 MMS DL/T 860 CMS

在线监测:



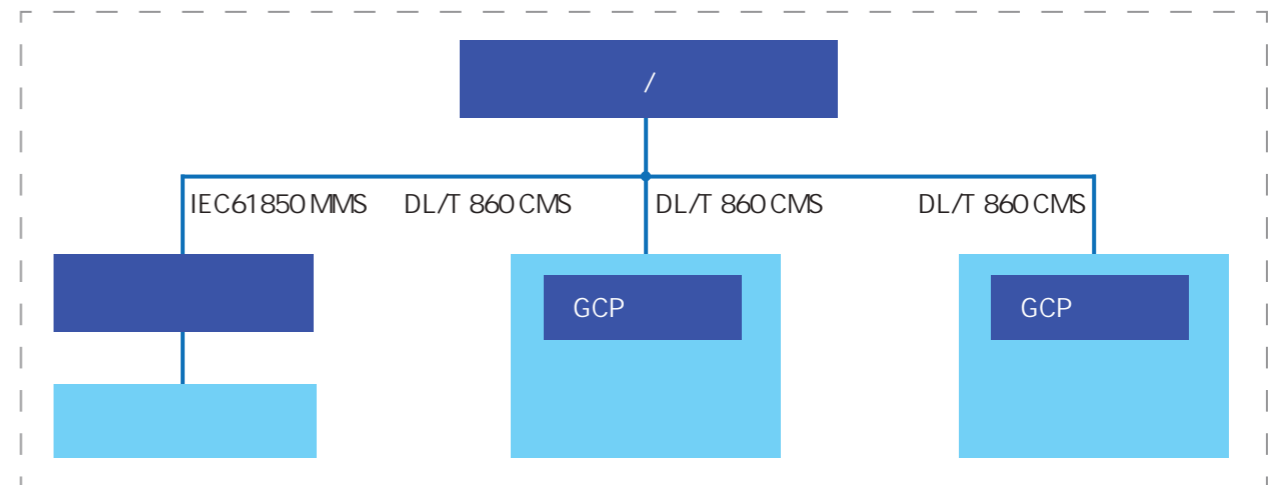
1. AGENT
2. SNTP IRIG-B
3. RS485 RJ45 DI DO 4-20mA
4. Modbus RTU(66) Modbus TCP
5. 4 :
6. CAC E

交直流电源设备 / 保护装置:



1. () ()
2. Modbus RTU Modbus TCP CDT
3. ()

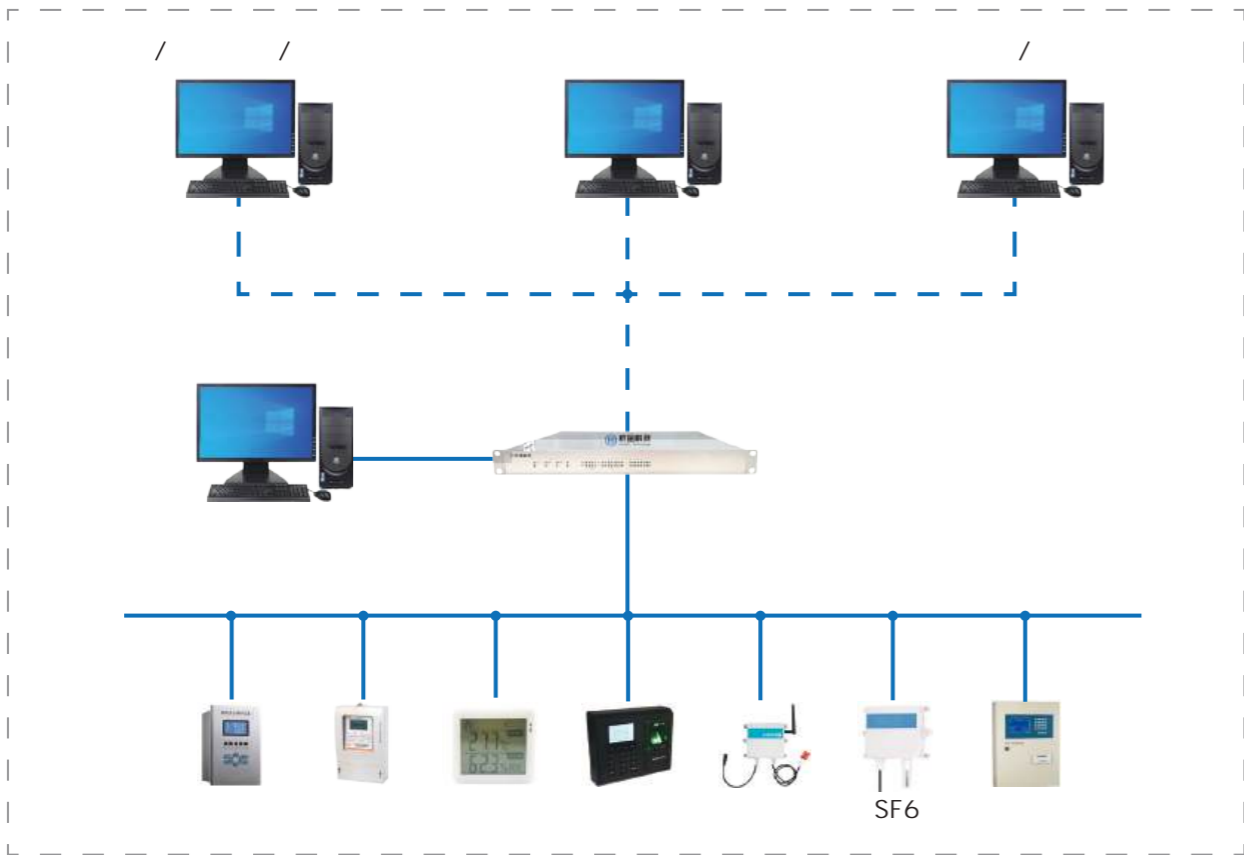
辅控:



- 1.
2. 61850 MMS DL/T 860 CMS
- 3.



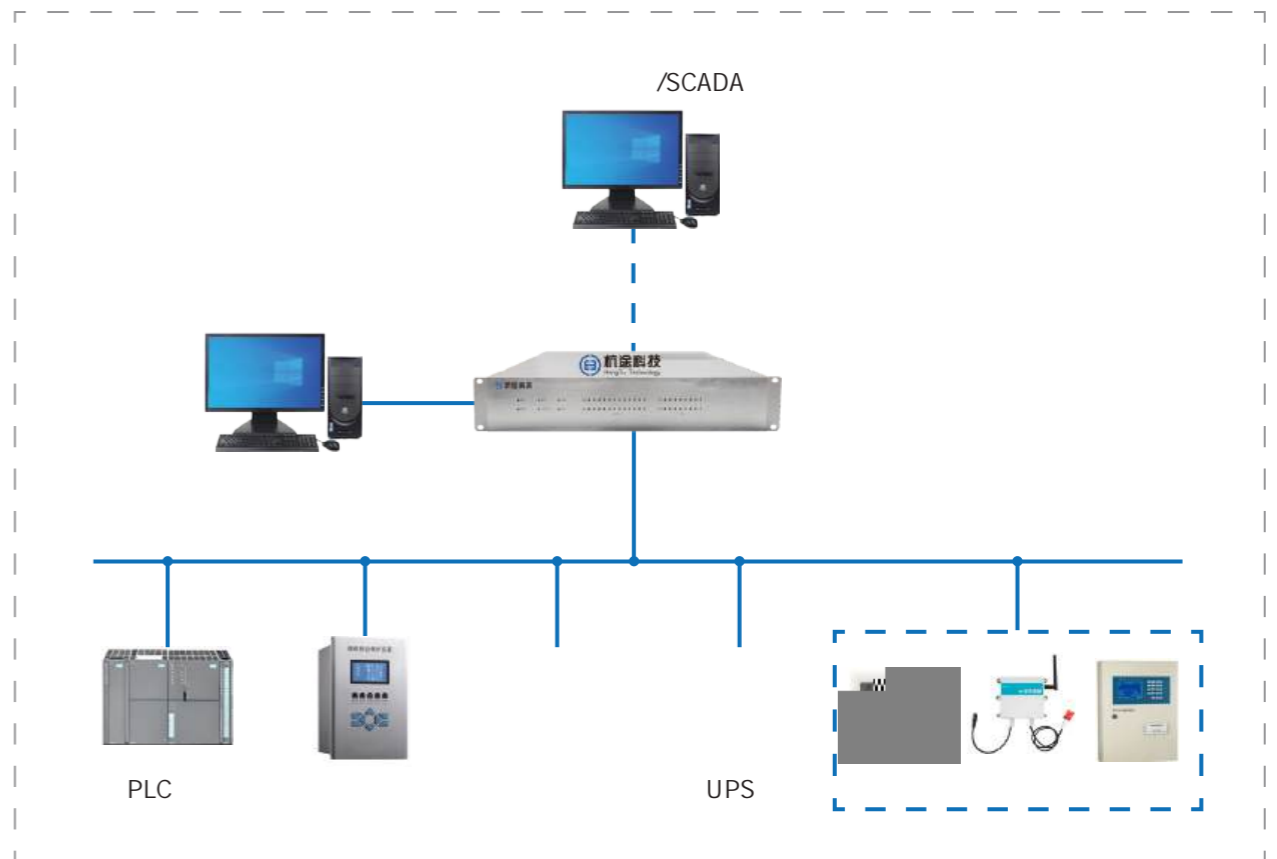
- 1.
- 2.
- 3.



1. DL/T645 97/07 MODBUS_RTU/TCP 102 101 103 DNP 104 CDT DGJ08-2068 IEC61850
- 2.
3. RS232 RS485 TCP UDP DI DO AI



1. PLC SCADA
2. UPS



1. DL/T645 97/07 MODBUS_RTU/TCP 102 101 103 DNP 104 CDT 61850MMS GOOSE
- 2.
3. RS232 RS485 TCP UDP DI DO AI



1.



PCT-1000

PCT-1000

10

PCT-1000

PCT-1000

CMS

Q/GDW 273

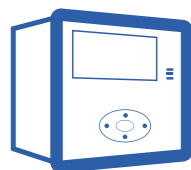
DL/T 476

IEC60870-5-104

-

103

IEC61850







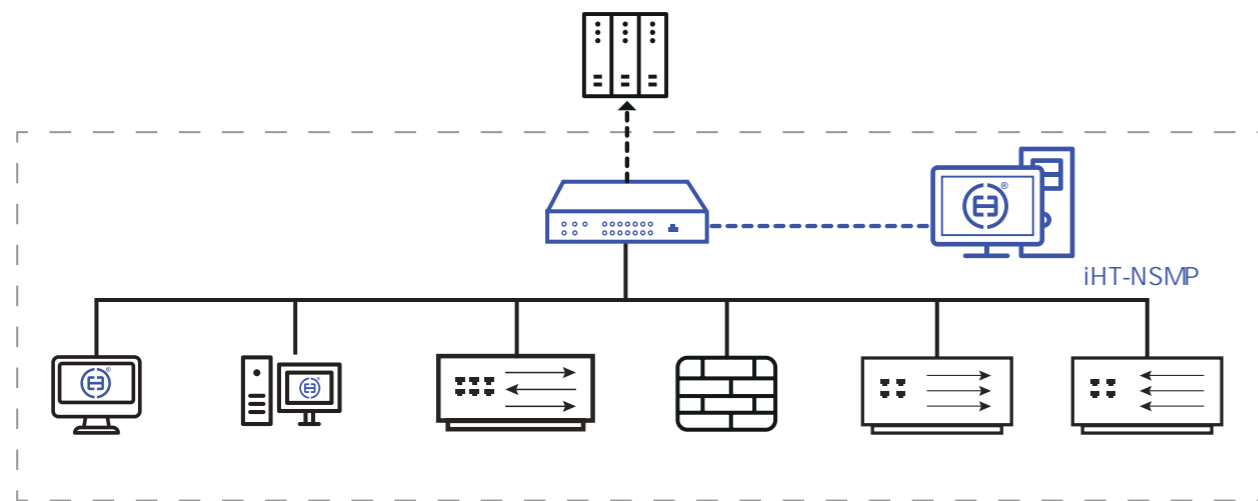
[2017]1084

iHT-NS818

iHT-NS-AGENT

iHT-NS828-ZK

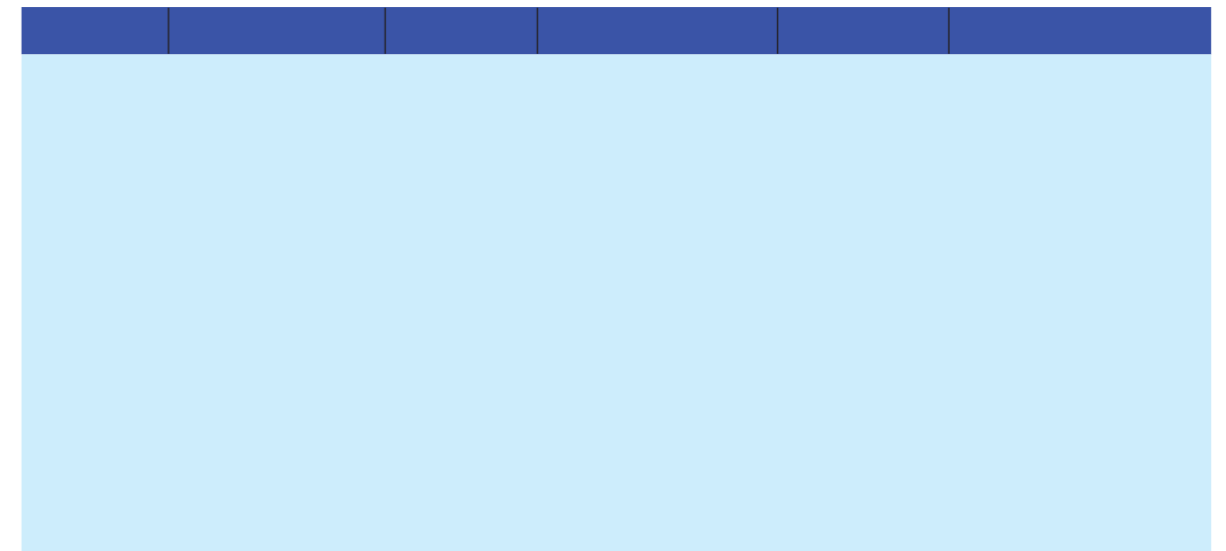
iHT-NSMP



iHT-NS-AGENT

Redhat

Centos Debian Ubuntu 100



1

II iHT-NS818

iHT-NS828-ZK



iHT-NS828-ZK

II iHT-NS818



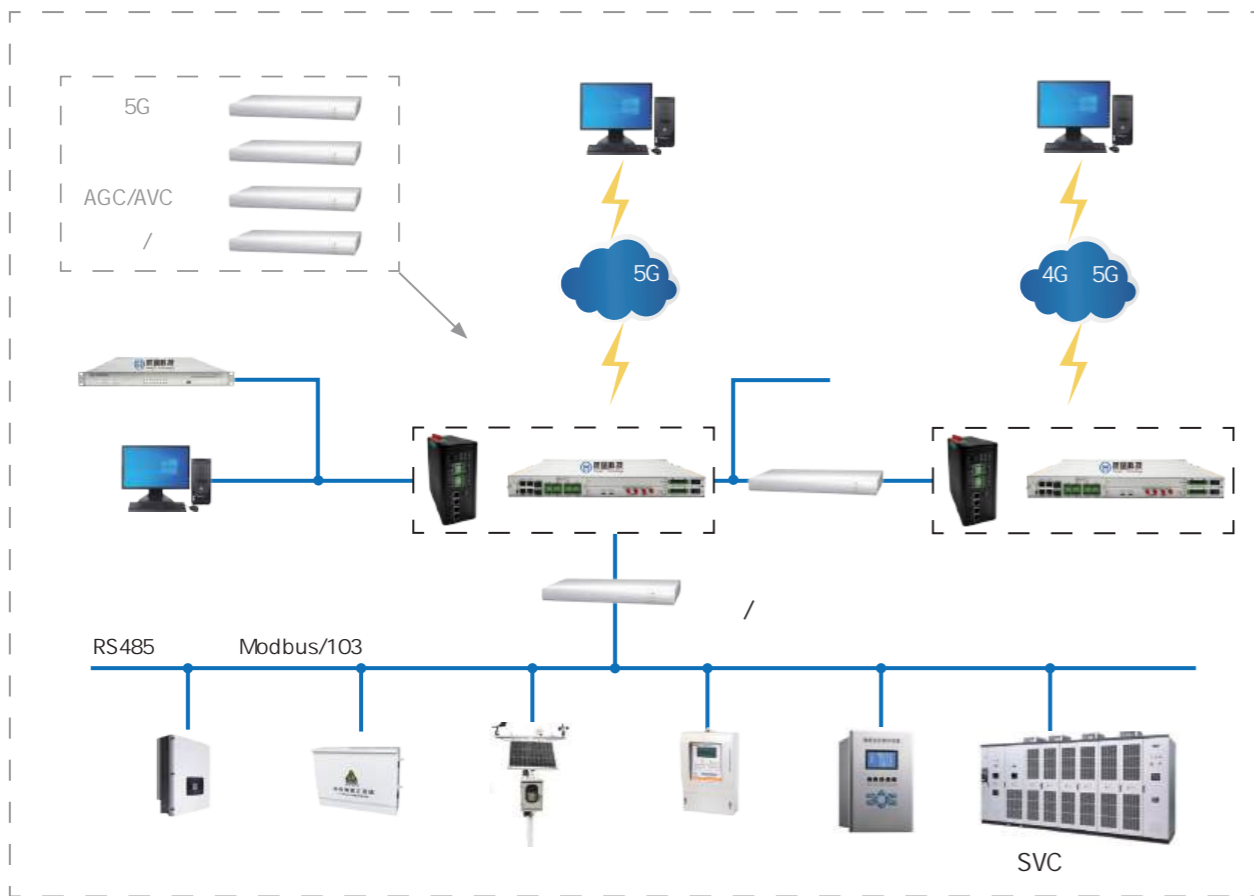
- 2000 /s
- 500
- 10
- 1s
- 3s
- 6 700
- 12
- 300000
- IRIG-B 1ms
- 24 1s

iHT-NSMP





- 1 1U 2U 4U
- 2 0-2 4G 5G
- 3 CPU
- 4 Ubuntu
- 5 II
- 6 AGC/AVC
- 7 SNTP IRIG-B AGC/AVC



iHT-ENCU3000F



	AC220V/DC110V
	3× RJ 45
2	1× RS232/RS485 +1× RS232
	RJ45 RS232
	4G 5G
	-40 ~ +70
	5% 95%

		10M
		10M
		10M
		2000V
		500V
		2000V
	4	GB/T 17626.2
	4	GB/T 17626.4
	4	GB/T 17626.5

I



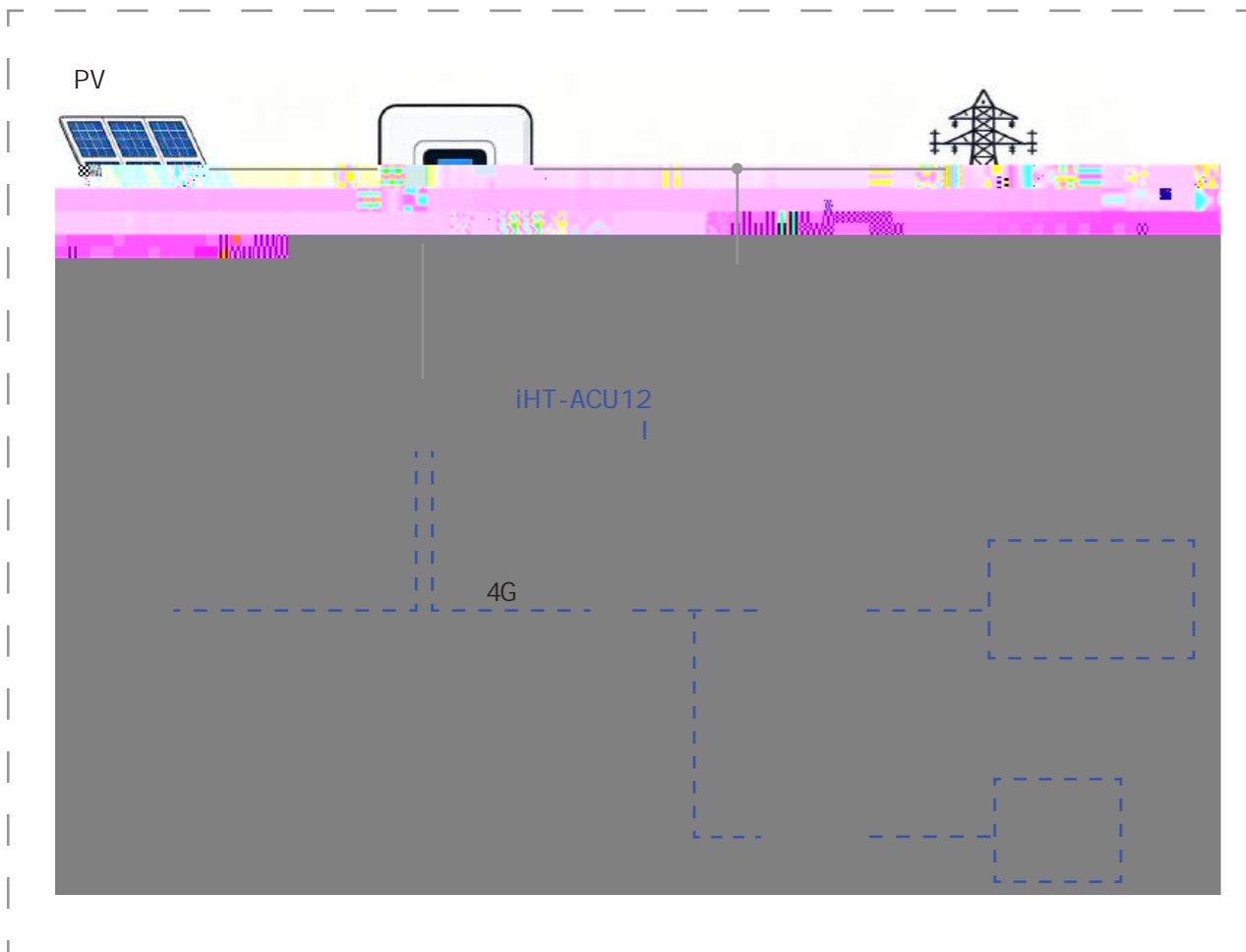
iHT-ACU12

I

4G APN

TLCP

..... " "



⚡ 即插即用

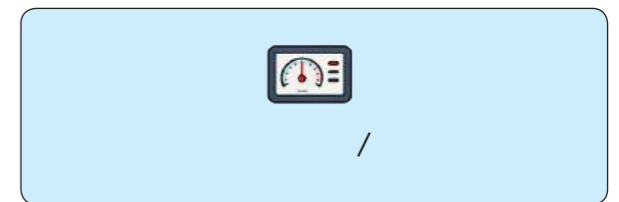
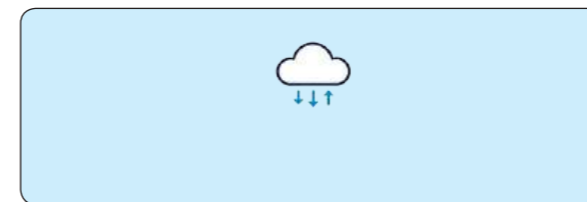
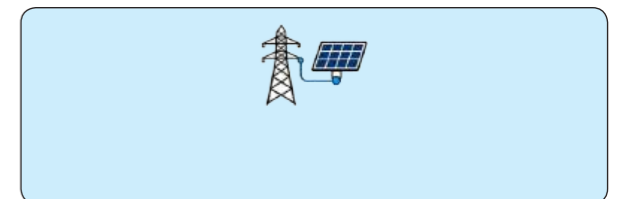
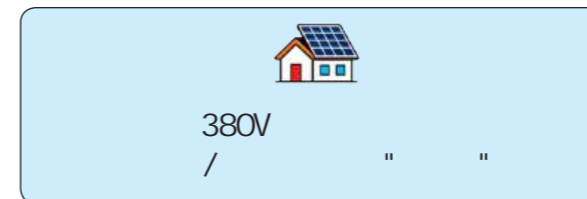
🔒 国密 TLCP 加密
SM2/SM3/SM4

🕒 秒级采集控制

📢 一发双收

💻 自带操作系统
Linux

🔄 多协议兼容
101/104/MQTT

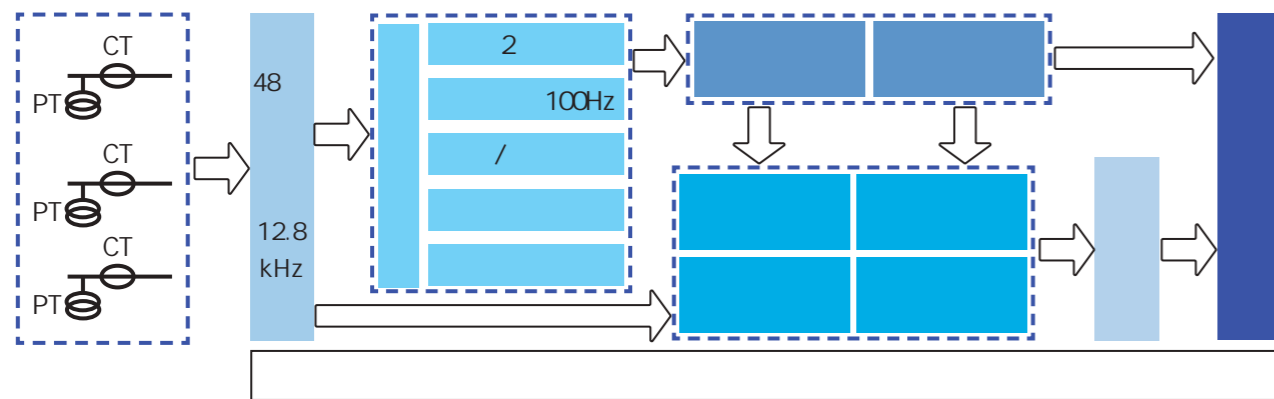
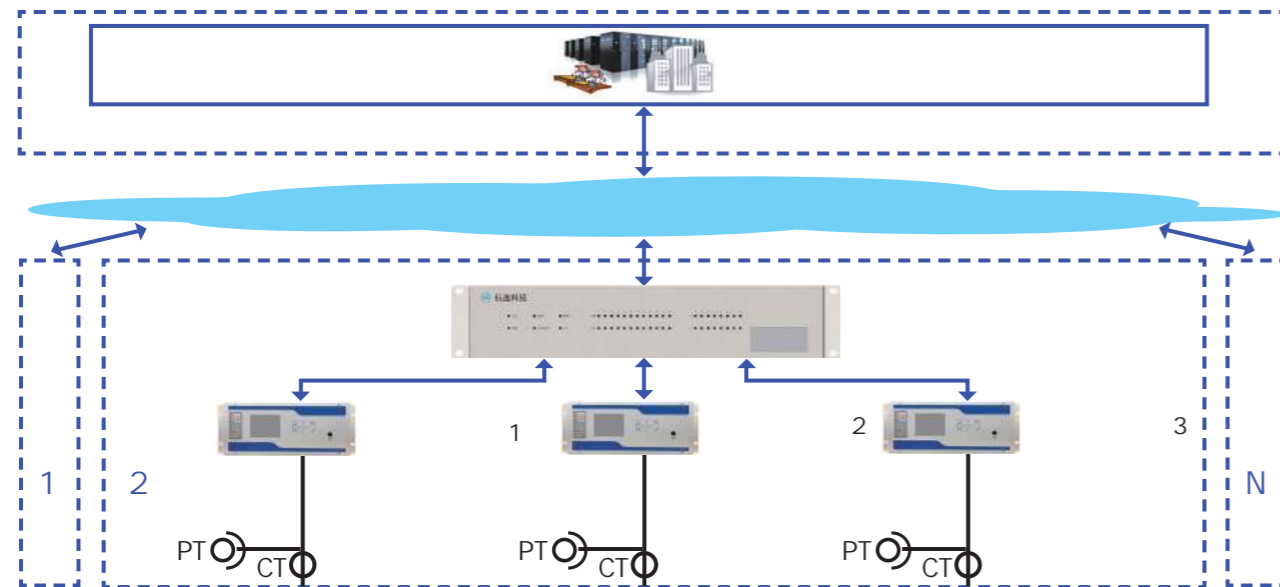


/	101	104	MQTT	HTTP	4G	APN	
					RS485	4PIN/USB	
/	1		5.0	APP / WEB			
/			DC 5V ± 5%	/	5W		
/			RS485		/IP65		
			4G CAT1	/	/		
			TLCP	SM2	SM3	SM4	
SIM						MicroSIM	
/	46x	28x	136mm		248mm+	/100g	
/			-25	~+70	/5%	~95%	



RTU PMU
0-2500Hz

Hz Hz
50Hz



1

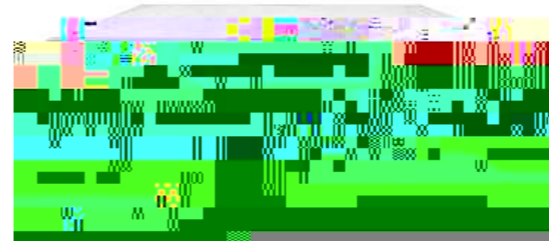


➤

- 200ms
- 8
- 8
- Q/GDW 10131-2017
- 100 /
- 14

	100~370V DC 85~264V AC
CPU	ARMA73× 4 + A53× 2
	1TB
	8× RJ45 10/100/1000Mbps
	IRIG-B
	HDMI VGA
USB	3× USB2.0
	2U 19"

2



➤

- 16 A/D 12.8kHz
- / IRIG-B
- /

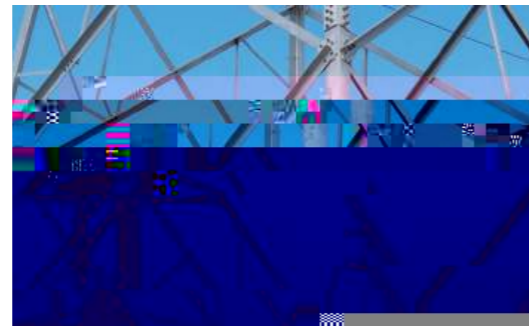
	220V DC 110V DC
CPU	ARM+DSP
	6× LC
	8 4 +2
	30 15
	/ IRIG-B
	4U 19"



HT-WQX2000

4G

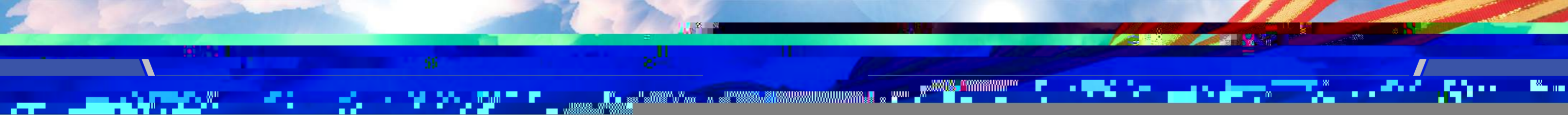
日期	时间	位置	信号强度	信号质量	网络制式	网络类型	网络模式	网络名称	网络鉴权	网络鉴权失败原因	鉴权失败次数	鉴权失败原因	鉴权失败次数
11/22/2018	15:18:37	20180410151837	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:20:37	20180410152037	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:21:37	20180410152137	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:22:37	20180410152237	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:23:37	20180410152337	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:24:37	20180410152437	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:25:37	20180410152537	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:26:37	20180410152637	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:27:37	20180410152737	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:28:37	20180410152837	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:29:37	20180410152937	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:30:37	20180410153037	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:31:37	20180410153137	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:32:37	20180410153237	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:33:37	20180410153337	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:34:37	20180410153437	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:35:37	20180410153537	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0
11/22/2018	15:36:37	20180410153637	-85	0.04	4G	TD-LTE	TD-LTE	TD-LTE	鉴权失败	鉴权失败	0	鉴权失败	0



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Qualification Certificate