

Press release

July 5, 2024 Shizen Connect Inc.

EMS "Shizen Connect" now compatible with OCPP and links to **EV Motors Japan and Jigowatts EV chargers**

Shizen Connect Inc., a VPP*1 platform developer, announces that its aggregation energy management system "Shizen Connect" is now compatible with OCPP1.6*2, the international standard communication protocol for EV charging stations, and can now be connected to quick chargers developed and sold by EV Motors Japan Co., Ltd. (EVM-J), and EV AC chargers developed and sold by Jigowatts Inc. (Jigowatts), both of which are compatible with OCPP.







The Japanese government has set a goal that all new passenger cars sold in Japan will be electrified vehicles*3 by 2035 and that 150,000 EV charging stations (300,000 charging points) will be installed by 2030. The Ministry of Economy, Trade and Industry's "Study Group for Promoting the Development of EV Charging Infrastructure" recommends the installation of remote control and communication functions in EV charging facilities to efficiently expand charging infrastructure, and is considering including OCPP compliance as a subsidy requirement in its guidelines for developing charging infrastructure*4.

"Shizen Connect" has been adopted by major electricity retailers as a VPP platform for residential storage batteries*5,*6. In order to further expand the control to EVs, Shizen Connect conducted proof of concept (PoC) for the control of V2H devices*7 and EV AC chargers*8,*9.

"Shizen Connect" now complies with OCPP 1.6, enabling it to control a wide range of OCPP-compliant EV charging equipment, and it has already been linked to quick chargers developed and sold by EVM-J and EV AC chargers developed and sold by Jigowatts. In the future, Shizen Connect intends to increase the number of devices that can be linked to "Shizen Connect" to further expand is adoption in low-voltage VPPs

and demand-side energy management*10. Figure 1 shows the compatible devices and manufacturers of "Shizen Connect" as of June 2024.

Shizen Connect Cloud API Gateway (Dispatcher) OCPP ELWA* EV Chargei Shizen Box API Adapter Yanekara Adapter API dapter Steve AP API OCPP1.6 Edge device [Shizen Box] idustri BESS sident BESS EcoCute **Any Device** (OCPF Omron Panasonic **PowerX** Sumitomo Nichicon Mitsubishi Huawei Nichicon Technolog Kyuden Techno Tsubaki Electric Nichicon **Jigowatts** ies (TBD) Grid Share Hitachi Global Life EV Motors Nitto Kogyo Canadian systems Sungrow Solar Japan Solutions Smart Solar Taoke Diamond Energy Omron Scheduled for Tesla development **ECHONET Lite Kyocera Nitto NEW Web API

Figure 1: List of compatible devices and manufacturers for "Shizen Connect" (as of June 2024)

Shizen Connect will continue to contribute to the realization of a decarbonized society together with leading companies in various fields.

Comments from companies

EV Motors Japan Co., Ltd. Mr. Takashi Hiromtsu

We are a company that contributes to the realization of a decarbonized society by developing state-of-the-art electric vehicles (EVs) and the charging facilities that are essential to the expansion of EV use. Our quick chargers are available in a wide range of outputs from 40kW to 120kW, with single or double guns as charging ports. Through linkage with Shizen Connect's energy management system, we expect to be able to develop user-friendly EV charging services that match the preferred usage style of EV users.

Jigowatts Inc. Mr. Tomoki Shibata

Since 2014, our company established, we have been working on the development and promoting of AC EV chargers that are "Simple," "Flexible," and "Connected".

We are lined up Japan's smallest EV AC charger "Ella" and a high-power yet compact EV AC charger "Industrial Model" (max. 8kW). We also provide an user authentication

and billing application called "PIYO CHARGE", our proprietary energy management systems and so on. Today, our AC EV chargers had beed enabled to connect to Shizen

Connect's energy management system, we will be able to provide even more value to EV users.

- *1 **Virtual Power Plant (VPP)**: a generic term for digital technology that collectively controls distributed power sources (power generation facilities, storage batteries, EVs, etc.) and demand-side facilities as if they were a single power plant
- *2 **OCPP (Open Charge Point Protocol)**: an international standard communication protocol for EV charging stations and energy management systems
- *3 **electrified vehicles**: includes EV (Electric Vehicle), FCV (Fuel Cell Vehicle), and HV (Hybrid Vehicle)
- *4 METI documents from "Study Group for Promoting the Development of EV Charging Infrastructure" (Japanese)

 $\frac{https://www.meti.go.jp/shingikai/mono_info_service/charging_infrastructure/pdf/007_03_00.pdf$

*5 "Shizen Connect" selected as control platform for Tokyo Gas IGNITURE storage batteries (April 23, 2024 Press release)

https://www.shizenenergy.net/2024/04/23/shizen_connect_igniture_saas/ (Japanese)

*6TEPCO Energy Partner selects Shizen Connect for low-voltage VVP operation (Press release June 21, 2024)

https://www.shizenenergy.net/en/2024/06/21/sc_tepco_adopt_dr_support/

*7 Shizen Connect completes one of Japan's largest VPP demonstrations with EV charging and discharging (February 16, 2024)

https://www.shizenenergy.net/en/2024/02/16/sc_ev_vpp_demo_complete24/

*8 Nitto Kogyo and Shizen Connect to conduct DR demonstration using OCPP-compliant EV chargers for VPP construction (Press release February 6, 2024)

https://www.shizenenergy.net/en/2024/02/06/nitto_sc_ocpp_evcharger/

*9Yanekara and Shizen Connect to conduct VPP PoC with Toho Gas using EV charging control (Press release June 17, 2024)

https://www.shizenenergv.net/2024/06/17/vanekara_sc_vpp_ioint_demo/ (Japanese)

*10 **energy management**: efficient energy use in factories, buildings, homes, etc. by visualizing energy consumption and controlling and managing energy equipment.

EV Motors Japan Co., Ltd.

Headquarters: 1-18-7 Hakusan, Wakamatsu-ku, Kitakyushu-shi, Fukuoka

Founded: April 1, 2019

Representative: President/CTO Yuji Sato

Business: Development and sales of electric buses, trucks, vans etc.

Development of buses compatible with automated driving (Level 4)

Development and sales of charging and energy storage equipment

Development and sales of charging and energy storage equipm

Sales of reused batteries and solar panels, etc.

URL: https://evm-j.com/en/

Jigowatts Inc.

Headquarters: 2-3-3 Nihonbashi Bakurocho, Chuo-ku, Tokyo

Founded: May 20, 2014

Representative: Representative Director Tomoki Shibata

Business: Development, manufacture and sales of EV/PHV chargers and development of

charging services

URL: https://jigowatts.jp/en/

Shizen Connect Inc.

Head Office: 2-4-7 Nihonbashi-honcho, Chuo-ku, Tokyo

Founded: October 2, 2023

Shareholder: Shizen Energy Inc. 100%

Representative Director: Munekazu Matsumura

Business: VPP platform, energy management service, IoT equipment sales, etc.

URL: https://se-digital.net (Japanese only)

EMS "Shizen Connect" https://www.se-digital.net/ (Japanese website)

"Shizen Connect" is an aggregation energy management system (EMS). It can provide individual control for storage batteries and EV chargers, control for microgrids connecting multiple buildings with their own private transmission lines, as well as control of VPPs for large scale energy resources. Individual control and VPP control tended to be separate, but Shizen Connect provides a one-stop service allowing energy resources to be used multi-purposefully, which also improves economic efficiency. The system can be adapted with any equipment supplier, allowing energy resources to be chosen freely without relying on a certain manufacturer.

<For inquiries regarding this press release> Shizen Energy Group, Public Relations Department

E-mail: se-comm@shizenenergy.net