

# Appendix A: OCPP configuration keys

## Standard OCPP configuration keys

Notes:

1. Not all keys defined by standard(s) are documented here. Here are only standard keys that are related to Ensto chargers. For full OCPP key list (1.5, 1.6 and 2.0), visit here: <https://www.openchargealliance.org/>
2. Default parameter values and in some cases their appearance (numeric versus string value) are related to Ensto chargers.

Key name	Description	Accessibility	Type	Range, Default or example
StopTxnSampledData	Types of meter values that should be sent as sample data elements in stop transaction messages	R/W	String	Energy.Active.Import.Register
StopTxnAlignedData	Types of meter values that should be sent as clock aligned data elements in stop transaction messages	R/W	String	Energy.Active.Import.Register
MeterValuesAlignedData	Comma-separated list of types of meter values that should be sent as clock aligned data elements in separate meter values messages. Supported are 'Energy.Active.Import.Register', 'Power.Active.Import' and 'Current.Import'.	R/W	String	Energy.Active.Import.Register
MeterValuesSampledData	Comma-separated list of types of meter values that should be sent as sampled data elements in separate meter value messages. Supported are 'Energy.Active.Import.Register', 'Power.Active.Import' and 'Current.Import'.	R/W	String	Energy.Active.Import.Register
SupportedFeatureProfiles	A list of supported Feature Profiles. Possible profile identifiers: Core, FirmwareManagement, LocalAuthListManagement, Reservation, SmartCharging and RemoteTrigger.	R	String	
ChargingScheduleAllowedChargingRateUnit	A list of supported quantities for use in a ChargingSchedule.	R	String	Current
HeartBeatInterval <sup>(1)</sup>	The interval in seconds with which OCPP heartbeat messages are sent to the backend system. Modifying this parameter may upset the backend system (OCPP 1.5).	R/W	Int	[10..3600] Def:240

HeartbeatInterval <sup>1</sup>	he interval in seconds with which OCPP heartbeat messages are sent to the backend system. Modifying this parameter may upset the backend system (OCPP 1.6).	R/W	Int	[10..3600] Def:240
ConnectionTimeOut	Interval (from successful authorization) until incipient charging session is automatically canceled due to failure of EV user to (correctly) insert the charging cable connector(s) into the appropriate connector(s).	R/W	Int	[10..300] Def:45
NumberOfConnectors	The number of physical charging connectors of this Charge Point.	R	Int	[0..254] Def:1
GetConfigurationMaxKeys	Maximum number of requested configuration keys in a GetConfiguration.req PDU.	R	Int	[0..2000] Def:1
LocalAuthListMaxLength	Maximum number of identifications that can be stored in the Local Authorization List	R	UInt	[0..1000000] Def:1000000
SendLocalListMaxLength	Maximum number of identifications that can be send in a single SendLocalList.req	R	UInt	[0..45000] Def:45000
ConnectorPhaseRotationMaxLength	Maximum number of items in a ConnectorPhaseRotation Configuration Key.	R	UInt	[1..255] Def:1
ChargeProfileMaxStackLevel	Max StackLevel of a ChargingProfile.	R	UInt	[1..255] Def:255
ChargingScheduleMaxPeriods	Maximum number of periods that may be defined per ChargingSchedule.	R	UInt	[1..255] Def:255
MaxChargingProfilesInstalled	Maximum number of Charging profiles installed at a time.	R	UInt	[1..255] Def:255
LocalAuthListEnabled	Whether the Local Authorization List is enabled	R	Enum	(0)Off (1)On Def:Off
AuthorizeRemoteTxRequests	This parameter determines whether after receiving an OCPP RemoteStart request the charger should still send an OCPP Authorize message to the backend system. Some backends require this as OCPP could be interpreted to require this. Some backends are upset if this is done	R/W	Enum	(0)Off (1)On Def:On

AllowOfflineTxForUnknownId	This parameter determines whether a client is allowed to charge in case its authorization cannot be processed because the backend is offline or not reachable. If set to ON, the client is allowed to charge even if it cannot get authenticated from the white list nor from local cache.	R/W	Enum	(0)Off (1)On (2)ImmediatelyWhenPlugged Def:Off
LocalAuthorizeOffline	Whether the Charge Point, when offline, will start a transaction for locally authorized identifiers	R/W	Enum	(0)Off (1)On Def:On
AuthorizationCacheEnabled	Parameter that enables the use of the internal cache of RFID UID. If disabled, RFIDs even if reported from the backend with an expiry date are not added to an internal cache.	R/W	Enum	(0)Off (1)On Def:On
LocalPreAuthorize	Whether the Charge Point, when online, will start a transaction for locally authorized identifiers without requesting an Authorize.conf from the Central System	R/W	Enum	(0)Off (1)On Def:On
StopTransactionOnEVSideDisconnect	When set to true, the Charge Point SHALL administratively stop the transaction when the cable is unplugged from the EV.	R	Enum	(0)Off (1)On Def:On
UnlockConnectorOnEVSideDisconnect	When set to true, the Charge Point SHALL unlock the cable on Charge Point side when the cable is unplugged at the EV.	R	Enum	(0)Off (1)On Def:On
ReserveConnectorZeroSupported	If this configuration key is present and set to true: Charge Point support reservations on connector 0.	R	Enum	(0)Off (1)On Def:On
ConnectorSwitch3to1PhaseSupported	If defined and true, this Charge Point support switching from 3 to 1 phase during a charging session.	R	Enum	(0)Off (1)On Def:Off

1. Although these two parameter names look alike, there is a slight difference in their appearance (one upper case 'L' versus one lower case 'l').

## Ensto charger specific OCPP configuration keys

Note that only most commonly used keys are documented here.

Key name	Description	Accessibility	Type	Range, Default or example
RfidTagFreeCharging	Rfid Tag for Free Charging with OCPP Full, fixed rfid modes	R/W	String	
FreeChargingMode	This allows to set the OCPP behavior in free charging mode. Note that in case of master slave scenario the slave will be automatically configured to the same mode the master uses	R/W	Enum	(0)No OCPP (1)With OCPP status notif without auth (2)With OCPP status notif with auth (3)With OCPP Full fixed Rfid with auth (4)With OCPP Full fixed Rfid without auth (5)With OCPP Full any Rfid Def:No OCPP
FreeCharging	This mode allows charging without authorization via RFID or the backend. Charging is started immediately after a vehicle is connected.	R/W	Enum	(0)Off (1)On Def:Off