

The screenshot displays the Huawei Enspire power system interface. At the top, the 'Deployment Wizard' is active, with a progress bar showing steps 1 through 7. The current step is 'Date&Time', which is part of the 'Basic parameters' section. The interface includes a sidebar with navigation options: Basic parameters, Huawei Devices, Power Meter, EMI, Huawei NMS, Third-party NMS, and Third-party Devices. The main content area is titled 'Date&Time' and contains the following configuration fields:

Country/Region	ZA(South Africa)
Local time zone	(UTC+02:00) Cape Tov
Date	2023-02-20 (YYYY-MM-DD)
Time	10:51:03 (HH:MM:SS)
Clock source	Management System
Synchronization server	intl.fusionsolar.huawei.com
Latest synchronization time	2023-02-16 16:16:34

At the bottom right of the configuration area, there are 'Next' and 'Skip' buttons. The footer of the interface shows the current time as 2023-02-20 10:51, grid dispatch status (P: 0.0%, Q: Disable), and a copyright notice for Huawei Technologies Co., Ltd. 2020.

The screenshot displays the Huawei Enspire power system interface. At the top, the 'Deployment Wizard' is active, with a progress bar showing steps 1 through 7. The current step is 'Wired Network Parameters', which is part of the 'Third-party NMS' configuration. The interface includes a sidebar with navigation options: 'Basic parameters', 'Huawei Devices', 'Power Meter', 'EMI', 'Huawei NMS', 'Third-party NMS', and 'Third-party Devices'. The main content area is titled 'Set the network parameters of the SmartLogger' and contains a table for 'Wired Network Parameters'. The table has two columns: 'Parameter' and 'Value'. The parameters and their values are: DHCP (Disable (Set it using the SUN2000 app.)), IP address (192, 168, 1, 224), Subnet mask (255, 255, 255, 0), Default gateway (192, 168, 1, 254), Primary DNS server (192, 168, 1, 1), and Secondary DNS server (8, 8, 8, 8). At the bottom right, there are 'Previous', 'Next', and 'Skip' buttons. The footer shows the time as 2023-02-20 10:53, grid dispatch status (P: 0.0%, Q: Disable), and a copyright notice for Huawei Technologies Co., Ltd. 2020.

Parameter	Value
DHCP	Disable (Set it using the SUN2000 app.)
IP address	192, 168, 1, 224
Subnet mask	255, 255, 255, 0
Default gateway	192, 168, 1, 254
Primary DNS server	192, 168, 1, 1
Secondary DNS server	8, 8, 8, 8

Enspire power system

English

Deployment Wizard | Over View | Monitoring | Query | Settings | Maintenance

1 | 2 | 3 | 4 | 5 | 6 | 7

Basic parameters | Huawei Devices | Power Meter | EMI | Huawei NMS | Third-party NMS | Third-party Devices

Device Mgmt. | Number of inverters: 1 | Number of PIDs: 0 | Number of STS: 0

<input type="checkbox"/> All	No.	Device	port	Comm Address	Logical addr.	SN	Device status
<input type="checkbox"/>	1	40KTL-M3(COM2-1)	COM2	1	1	6T2259051531	●

Search for Device

Previous | Next | Skip

Time: 2023-02-20 10:53 | Grid dispatch: P: 0.0% | Q: Disable | Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

Enspire

English
🔍
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Deployment Wizard

Over View
Monitoring
Query
Settings
Maintenance

Deployment Wizard

1

2

3

4

5

6

7

Basic parameters

Huawei Devices

Power Meter

EMI

Huawei NMS

Third-party NMS

Third-party Devices

Modbus RTU

Port

Protocol

Baud rate

Parity

Stop Bit

Address

COM1

Modbus

9600

None

1

1 [1, 247]

[Add Devices](#)

Power Meter Running Parameters

Device

Intelligent Power Meter Type

Voltage change ratio

Current change ratio

Meter usage

Meter(COM1-11)

CHNT-DTSU666

1.0 [0.1, 65535.0]

1.0 [0.1, 65535.0]

Export+import meter

[Submit](#)

Power Meter Running Information

Meter(COM1-11)

Signal Name

Value

Unit

	Device status	Disconnection	
	Meter usage	Export+import meter	
	Line voltage between phases A and B	NA	V
	Line voltage between phases B and C	NA	V

[Previous](#)
[Next](#)
[Skip](#)

Time: 2023-02-20 10:54

Grid dispatch: P: 0.0% Q: Disable

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The screenshot shows the Enspire power system interface. At the top, there is a navigation bar with tabs for Deployment Wizard, Over View, Monitoring, Query, Settings (selected), and Maintenance. The main content area is titled "Date&Time" and contains the following configuration fields:

Local time zone	(UTC+02:00) Cape Toy
Date	2023-02-20 (YYYY-MM-DD)
Time	10:57:09 (HH-MM:SS)
Clock source	Management System
Synchronization server	intl.fusionsolar.huawei.com
Latest synchronization time	2023-02-16 16:16:34

Below the configuration fields is a "Submit" button. On the left side, there is a sidebar menu with categories: User Param. (expanded), Date&Time (selected), Plant, Revenue, Save Period, Comm. Param., Power Adjustment, EMS Control, Remote Shutdown, DI, Alarm Output, Smart Tracking Algorithm, and Other Parameters. At the bottom left, a status bar shows "Time: 2023-02-20 10:57" and "Grid dispatch: P: 0.0% Q: Disable". At the bottom right, there is a copyright notice: "Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved."

The screenshot displays the 'Enspire' power system settings interface. The top navigation bar includes 'Deployment Wizard', 'Over View', 'Monitoring', 'Query', 'Settings', and 'Maintenance'. The 'Settings' tab is active. On the left, a sidebar lists various configuration categories: 'User Param.', 'Date&Time', 'Plant', 'Revenue', 'Save Period', 'Comm. Param.', 'Power Adjustment', 'EMS Control', 'Remote Shutdown', 'DI', 'Alarm Output', 'Smart Tracking Algorithm', and 'Other Parameters'. The 'Plant' category is selected. The main content area is titled 'Plant Info.' and contains the following fields: 'Plant name', 'Plant address', 'Plant owner', 'Plant owner address', and 'Country/Region'. Each field is filled with redacted information. A 'Submit' button is located below the 'Country/Region' field. The bottom status bar shows the time as 2023-02-20 10:57, grid dispatch status (P: 0.0%, Q: Disable), and a copyright notice for Huawei Technologies Co., Ltd. 2020.

The screenshot displays the Enspire power system management interface. At the top left, the logo "Enspire" is visible with the tagline "power system". The top navigation bar includes tabs for "Deployment Wizard", "Over View", "Monitoring", "Query", "Settings", and "Maintenance", with "Settings" currently selected. In the top right corner, there is a language dropdown set to "English" and a system status bar showing signal strength, a warning icon, and two zero counts.

The main content area is titled "Save Period" and contains a single configuration item: "Performance data save period" with a dropdown menu set to "1 min" and a "Submit" button below it.

A left-hand sidebar menu lists various configuration categories: "User Param.", "Date&Time", "Plant", "Revenue", "Save Period" (highlighted), "Comm. Param.", "Power Adjustment", "EMS Control", "Remote Shutdown", "DI", "Alarm Output", "Smart Tracking Algorithm", and "Other Parameters".

The bottom status bar provides system information: "Time: 2023-02-20 10:58", "Grid dispatch: P: 0.0% Q: Disable", and a copyright notice: "Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved."

The screenshot displays the 'Settings' page of the Enspire power system. The interface includes a top navigation bar with tabs for 'Deployment Wizard', 'Over View', 'Monitoring', 'Query', 'Settings', and 'Maintenance'. A left sidebar lists various configuration categories, with 'Wired Network' selected under 'Comm. Param.'. The main content area is divided into three sections: 'Wired Network Parameters', 'WAN & SFP Port Parameters', and 'LAN Port Parameters'. The 'Wired Network Parameters' section shows a dropdown for 'WAN/LAN port working mode' set to 'WAN+LAN'. The 'WAN & SFP Port Parameters' section contains a table for DHCP settings, including IP address, Subnet mask, Default gateway, Primary DNS server, and Secondary DNS server. The 'LAN Port Parameters' section shows IP address and Subnet mask fields. A 'Submit' button is located at the bottom of the LAN Port Parameters section. The footer of the page displays the time '2023-02-20 10:58', grid dispatch status 'P: 0.0%', and a copyright notice for Huawei Technologies Co., Ltd. 2020.

Wired Network Parameters

WAN/LAN port working mode: WAN+LAN

WAN & SFP Port Parameters

DHCP	Disable (Set it using the SUN2000 app.)
IP address	192, 168, 1, 224
Subnet mask	255, 255, 255, 0
Default gateway	192, 168, 1, 254
Primary DNS server	192, 168, 1, 1
Secondary DNS server	8, 8, 8, 8

LAN Port Parameters

IP address	192, 168, 8, 10
Subnet mask	255, 255, 255, 0

Submit

Time: 2023-02-20 10:58 Grid dispatch: P: 0.0% Q: Disable Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

The screenshot shows the Enspire power system settings interface. The top navigation bar includes 'Deployment Wizard', 'Over View', 'Monitoring', 'Query', 'Settings', and 'Maintenance'. The 'Settings' tab is active. On the left, a sidebar menu lists various settings categories: 'User Param.', 'Comm. Param.', 'Power Adjustment', and 'Other Parameters'. The 'User Param.' section is expanded to show 'RS485' settings. A table displays the configuration for three communication ports: COM1, COM2, and COM3. All ports are configured with the Modbus protocol, a baud rate of 9600, and no parity. The stop bit is set to 1. The start address for all ports is 1, and the end address is 247. Below the table, there are sections for 'Night Communication Settings' and 'Records'. The bottom status bar shows the time as 2023-02-20 10:58, grid dispatch at 0.0%, and a 'Disable' button. The footer contains the copyright notice for Huawei Technologies Co., Ltd. 2020.


RS485	Protocol	Baud rate	Parity	Stop Bit	Start address	End address
COM1	Modbus	9600	None	1	1 [1, 247]	247 [1, 247]
COM2	Modbus	9600	None	1	1 [1, 247]	247 [1, 247]
COM3	Modbus	9600	None	1	1 [1, 247]	247 [1, 247]

Time: 2023-02-20 10:58 Grid dispatch: P: 0.0% Q: Disable Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.





The screenshot displays the Huawei Enspire power system management interface. The top navigation bar includes tabs for Deployment Wizard, Over View, Monitoring, Query, Settings (selected), and Maintenance. The left sidebar lists various configuration categories: User Param., Comm. Param., Power Adjustment, EMS Control, Remote Shutdown, DI, Alarm Output, Smart Tracking Algorithm, and Other Parameters. The main content area is titled 'Management System' and contains two sections: 'Basic parameters' and 'Security Certificate'. The 'Basic parameters' section includes a table with the following data:

Parameter	Value
Server	intl.fusionsolar.huawei.com
Port	27250 [1,65535]
Address mode	Logical address
SSL encryption	Enable
Second challenge authentication	Enable
NMS connection status	Connected

Below the table is a 'Submit' button. The 'Security Certificate' section is currently empty. The bottom status bar shows the time as 2023-02-20 10:59, grid dispatch status as P: 0.0% Q: Disable, and a copyright notice for Huawei Technologies Co., Ltd. 2020.



Deployment Wizard
Over View
Monitoring
Query
Settings
Maintenance

English





User Param.

Date&Time

Plant

Revenue

Save Period

Comm. Param.

Wireless Network

Wired Network

RS485

Management System

Modbus TCP

IEC103

IEC104

FTP

Email

Power Adjustment

Active Power Control

Reactive Power Control

Export Limitation

Smart Reactive Power C...

DRM

EMS Control

Remote Shutdown

DI

Active power control

Active power control mode: Export Limitation(KW)

Status: Normal

Common Parameters

Start control: Yes

Electric meter power direction: Positive

Limitation mode: Total power

Maximum grid feed-in power: 0.000 [-1000.000, 5000.000] kW

Power lowering adjustment period: 0.5 [0.2, 300.0] s

Maximum protection time: 3.0 [2.0, 300.0] s

Power raising threshold: 0.880 [0.001, 50.000] kW

Extended Parameters

Fail-safe power threshold: 100.0 [0.0, 100.0] %

Switch-off with 0% power limit: Disable

Switch-off control port: No

Switch-on control port: No

Switch-off state feedback port: No

Switch-on state feedback port: No

Circuit breaker operation

Switch off
Switch on

Submit

Time: 2023-02-20 10:59 Grid dispatch: P: 0.0% Q: Disable

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The screenshot displays the Enspire power system management interface. At the top, the 'Enspire' logo is on the left, and navigation tabs for 'Deployment Wizard', 'Over View', 'Monitoring', 'Query', 'Settings', and 'Maintenance' are in the center. The 'Settings' tab is active. On the right side of the top bar, there is a language dropdown set to 'English' and system status icons. A left-hand navigation menu is expanded to show 'Reactive Power Control' under the 'Power Adjustment' section. The main content area is titled 'Reactive Power Control' and features a dropdown menu for 'Reactive power control mode' currently set to 'No output'. A 'Submit' button is located at the bottom right of the main area. The footer contains system information: 'Time: 2023-02-20 11:00', 'Grid dispatch P: 0.0% Q: Disable', and a copyright notice for Huawei Technologies Co., Ltd. 2020.

Enspire

English
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Deployment Wizard
Over View
Monitoring
Query
Settings
Maintenance

User Param.

- Date&Time
- Plant
- Revenue
- Save Period

Comm. Param.

- Wireless Network
- Wired Network
- RS485
- Management System
- Modbus TCP
- IEC103
- IEC104
- FTP
- Email

Power Adjustment

- Active Power Control
- Reactive Power Control
- Export Limitation
- Smart Reactive Power C...
- DRM

EMS Control

- Remote Shutdown
- DI

1

2

3

Power Meter
Inverter Parameters
Export Limitation Parameters

Export Limitation
Help

Active power control mode	Export Limitation(kW)
Status	Normal

Common Parameters

Start control	Yes
Electric meter power direction	Positive
Limitation mode	Total power
Maximum grid feed-in power	[-1000.000, 5000.000]kW
Power lowering adjustment period	[0.2, 300.0]s
Maximum protection time	[2.0, 300.0]s
Power raising threshold	[0.001, 50.000]kW

Extended Parameters


Fail-safe power threshold	100.0
Switch-off with 0% power limit	Disable
Switch-off control port	No
Switch-on control port	No
Switch-off state feedback port	No
Switch-on state feedback port	No

Submit

Circuit breaker operation

Switch off
Switch on

Time: 2023-02-20 11:00
Grid dispatch: P: 0.0% Q: Disable
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Deployment Wizard
Over View
Monitoring
Query
Settings
Maintenance

English


Running Info.
Active Alarm
Performance Data
Energy yield
Running Param.
About


Grid Parameters
Protection Parameters
Feature Parameters
Power Adjustment
Power baseline



<input type="checkbox"/>	No.	Signal Name	Value	Unit
<input type="checkbox"/>	1	Remote power schedule	Enable	
<input type="checkbox"/>	2	Schedule instruction valid duration	0	[0, 86400] s
<input type="checkbox"/>	3	Maximum active power	44.000	[0.100, 44.000] kW
<input type="checkbox"/>	4	Shutdown at 0% power limit	Disable	
<input type="checkbox"/>	5	Active power change gradient	125.000	[0.100, 5000.000] %/s
<input type="checkbox"/>	6	Fixed active power derated	44000	[0, 44000] W
<input type="checkbox"/>	7	Active power percentage derating	100.0	[0.0, 100.0] %
<input type="checkbox"/>	8	Reactive power change gradient	125.000	[0.100, 5000.000] %/s
<input type="checkbox"/>	9	PF(U) voltage detection filter time	1.5	[0.1, 120.0] s
<input type="checkbox"/>	10	Power factor	1.000	(-1.000, -0.800]U[0.800, 1.000]
<input type="checkbox"/>	11	Reactive power compensation(Q/S)	0.000	[-1.000, 1.000]
<input type="checkbox"/>	12	Overfrequency derating	Enable	
<input type="checkbox"/>	13	Trigger frequency of over frequency derating	50.50	[40.00, 60.00] Hz
<input type="checkbox"/>	14	Quit frequency of over frequency derating	50.20	[40.00, 60.00] Hz
<input type="checkbox"/>	15	Cutoff frequency of overfrequency derating	52.70	[40.00, 60.00] Hz
<input type="checkbox"/>	16	Cutoff power of overfrequency derating	0	[0, 100] %
<input type="checkbox"/>	17	Power recovery gradient of overfrequency derating	10	[1, 6000] %/min
<input type="checkbox"/>	18	Recovery delay of frequency-based active power derating	5	[0, 7200] s
<input type="checkbox"/>	19	Communication disconnection fall-safe	Enable	
<input type="checkbox"/>	20	Communication disconnection detection time	60	[1, 7200] s
<input type="checkbox"/>	21	Failsafe Active Power Limits	100.0	[0.0, 100.0] %

Submit
Batch configurations

Time: 2023-02-20 11:01
Grid dispatch: P: 0.0% Q: Disable
1 / 1 Page
Go to

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English



Deployment Wizard
Over View
Monitoring
Query
Settings
Maintenance

- SmartLogger3000
- Logger(Local)
- SUN2000
 - 40KTL-M3(COM2-1)
- Power Meter
 - Meter(COM1-11)

Running Info.
Active Alarm
Performance Data
Energy yield
Running Param.
Characteristic Curve
About

Grid Parameters
Protection Parameters
Feature Parameters
Power Adjustment
Power baseline

<input type="checkbox"/> All	No.	Signal Name	Value	Unit
<input type="checkbox"/>	1	Insulation resistance protection	0.033 [0.020, 1.500]	MΩ
<input type="checkbox"/>	2	Unbalance voltage protection	50.0 [0.0, 50.0]	%
<input type="checkbox"/>	3	Phase angle offset protection	Disable	
<input type="checkbox"/>	4	10 minute OV protection	253.0 [230.0, 345.0]	V
<input type="checkbox"/>	5	10 minute OV protection time	100 [50, 7200000]	ms
<input type="checkbox"/>	6	Level-1 OV protection	287.5 [230.0, 345.0]	V
<input type="checkbox"/>	7	Level-1 OV protection time	100 [50, 7200000]	ms
<input type="checkbox"/>	8	Level-1 UV protection	184.0 [11.5, 230.0]	V
<input type="checkbox"/>	9	Level-1 UV protection time	3000 [50, 7200000]	ms
<input type="checkbox"/>	10	Level-2 UV protection	103.5 [11.5, 230.0]	V
<input type="checkbox"/>	11	Level-2 UV protection time	300 [50, 7200000]	ms
<input type="checkbox"/>	12	Level-1 OF protection	53.00 [50.00, 60.00]	Hz
<input type="checkbox"/>	13	Level-1 OF protection time	100 [50, 7200000]	ms
<input type="checkbox"/>	14	Level-1 UF protection	47.50 [40.00, 50.00]	Hz
<input type="checkbox"/>	15	Level-1 UF protection time	100 [50, 7200000]	ms

Submit
Batch configurations

1 / 1 Page adm Go to

Time 2023-02-20 13:40
Grid dispatch P: 100.0% Q: Disable

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Created By Hanno Bisschoff

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Ensure that your settings are adjusted according to your site and equipment (inverter rating, grid code etc.)