



hypercharger OCPP Configuration Keys

**hypercharger HYC_150 / HYC_300
(75kW – 300kW)**

ultra-fast charging system for electric vehicles

for SW-Versions 1.6



hypercharger OCPP Configuration Keys

Version

Version 1-5 of hypercharger OCPP Configuration Keys

Original English version
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1. Scope

This document defines the parameters configurable via OCPP configuration keys for hypercharger HYC_150 and HYC_300.

1.1. Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT",

"RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC2119 [1]

1.2. References

Reference	Description
[1]	Key words for use in RFCs to Indicate Requirement Levels. S. Bradner. March 1997. http://www.ietf.org/rfc/rfc2119.txt
[2]	Open Charge Point Protocol 1.6 edition 2 FINAL, 2017-09-28 https://www.openchargealliance.org/downloads/

2. Standard Configuration Key Names & Values

The following configuration keys are defined in the Open Charge Point Protocol 1.6 [2].

2.1. Core Profile

2.1.1. AllowOfflineTxForUnknownId

Required / supported	Optional / supported
Accessibility	RW
Type	boolean
Description	If this key exists, the Charge Point supports Unknown Offline Authorization. If this key reports a value of true, Unknown Offline Authorization is enabled.
RebootRequired	false

2.1.2. AuthorizationCacheEnabled

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	If this key exists, the Charge Point supports an Authorization Cache. If this key reports a value of true, the Authorization Cache is enabled.
RebootRequired	false

2.1.3. AuthorizeRemoteTxRequests

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	Whether a remote request to start a transaction in the form of a RemoteStartTransaction.req message should be authorized beforehand like a local action to start a transaction.
RebootRequired	false

2.1.4. BlinkRepeat

Required / supported	optional / not supported
Accessibility	RW
Type	integer
Unit	times
Description	Number of times to blink Charge Point lighting when signalling
RebootRequired	false

2.1.5. ClockAlignedDataInterval

Required / supported	required / supported
Accessibility	RW
Type	integer
Unit	seconds
Description	Size (in seconds) of the clock-aligned data interval. This is the size (in seconds) of the set of evenly spaced aggregation intervals per day, starting at 00:00:00 (midnight). For example, a value of 900 (15 minutes) indicates that every day should be broken into 96 15-minute intervals. When clock aligned data is being transmitted, the interval in question is

identified by the start time and (optional) duration interval value, represented according to the ISO8601 standard. All "per-period" data (e.g. energy readings) should be accumulated (for "flow" type measurands such as energy), or averaged (for other values) across the entire interval (or partial interval, at the beginning or end of a Transaction), and transmitted (if so enabled) at the end of each interval, bearing the interval start time timestamp. A value of "0" (numeric zero), by convention, is to be interpreted to mean that no clock-aligned data should be transmitted.

RebootRequired false

2.1.6. ConnectionTimeOut

Required / supported required / supported

Accessibility RW

Type integer

Unit seconds

Description Interval from beginning of status: 'Preparing' until incipient Transaction is automatically cancelled, due to failure of EV driver to (correctly) insert the charging cable connector(s) into the appropriate socket(s). The Charge Point will go back to the original state, probably: 'Available'.

RebootRequired false

2.1.7. ConnectorPhaseRotation

Required / supported required / supported

Accessibility RW

Type CSL

Description The phase rotation per connector in respect to the connector's electrical meter (or if absent, the grid connection). Possible values per connector are:
 Not Applicable (for Single phase or DC Charge Points)
 Unknown (not (yet) known)
 RST (Standard Reference Phasing)
 RTS (Reversed Reference Phasing)
 SRT (Reversed 240 degree rotation)
 STR (Standard 120 degree rotation)
 TRS (Standard 240 degree rotation)
 TSR (Reversed 120 degree rotation)
 R can be identified as phase 1 (L1), S as phase 2 (L2), T as phase 3 (L3).
 If known, the Charge Point MAY also report the phase rotation between the grid connection and the main energy meter by using index number Zero (0).
 Values are reported in CSL, formatted: 0.RST, 1.RST, 2.RTS

RebootRequired false

2.1.8. ConnectorPhaseRotationMaxLength

Required / supported optional / supported

Accessibility R

Type integer

Description Maximum number of items in a ConnectorPhaseRotation Configuration Key.

RebootRequired false

2.1.9. GetConfigurationMaxKeys

Required / supported	required / supported
Accessibility	R
Type	integer
Description	Maximum number of requested configuration keys in a GetConfiguration.req PDU.
RebootRequired	false

2.1.10. HeartbeatInterval

Required / supported	required / supported
Accessibility	RW
Type	integer
Unit	seconds
Description	Interval of inactivity (no OCPP exchanges) with central system after which the Charge Point should send a Heartbeat.req PDU
RebootRequired	false

2.1.11. LightIntensity

Required / supported	optional / not supported
Accessibility	RW
Type	integer
Unit	%
Description	Percentage of maximum intensity at which to illuminate Charge Point lighting
RebootRequired	false

2.1.12. LocalAuthorizeOffline

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	whether the Charge Point, when offline , will start a transaction for locally-authorized identifiers.
RebootRequired	false

2.1.13. LocalPreAuthorize

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	whether the Charge Point, when online , will start a transaction for locally-authorized identifiers without waiting for or requesting an Authorize.conf from the Central System
RebootRequired	false

2.1.14. MaxEnergyOnInvalidId

Required / supported	optional /not supported
Accessibility	RW
Type	integer
Unit	Wh
Description	Maximum energy in Wh delivered when an identifier is invalidated by the Central System after start of a transaction.

RebootRequired false

2.1.15. MeterValuesAlignedData

Required / supported required / supported

Accessibility RW

Type CSL

Description Clock-aligned measurand(s) to be included in a MeterValues.req PDU, every ClockAlignedDataInterval seconds

RebootRequired false

2.1.16. MeterValuesAlignedDataMaxLength

Required / supported optional / supported

Accessibility R

Type integer

Description Maximum number of items in a MeterValuesAlignedData Configuration Key.

RebootRequired false

2.1.17. MeterValuesSampledData

Required / supported required / supported

Accessibility RW

Type CSL

Description Sampled measurands to be included in a MeterValues.req PDU, every MeterValueSampleInterval seconds. Where applicable, the Measurand is combined with the optional phase; for instance: Voltage.L1 Default: "Energy.Active.Import.Register"

RebootRequired false

2.1.18. MeterValuesSampledDataMaxLength

Required / supported optional / supported

Accessibility R

Type integer

Description Maximum number of items in a MeterValuesSampledData Configuration Key.

RebootRequired false

2.1.19. MeterValueSampleInterval

Required / supported required / supported

Accessibility RW

Type integer

Unit seconds

Description Interval between sampling of metering (or other) data, intended to be transmitted by "MeterValues" PDUs. For charging session data (ConnectorId>0), samples are acquired and transmitted periodically at this interval from the start of the charging transaction.
A value of "0" (numeric zero), by convention, is to be interpreted to mean that no sampled data should be transmitted.

RebootRequired false

2.1.20. MinimumStatusDuration

Required / supported optional / not supported

Accessibility	RW
Type	integer
Unit	seconds
Description	The minimum duration that a Charge Point or Connector status is stable before a StatusNotification.req PDU is sent to the Central System.
RebootRequired	false

2.1.21. NumberOfConnectors

Required / supported	required / supported
Accessibility	R
Type	integer
Description	The number of physical charging connectors of this Charge Point.
RebootRequired	false

2.1.22. ResetRetries

Required / supported	required / supported
Accessibility	RW
Type	integer
Unit	times
Description	Number of times to retry an unsuccessful reset of the Charge Point.
RebootRequired	false

2.1.23. StopTransactionOnEVSideDisconnect

Required / supported	required / not supported
Accessibility	RW
Type	boolean
Description	When set to true, the Charge Point SHALL administratively stop the transaction when the cable is unplugged from the EV.
RebootRequired	false

2.1.24. StopTransactionOnInvalidId

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	whether the Charge Point will stop an ongoing transaction when it receives a non- Accepted authorization status in a StartTransaction.conf for this transaction
RebootRequired	false

2.1.25. StopTxnAlignedData

Required / supported	required / supported
Accessibility	RW
Type	CSL
Description	Clock-aligned periodic measurand(s) to be included in the TransactionData element of StopTransaction.req MeterValues.req PDU for every ClockAlignedDataInterval of the Transaction
RebootRequired	false

2.1.26. StopTxnAlignedDataMaxLength

Required / supported	optional / supported
-----------------------------	----------------------

Accessibility	R
Type	integer
Description	Maximum number of items in a StopTxnAlignedData Configuration Key.
RebootRequired	false

2.1.27. StopTxnSampledData

Required / supported	required / supported
Accessibility	RW
Type	CSL
Description	Sampled measurands to be included in the TransactionData element of StopTransaction.req PDU, every MeterValueSampleInterval seconds from the start of the charging session
RebootRequired	false

2.1.28. StopTxnSampledDataMaxLength

Required / supported	optional / supported
Accessibility	R
Type	integer
Description	Maximum number of items in a StopTxnSampledData Configuration Key.
RebootRequired	false

2.1.29. SupportedFeatureProfiles

Required / supported	required / supported
Accessibility	R
Type	CSL
Description	A list of supported Feature Profiles. Possible profile identifiers: Core, FirmwareManagement, LocalAuthListManagement, Reservation, SmartCharging and RemoteTrigger.
RebootRequired	false

2.1.30. SupportedFeatureProfilesMaxLength

Required / supported	optional / supported
Accessibility	R
Type	integer
Description	Maximum number of items in a SupportedFeatureProfiles Configuration Key.
RebootRequired	false

2.1.31. TransactionMessageAttempts

Required / supported	required / supported
Accessibility	RW
Type	integer
Unit	times
Description	How often the Charge Point should try to submit a transaction-related message when the Central System fails to process it.
RebootRequired	false

2.1.32. TransactionMessageRetryInterval

Required / supported	required / supported
Accessibility	RW
Type	integer

Unit	seconds
Description	How long the Charge Point should wait before resubmitting a transaction-related message that the Central System failed to process.
RebootRequired	false

2.1.33. UnlockConnectorOnEVSideDisconnect

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	When set to true, the Charge Point SHALL unlock the cable on Charge Point side when the cable is unplugged at the EV.
RebootRequired	false

2.1.34. WebSocketPingInterval

Required / supported	optional / supported
Accessibility	RW
Type	integer
Unit	seconds
Description	Only relevant for websocket implementations. 0 disables client side websocket Ping/Pong. In this case there is either no ping/pong or the server initiates the ping and client responds with Pong. Positive values are interpreted as number of seconds between pings. Negative values are not allowed. ChangeConfiguration is expected to return a REJECTED result.
RebootRequired	false

2.2. Local Auth List Management Profile

2.2.1. LocalAuthListEnabled

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	whether the Local Authorization List is enabled
RebootRequired	false

2.2.2. LocalAuthListMaxLength

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	Maximum number of identifications that can be stored in the Local Authorization List
RebootRequired	false

2.2.3. SendLocalListMaxLength

Required / supported	required / supported
Accessibility	RW
Type	boolean
Description	Maximum number of identifications that can be send in a single SendLocalList.req
RebootRequired	false

2.3. Reservation Profile

2.3.1. ReserveConnectorZeroSupported

Required / supported	optional / not supported
Accessibility	R
Type	boolean
Description	If this configuration key is present and set to true: Charge Point support reservations on connector 0.
RebootRequired	false

2.4. Smart Charging Profile

2.4.1. ChargeProfileMaxStackLevel

Required / supported	required /not supported
Accessibility	R
Type	integer
Description	Max StackLevel of a ChargingProfile. The number defined also indicates the max allowed number of installed charging schedules per Charging Profile Purposes.
RebootRequired	false

2.4.2. ChargingScheduleAllowedChargingRateUnit

Required / supported	required / supported
Accessibility	R
Type	CSL
Description	A list of supported quantities for use in a ChargingSchedule. Allowed values: 'Current' and 'Power'
RebootRequired	false

2.4.3. ChargingScheduleMaxPeriods

Required / supported	required / not supported
Accessibility	R
Type	integer
Description	Maximum number of periods that may be defined per ChargingSchedule.
RebootRequired	false

2.4.4. ConnectorSwitch3to1PhaseSupported

Required / supported	optional / not supported
Accessibility	R
Type	boolean
Description	If defined and true, this Charge Point support switching from 3 to 1 phase during a Transaction.
RebootRequired	false

2.4.5. MaxChargingProfilesInstalled

Required / supported	required / not supported
Accessibility	R
Type	integer
Description	Maximum number of Charging profiles installed at a time
RebootRequired	false

2.5. Security Profiles

2.5.1. AuthorizationKey

Required / supported	optional / not supported
Accessibility	W
Type	String
Description	The basic authentication password is used for HTTP Basic Authentication, minimal length: 16 bytes. It is strongly advised to be randomly generated binary to get maximal entropy. Hexadecimal represented (20 bytes maximum, represented as a string of up to 40 hexadecimal digits). This configuration key is write-only, so that it cannot be accidentally stored in plaintext by the Central System when it reads out all configuration keys. If security profile: '3 - TLS with client side certificates' is used, this Configuration Key does not have to be present.
RebootRequired	false

2.5.2. CertificateSignedMaxChain

Required / supported	optional / not supported
Accessibility	R
Type	integer
Description	Maximum length of a certificate chain that can be installed via a CertificateSigned.req PDU.
RebootRequired	false

2.5.3. CertificateSignedMaxChain

Required / supported	optional / not supported
Accessibility	R
Type	integer
Description	Maximum number of Root/CA certificates that can be installed in the Charge Point.
RebootRequired	false

2.5.4. CpoName

Required / supported	optional / not supported
Accessibility	RW
Type	String
Description	This configuration key contains CPO name (or an organization trusted by the CPO) as used in the Charge Point Certificate. This is the CPO name that is to be used in a CSR send via: SignCertificate.req
RebootRequired	false

2.5.5. SecurityProfile

Required / supported	optional / not supported
Accessibility	RW
Type	integer
Description	This configuration key is used to set the security profile used by the Charge Point. The value of this configuration key can only be increased to a higher level, not decreased to a lower level, if the Charge Point receives a lower value than currently configured, the Charge Point SHALL Rejected the

ChangeConfiguration.req

Before accepting the new value, the Charge Point SHALL check if all the prerequisites for the new Security Profile are met, if not, the Charge Point SHALL Rejected the ChangeConfiguration.req.

After the security profile was successfully changed, the Charge Point disconnects from the Central System and SHALL reconnect using the new configured Security Profile.

Default, when no security profile is yet configured: 0.

RebootRequired

false

3. hypercharger specific keys

3.1. WebSocketUrl

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	Websocket URL used for Backend Communication over OCPP 1.6 JSON
RebootRequired	true

3.2. HycKioskModeEnabled

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Enables everybody who approaches the CP to charge without authenticating themselves using a RFID Card. Similar to OCPP Freemode. If set true, the content of Authorization.res will be ignored and authorization will always succeed.
RebootRequired	false

3.3. HycKioskModeTagIds

Required / supported	optional / supported
Accessibility	RW
Type	CSL
Description	Virtual ID's to be used in Authorization.req to keep track of free charging sessions. If less than 3 IDs (= max. number of parallel charging session) get provided, the charging station will use generic IDs: HycKioskTag1..n
RebootRequired	false

3.4. SimPin

Required / supported	Optional / supported
Accessibility	RW
Type	numeric
Description	PIN of SIM card inserted in the customer SIM card slot
RebootRequired	true

3.5. APN

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	APN to be used by customer SIM
RebootRequired	true

3.6. ApnUsername

Required / supported	Optional / supported
Accessibility	RW
Type	string

Description	APN username used to authenticate customer SIM card to mobile network operator
RebootRequired	true

3.7. ApnPassword

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	APN Password used to authenticate customer SIM card to mobile network operator
RebootRequired	true

3.8. DnsServer

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	Set static IP address to an external DNS server If set, the DNS Server provided by the mobile network operator gets ignored.
RebootRequired	false

3.9. SecondaryDnsServer

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	Set static IP address to an external DNS server If set, the DNS Server provided by the mobile network operator gets ignored
RebootRequired	false

3.10. GUIchargingCurrentVisible

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Show charging current on charging screen
RebootRequired	true

3.11. GUIchargingVoltageVisible

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Show charging voltage on charging screen
RebootRequired	true

3.12. GUIchargingPowerVisible

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Show charging power on charging screen
RebootRequired	true

3.13. GUItimeRemainingVisible

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Show time to bulk / full SoC on charging screen
RebootRequired	true

3.14. GUIchargeParameterOverlayVisible

Required / supported	optional / supported
Accessibility	RW
Type	Boolean
Description	Show charging parameters overlay on standby screen
RebootRequired	true

3.15. GUIprimaryLanguage

Required / supported	required / supported
Accessibility	RW
Type	string
Description	Set primary GUI language
RebootRequired	true

3.16. GUIsecondaryLanguage

Required / supported	required / supported
Accessibility	RW
Type	string
Description	Set secondary GUI language
RebootRequired	true

3.17. GUItertiaryLanguage

Required / supported	required / supported
Accessibility	RW
Type	string
Description	Set tertiary GUI language
RebootRequired	true

3.18. GUIslideTime

Required / supported	optional / supported
Accessibility	RW
Type	integer
Unit	seconds
Description	Time in seconds till the next image of the slide show is shown. If set to 0 slide show is disabled.
RebootRequired	true

3.19. GUIChargingSessionScreenTimeout

Required / supported	optional / supported
Accessibility	RW
Type	integer
Unit	seconds

Description	Timeout in seconds till the screen locks itself
RebootRequired	false

3.20. MaxGridPower

Required / supported	required / supported
Accessibility	RW
Type	integer
Unit	W
Description	Maximum power to be drawn from the AC grid
RebootRequired	true

3.21. ChargePointMaxProfileEnabled

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	If true loadmanagement over OCPP using SmartCharging is enabled
RebootRequired	true

3.22. chargePointIdentity

Required / supported	Required / supported
Accessibility	RW
Type	string
Description	Charge Point identity used by CP to identify itself against the OCPP Backend
RebootRequired	true

3.23. Connectors

Required / supported	optional / supported
Accessibility	R
Type	string -JSON array
Description	JSON array which contains information to the installed connectors: e.g.

```
{
  "connectors": [
    {
      "max_current": 125,
      "pos": 1,
      "type": "CHAdeMO"
    },
    {
      "max_current": 500,
      "pos": 2,
      "type": "CCS"
    },
    {
      "max_current": 32,
      "pos": 3,
      "type": "CCS_AC"
    }
  ]
}
```

Attention: To avoid issues parsing the json string inside the key value, double quotes (") are substituted with single quotes ('). Resubstitute single quotes to double quotes before parsing the json array!

RebootRequired	false
-----------------------	-------

3.24. ConnectorsPowerLimit

Required / supported	optional / supported
Accessibility	RW
Type	CSL
Unit	W
Description	Max Power limit in Watt of every connector of the CP. Comma separated list starting with connector 1
RebootRequired	true

3.25. MobileRSSI

Required / supported	Optional / supported
Accessibility	R
Type	string
Description	RSSI of customer SIM Card
RebootRequired	false

3.26. MobileProvider

Required / supported	optional / supported
Accessibility	R
Type	string
Description	Current mobile network operator customer SIM card is connected to.
RebootRequired	false

3.27. MobileConnectionStandard

Required / supported	optional / supported
Accessibility	R
Type	string
Description	Current mobile network technology customer SIM card is connected to (4G,3G,2G)
RebootRequired	false

3.28. GUIConnectorHolderColors

Required / supported	optional / supported
Accessibility	RW
Type	CSL
Description	CSL of Webcolor codes that determine the color of the LED holders in different states (Unavailable, Available, Occupied, Finished, Faulted)
RebootRequired	false

3.29. GridFallbackPower

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	Fallback Power the charging stations falls back to in case of missing communication with the external load management controller.
RebootRequired	true

3.30. GridFallbackTimeout

Required / supported	optional / supported
Accessibility	RW
Type	Integer
Unit	seconds
Description	Timeout after the charging station falls back to the GridFallbackPower due to missing communication with the external load management controller
RebootRequired	true

3.31. ModbusLoadManagementEnabled

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Defines if the load management is enabled and an external load management controller is available or not
RebootRequired	true

3.32. ChargingStrategy

Required / supported	optional / supported
Accessibility	RW
Type	string
Values	FCFS, FAIR
Description	Defines if on the charging station is applied the “first come first serve” or “fair share” policy
RebootRequired	true

3.33. AutochargeEnabled

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	If enabled charging stations tries automatically to start charging session without additional authorization. EVID will be passed as idTag in StartTransaction request to backend in case of an activated OCPP backend.
RebootRequired	true

3.34. RemoteTxStoppableLocally

Required / supported	optional / supported
Accessibility	RW
Type	Boolean
Description	Defines if a charging session that has been started from remote is stoppable directly on the charger or only from remote
RebootRequired	false

3.35. KioskModeWhenOffline

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	The charging station switches automatically into kiosk mode in case the connection with the backend is lost.

RebootRequired false

3.36. GUIchargePointIdVisible

Required / supported	optional / supported
Accessibility	RW
Type	Boolean
Description	Show ChargePointId in the upper left corner of the standby screen
RebootRequired	true

3.37. GUIconnectorPowerVisible

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	False -> Show charging type per connector in connector selection screen (AC/DC) True -> Show maximum output power per connector in connector selection screen
RebootRequired	true

3.38. GUIconnectorLabelsVisible

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Overrides	GUIconnectorPowerVisible
Description	False -> Show default value or GUIconnectorPowerVisible True -> Show GUIconnectorLabels
RebootRequired	true

3.39. GUIconnectorLabels

Required / supported	optional / supported
Accessibility	RW
Type	CSL - String
Description	Provide custom connector label per connector in connector selection screen
RebootRequired	true

3.40. ChargePointModelLegacyMode

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	Defines if in the BootNotification.res the chargepoint model is sent the whole charger configuration or just the general model description.
RebootRequired	true

3.41. TargetCos(Phi)

Required / supported	optional / supported
Accessibility	RW
Type	Float

Description	Controls the target power factor of the charging station. Default value: 0.99
RebootRequired	true

3.42. OcppStatusUnavailableConnector

Required / supported	optional / supported
Accessibility	RW
Type	String
Description	Possible values are "Preparing " or "Unavailable". Controls whether the station will send "Preparing" or "Unavailable" as an ocpp connector state when a connector is in state UnavailableConnObj. Default value: "Preparing"
RebootRequired	true

3.43. GuiShowSingleLanguage

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	If true, only <i>GUiprimaryLanguage</i> gets shown on multilanguage views
RebootRequired	true

3.44. GuiChargingScreenMessage

Required / supported	optional / supported
Accessibility	RW
Type	String
Description	This is an HTML interpreted string which can be shown at the charging screen view, the string must be base64 encoded
RebootRequired	true

3.45. DataTransfer-AutoChargeVID

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	If true, a <code>DataTransfer</code> with <code>vendorId it.hypercharger.autocharge/v1</code> and <code>messageId VehicleID</code> gets sent after <code>StartTransaction.req</code> . This allows to map the EVCCID to a charging session / transactionID.
RebootRequired	true

3.46. CacheSampledMeterValues

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Description	If true, all <code>SampledMeterValue</code> get cached in offline case.
RebootRequired	true

3.47. Credit Card Parameters

3.47.1. CreditCardCurrency

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	Currency used for credit card payments. Supported values: EUR, GBP, DKK, NOK, SEK
RebootRequired	true

3.47.2. CreditCardEnergyTariff

Required / supported	optional / supported
Accessibility	RW
Type	CSL int [currency/100] / kWh
Description	Energy based tariff applied to credit card payments – e.g. 55 = 0,55 € / kWh. Format: DC-Tariff, AC-Tariff – if only 1 value provided it gets applied to both
RebootRequired	true

3.47.3. CreditCardTimeTariff

Required / supported	optional / supported
Accessibility	RW
Type	CSL int [currency/100] / min
Description	Time based tariff applied to credit card payments – e.g. 1 = 0,01 € / min. Format: DC-Tariff, AC-Tariff – if only 1 value provided it gets applied to both
RebootRequired	true

3.47.4. CreditCardVATRate

Required / supported	optional / supported
Accessibility	RW
Type	Float
Description	VAT Rate in % applied to credit card payments
RebootRequired	true

3.47.5. CreditCardPreAuthAmount

Required / supported	optional / supported
Accessibility	RW
Type	int [currency / 100]
Description	Amount of money to be pre-authorized. Amount to be provided in hundreds of "CreditCardCurrency": e.g. 20,00 € -> 2000
RebootRequired	true

3.47.6. CreditCardCorpName

Required / supported	optional / supported
Accessibility	RW
Type	string
Description	Company/Merchant name to be reported in sales receipt
RebootRequired	true

3.47.7. IgnorePreauthAmount

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Default value	false
Description	If true, charging session continuous even PreauthorizationAmount has been reached.
RebootRequired	true

3.47.8. CreditCardCorpAddress

Required / supported	optional / supported
Accessibility	RW
Type	String
Description	Merchant address reported on sales receipt
RebootRequired	true

3.47.9. CreditCardVirtualTagId

Required / supported	optional / supported
Accessibility	RW
Type	String
Description	If set, this parameter will be used as a tagId in Authorize and StartTransaction OCPP messages.
RebootRequired	true

3.47.10. CreditCardEODTime

Required / supported	optional / supported
Accessibility	RW
Type	String
Description	Controls when the credit card service will trigger an EOD (end-of-day) on the credit card terminal. possible values are [0-24]:[0-59]. Default value: 02:00.
RebootRequired	true

3.47.11. AuthorizeCreditCardTx

Required / supported	optional / supported
Accessibility	RW
Type	Bool
Description	If true, an OCPP Authorize request will be sent by the charging station when a credit card session is started. Default value: false
RebootRequired	true

3.47.12. CreditCardReceiptUrl

Required / supported	optional / supported
Accessibility	RW
Type	String
Description	By default customers will be directed to hyc.cash at the receipt view. Change this parameter, to point customers to a different URL.

RebootRequired true

3.48. JanitzaMeterConfig

3.48.1. JanitzaMeterConfig

Required / supported optional / supported

Accessibility RW

Type Int

Description
0 -> No Janitza Meter
1 -> Meter value excludes power drawn by charging station
2 -> Meter value includes power drawn by charging station

RebootRequired true

3.48.2. JanitzaLMPowerLimit

Required / supported optional / supported

Accessibility RW

Type float W

Description Power Limit

RebootRequired true

3.48.3. JanitzaLMSafetyMargin

Required / supported optional / supported

Accessibility RW

Type float W

Description Safety margin to 1.1.1. JanitzaLMPowerLimit

RebootRequired true

3.48.4. JanitzaIP

Required / supported optional / supported

Accessibility RW

Type string

Description Ip address of Janitza's UMG96 modbus slave

RebootRequired true

Default value "192.168.0.70"

3.48.5. JanitzaPort

Required / supported optional / supported

Accessibility RW

Type Int

Description Janitza UMG96 modbus port

RebootRequired true

Default value 502

3.49. LockShutterUntilAuthorized

Required / supported optional / supported

Accessibility RW

Type boolean

Default value	false
Description	If true, the shutter of the AC socket is kept locked until a charging session is authorized
RebootRequired	true

3.50. FreeChargelfMeterError

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Default value	false
Description	If true, charging session continuous in case of a meter error. This might lead to charging sessions that can not be charged to the customer because of missing meter values
RebootRequired	true

3.51. NumberOfParallelChargingSessions

Required / supported	optional / supported
Accessibility	RW
Type	int
Default value	2
Description	Number of allowed parallel charging sessions. E.g. with a 2xCCS + TYP2 charging station 3 parallel charging session are possible but there might be only 2 parking lots.
RebootRequired	true

3.52. TimeZone

Required / supported	optional / supported
Accessibility	RW
Type	string
Default value	""
Description	Charging station time zone (must be a suitable POSIZ TZ environment variable value)
RebootRequired	true

3.53. LMLocalStackLevel

Required / supported	optional / supported
Accessibility	RW
Type	int
Default value	0
Description	Charging profile stackLevel for local profiles (Modbus and Janitza).
RebootRequired	true

3.54. StopChargingOnDoorOpen

Required / supported	optional / supported
Accessibility	RW
Type	bool
Default value	false
Description	Whether opening the door will cause the charger to stop all active charging session and go into an emergency state
RebootRequired	true

3.55. GiroEEnabled

Required / supported	optional / supported
Accessibility	RW
Type	bool
Default value	false
Description	Enable authentication with GiroE cards, requires specific hardware and backend support.
RebootRequired	true

3.56. GUIQRCodeVisible

Required / supported	optional / supported
Accessibility	RW
Type	bool
Default value	false
Description	Enable visualization of a QRCode in the charging page of a session with a link to a web page for remote control of the session: <a href="https://live.hypercharger.it/<sessionID>">https://live.hypercharger.it/<sessionID>
RebootRequired	true

3.57. SilentMode

3.57.1. SilentMode

Required / supported	optional / supported
Accessibility	RW
Type	String
Default value	OFF
Description	<p>OFF -> No limit</p> <p>A -> 00:00 - 23:59 70 dB(A)</p> <p>B -> 06:00 - 21:59 65 dB(A) 22:00 - 05:59 50 dB(A)</p> <p>C -> 06:00 - 21:59 63 dB(A) -> 22:00 - 05:59 45 dB(A)</p> <p>D -> 06:00 - 21:59 55 dB(A) 22:00 - 05:59 40 dB(A)</p> <p>E -> 06:00 - 21:59 55 dB(A) 22:00 - 05:59 40 dB(A)</p> <p>F -> 06:00 - 21:59 50 dB(A) 22:00 - 05:59 35 dB(A)</p> <p>G -> 06:00 - 21:59 45 dB(A) 22:00 - 05:59 35 dB(A)</p>
RebootRequired	true

3.57.2. SilentModeDistance

Required / supported	optional / supported
Accessibility	RW
Type	float [m]
Description	Distance to immission location – e.g. closest window
RebootRequired	true

3.58. Eichrecht Parameters

3.58.1. SendMeterPublicKeyOnBootNotification

Required / supported	optional / supported
Accessibility	RW
Type	boolean
Default value	false
Description	Whether charging station transmits a DataTransfer.req of type setMeterConfiguration after Bootnotification
RebootRequired	true

3.58.2. MeterXPublicKey

Required / supported	optional / supported
Accessibility	R
Type	string
Default value	""
Description	Public Key of meter installed to connector X
RebootRequired	false

3.58.3. metersPublicKeys

Required / supported	optional / supported
Accessibility	R
Type	string CSL
Default value	""
Description	Public Key of meter installed to connector 1 ... #Connectors
RebootRequired	false

3.58.4. SignedMeterValueFormat

Required / supported	optional / supported
Accessibility	RW
Type	string
Default value	"OCMF"
Description	- "OCMF": Send signed meter value in OCMF format - "XML": Send signed meter value in XML format for direct use in Transparenzsoftware
RebootRequired	true

3.58.5. ChargePointModelOverride

Required / supported	optional / supported >= v1.6.2
Accessibility	RW
Type	CiString20Type
Default value	"" - empty
Description	If empty, regular chargePointModel value gets used. If set, value overrides chargePointModel value in BootNotification.req
RebootRequired	true