

**FusionCharge AC**

# **OCPP1.6 Protocol Messages and Commissioning Guide**

**Issue**            01  
**Date**             2024-03-14



**Copyright © Huawei Digital Power Technologies Co., Ltd. 2024. All rights reserved.**

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Digital Power Technologies Co., Ltd.

## **Trademarks and Permissions**



HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

## **Notice**

The purchased products, services and features are stipulated by the contract made between Huawei Digital Power Technologies Co., Ltd. and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied. The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

## **Huawei Digital Power Technologies Co., Ltd.**

Address: Huawei Digital Power Antuoshan Headquarters  
Futian, Shenzhen 518043  
People's Republic of China

Website: <https://digitalpower.huawei.com>

---

# Contents

---

<b>1 FusionCharge AC_OCPP1.6J Protocol Messages.....</b>	<b>1</b>
1.1 Messages.....	1
1.2 Configuration Keys.....	3
<b>2 OCPP Commissioning Guide.....</b>	<b>7</b>

# 1 FusionCharge AC\_OCPP1.6J Protocol Messages

## 1.1 Messages

Profile Name	Message	Support ed (Y/N)	Comment
CORE	Authorize	Y	
	BootNotification	Y	
	ChangeAvailabili-ty	N	
	ChangeConfigura-tion	Y	
	ClearCache	Y	
	DataTransfer	N	
	GetConfiguration	Y	
	Heartbeat	Y	
	MeterValues	Y	Huawei supports following measurand types for AC: Current.Import Current.Offered Energy.Active.Import.Register Power.Active.Import Temperature Voltage

Profile Name	Message	Support ed (Y/N)	Comment
	RemoteStartTransaction	Y	
	RemoteStopTransaction	Y	
	Reset	Y	
	StartTransaction	Y	
	StatusNotification	Y	
	StopTransaction	Y	
	UnlockConnector	Y	
FIRMWARE MANAGEMENT	GetDiagnostics	N	
	DiagnosticsStatusNotification	N	
	FirmwareStatusNotification	N	
	UpdateFirmware	N	
LOCAL AUTH LIST MANAGEMENT	GetLocalListVersion	Y	
	SendLocalList	Y	
RESERVATION	CancelReservation	N	
	ReserveNow	N	
SMART CHARGING	ClearChargingProfile	Y	
	GetCompositeSchedule	Y	
	SetChargingProfile	Y	
REMOTE TRIGGER	TriggerMessage	Y	Chargers support the following message triggers: BootNotification Heartbeat MeterValues StatusNotification

Profile Name	Message	Support ed (Y/N)	Comment
SECURE CONNECTION SETUP	CertificateSigned	Y	
	DeleteCertificate	Y	
	GetInstalledCertificateIds	Y	
	InstallCertificate	Y	
	SignCertificate	Y	
	ExtendedTriggerMessage	Y	Chargers support the following message triggers: BootNotification Heartbeat MeterValues SignChargePointCertificate StatusNotification
SECURITY EVENTS/ LOGGING	SecurityEventNotification	N	
	LogStatusNotification	N	
	GetLog	N	
SECURE FIRMWARE UPDATE	SignedFirmwareStatusNotification	N	
	SignedUpdateFirmware	N	

## 1.2 Configuration Keys

Key Name	Support ed (Y/N)	Required / Optional	Default Value	Value Range
AllowOfflineTxForUnknownId	N	Optional	/	
AuthorizationCacheEnabled	Y	Optional	FALSE	
LocalAuthListEnabled	Y	Required	FALSE	

Key Name	Supported (Y/N)	Required / Optional	Default Value	Value Range
LocalAuthListMaxLength	Y	Required	2000	
SendLocalListMaxLength	Y	Required	25	
LocalAuthorizeOffline	Y	Required	FALSE	
StopTransactionOnInvalidId	Y	Required	TRUE	
MaxEnergyOnInvalidId	N	Optional	/	
LocalPreAuthorize	Y	Required	FALSE	
AuthorizeRemoteTxRequests	Y	Required	FALSE	
ConnectorPhaseRotation	Y	Required	0.RST	
ConnectorPhaseRotationMaxLength	Y	Optional	2	
MeterValuesSampledData	Y	Required	Energy.Active.Import.Register	
MeterValuesSampledDataMaxLength	Y	Optional	22	
MeterValueSampleInterval	Y	Required	60	[10, 86400]
StopTxnSampledData	Y	Required	Energy.Active.Import.Register	
StopTxnSampledDataMaxLength	Y	Optional	22	
ClockAlignedDataInterval	Y	Required	0	0, [30, 86400]
MeterValuesAlignedData	Y	Required	Energy.Active.Import.Register	
MeterValuesAlignedDataMaxLength	Y	Optional	22	

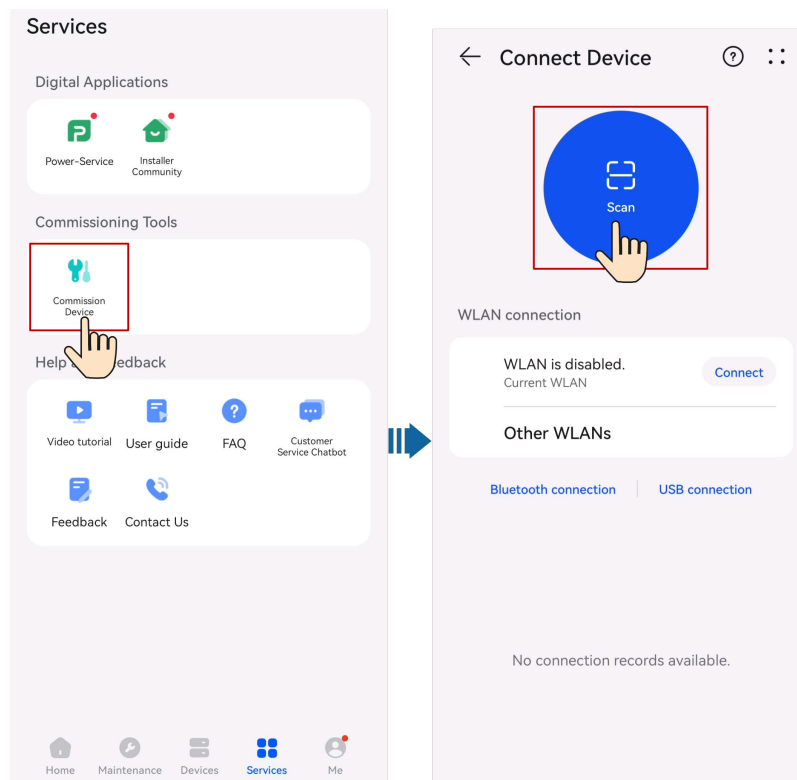
Key Name	Supported (Y/N)	Required / Optional	Default Value	Value Range
StopTxnAlignedData	Y	Required	Energy.Active.Import.Register	
StopTxnAlignedData-MaxLength	Y	Optional	22	
StopTransactionMax-MeterValues	Y	Optional	2	
ChargeProfileMax-StackLevel	Y	Required	30	
ChargingScheduleAllowedChargingRateUnit	Y	Required	power	
ChargingScheduleMax-Periods	Y	Required	48	
ConnectorSwitch3to1PhaseSupported	Y	Optional	TRUE	
MaxChargingProfile-Installed	Y	Required	30	
BlinkRepeat	N	Optional	/	
LightIntensity	N	Optional	/	
ConnectionTimeOut	Y	Required	60	[10, 300]
MinimumStatusDuration	Y	Optional	5	[1, 60]
StopTransactionOnEV-SideDisconnect	Y	Required	TRUE	
GetConfigurationMax-Keys	Y	Optional	20	
HeartbeatInterval	Y	Required	30	
SupportedFeatureProfiles	Y	Required	Core; Local Auth List Management; Smart Charging; Remote Trigger	
SupportedFeatureProfilesMaxLength	N	Required	/	



Key Name	Supported (Y/N)	Required / Optional	Default Value	Value Range
TransactionMessageAttempts	Y	Required	3	[1, 10]
TransactionMessageRetryInterval	Y	Required	10	[10, 30]
UnlockConnectorOnEVSideDisconnect	Y	Required	TRUE	
WebSocketPingInterval	N	Optional	60	[10, 65535]
MessageTimeout	N	Optional	300	[30, 600]
ReserveConnectorZeroSupported	N	Optional	/	
NumberOfConnectors	Y	Required	1	
ResetRetries	Y	Required	0	
SupportedFileTransferProtocols	Y	Optional	FTP; FTPS	
AdditionalRootCertificateCheck	Y	Optional	FALSE	
AuthorizationKey	Y	Optional	/	
CertificateSignedMaxChainSize	Y	Optional	2048	
CertificateStoreMaxLength	Y	Optional	5	
CpoName	Y	Optional	The default value is empty.	
SecurityProfile	Y	Optional	3	

# 2 OCPP Commissioning Guide

1. Log in to the FusionSolar app and choose **Services** > **Commission Device**.
2. Connect to the WLAN of the charger as prompted.



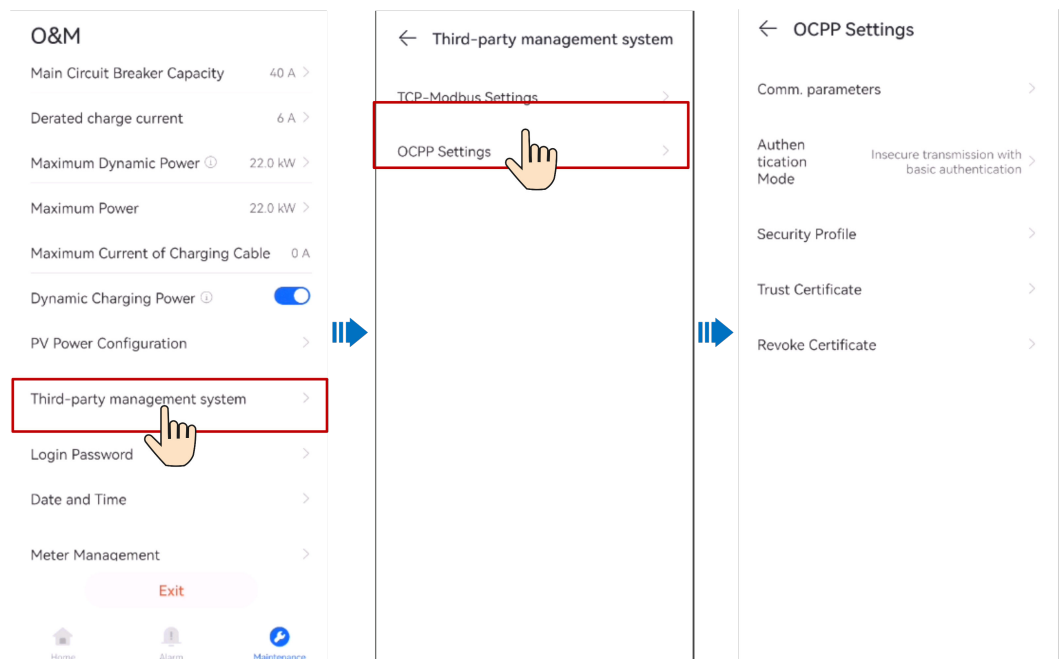
 **NOTE**

- The last six digits of the product WLAN name are the same as the last six digits of the product SN.
  - Use the initial password to log in for the first time and change the password as prompted.
  - To ensure account security, protect the password by changing it periodically, and keep it secure. Your password might be stolen or cracked if it is left unchanged for extended periods. If a password is lost, devices cannot be accessed. In these cases, the Company shall not be liable for any loss.
  - If the login screen is not displayed after you scan the QR code, check whether the device is correctly connected to the WLAN network. If not, manually select and connect to the WLAN network.
  - If the **This WLAN network has no Internet access. Connect anyway?** message is displayed when you connect to the device WLAN, tap **CONNECT**. Otherwise, you cannot log in to the system. The actual UI and messages may vary with mobile phones.
3. Choose **Installer** as the user and enter the login password.

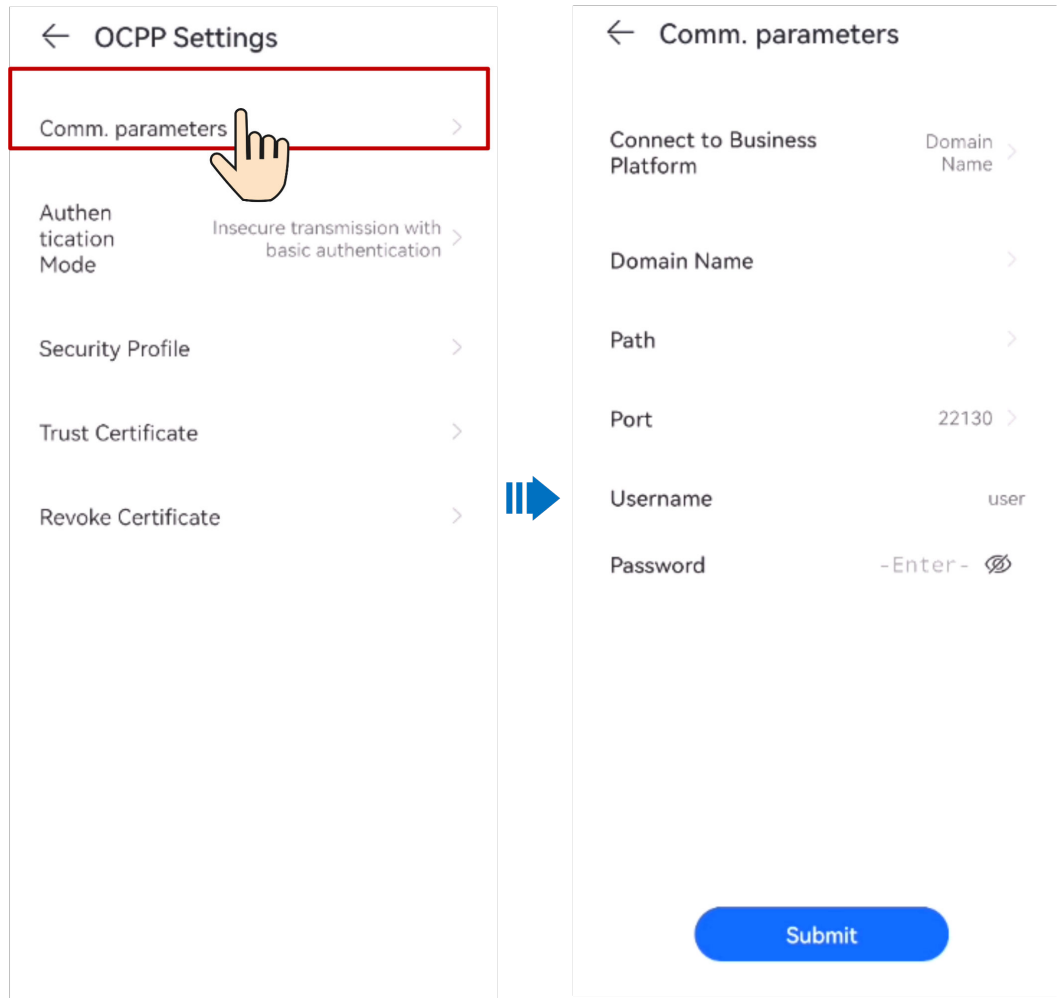
 **NOTE**

For the first login, the initial password is **Changeme**. If the system prompts you to set a password, set the login password as prompted.

4. Choose **O&M > Third-party management system > OCPP Settings** to set OCPP-related parameters.



5. Set communications parameters. (Related information comes from the third-party business platform.)



6. Set the authentication mode.

