

Custom Key Guide

CCS2 Controller

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This custom key guide is intended to improve the operator's efficiency throughout the procedure and does not entirely absolve them of responsibility.

Change Record

Rev. No.	Date	Details	Revised By	Approved By
1	02/04/2024	Initial Release	Shital Gosai	Kanji Viroja
2	26/04/2024	Note update for charge point URL with options	Shital Gosai	Kanji Viroja
3	06/06/2024	Contact Details	Shital Gosai	Kanji Viroja
4	25/04/2025	Legal Entity Conversion: LLP to PVT LTD	Shital Gosai	Kanji Viroja
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1 Intended Use

This custom key guide will explain how to use OCPP (Open Charge Point Protocol) to extend the protocol's functionality to accommodate special requirements or features that are not covered by the standard protocol standards. The custom key enables implementers to create extra parameters, commands, or responses tailored to their specific use cases.

Furthermore, the user can contact our team to resolve their issue by using the contact information provided on the last page.

WARNING!	Risk caused by inappropriate use!
	<p>Any unconventional use and/or different operation of the product can lead to hazardous situations.</p> <ul style="list-style-type: none"> • Only use the product in a conventional manner.

1.1 Alteration and Restoration of the Product/System

To prevent risks and ensure optimal performance, no alterations, attachments, or restoration of the product are permitted without explicit authorization of Bacancy Systems PVT LTD.

2 Custom Keys


2.1 Plug and Charge

Key	PlugAndCharge
Accessibility	RW (Read / Write)
Data Type	int
Value	0 / 1
Description	<p>The plug-and-charge capability can be enabled through the CDM utility tool during an on-site visit. The user can change the mode in accordance with the mode specified below.</p> <ul style="list-style-type: none"> • 0: User authentication mode • 1: Plug-and-charge mode.

2.2 Default Tag

Key	DefaultTag
Accessibility	RW (Read / Write)
Data Type	String (CiString20Type)
Value	1234A2C4
Description	<p>The maximum length of IDTAG is 20. Only the default ID tag is sent to the server online; offline, all transactions are saved with the default ID tag.</p>

2.3 OCPP End Point to Backend

NOTE!	Charge Point URL
	<ul style="list-style-type: none"> • To set the “Charge Point URL,” use the OCPPEndpointToBackend Key. Once you've set up the URL, check to determine if the response has been accepted. • If it has, send the “Get Configuration” command to check if the “Charge Point URL's” valid or not.
<p>There are two options for the charger point on new URL.</p>	
<p>Option 1:</p>	<ul style="list-style-type: none"> • If everything is in order, CSMS will send a hard or soft reset command. • After the charge point has been reset, it will reconnect with the new Charge Point ID. • If the charge point URL responds to "ChangeConfiguration.req" and "ChangeConfiguration.conf" with status "Accepted," the central system will disconnect from the charger point URL. • Send a quick restart command and make no prior modifications after the OCPP web socket URL has been successfully changed. • When the system restarts, it will attempt to connect to the new web socket URL. If the attempt fails within 20 to 30 minutes, it will automatically redirect to the previous web socket URL.

Option 2:	<ul style="list-style-type: none"> • If the charge point URL responds to “ChangeConfiguration.req” and “ChangeConfiguration.conf” with status “Accepted”, the central system will disconnect from the charger point URL. • It will connect with the new charging point connection ID with a new URL. A newly connected Charge Point URL will initially send a “BootNotification”, which will appear in the server data log.
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Key	OCPPEndpointToBackend
Accessibility	RW (Read / Write)
Data Type	string
Value	<ul style="list-style-type: none"> • ws://xyz.xyz.xyz/chargepintID • wss://xyz.xyz.XYZ/chargepintID
Description	Charge Point URL

2.4 Free Mode

Key	FreeMode
Accessibility	RW (Read / Write)
Data Type	boolean
Value	True / False
Description	To enable or disable the FreeMode functionality. If this feature is enabled, only the default ID tag is sent to the server whenever online ; offline , all transaction stores are save with the default ID tag .

2.5 Access Point Name (APN)

Key	APN
Accessibility	R (Read)
Data Type	string
Description	SIM Card Access Point Name

2.6 Integrated Circuit Card Identification Number (ICCID)

Key	ICCID
Accessibility	R (Read)
Data Type	string
Value	345xx654xyz5
Description	This is a globally unique identification number for the SIM card.

2.7 Power Limit Configuration

Key	PowerLimitConfigurations
Accessibility	RW (Read / Write)
Data Type	int
Value	0 to 800
Description	It can be implemented to limit power or current output at the connector level in public stations.

2.8 Set Maximum SOC

Key	SetMaxSOC
Accessibility	RW (Read/Write)
Data Type	int
Value	1 to 100
Description	EV Charging is allowed only up to the set SOC Limit.

2.9 SOC Limit Enable or Disable

Key	SOCLimitDisable
Accessibility	RW (Read / Write)
Data Type	Boolean
Value	True / False
Description	To enable or disable the SOC limit feature.

2.10 International Mobile Equipment Identity(IMEI)

Key	IMEI
Accessibility	R (Read)
Data Type	string
Value	345xx654xyz5
Description	The IMEI is a unique 15-digit code.

2.11 Simultaneous Charge Enable (TBD)

Key	SimultaneousChargeEnable
Accessibility	RW (Read / Write)
Data Type	boolean
Value	True / False
Description	To enable or disable the simultaneous charge feature.

2.12 Currency (TBD)


Key	Currency
Accessibility	RW (Read / Write)
Data Type	string

2.13 Per Unit Rate (TBD)


Key	PerUnitRate
Accessibility	RW (Read / Write)
Data Type	string
Description	Specifies the cost or price per unit .


2.14 Helpline No (TBD)

Key	HelplineNo
Accessibility	RW (Read / Write)
Data Type	string
Description	The helpline number provides personalised customer service for product inquiries , technical difficulties , and general questions .

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