The EV Quick Charger Monitoring System is a device to monitor CHAdeMO quick chargers.
It has been developed specifically for EV quick charger manufacturers.
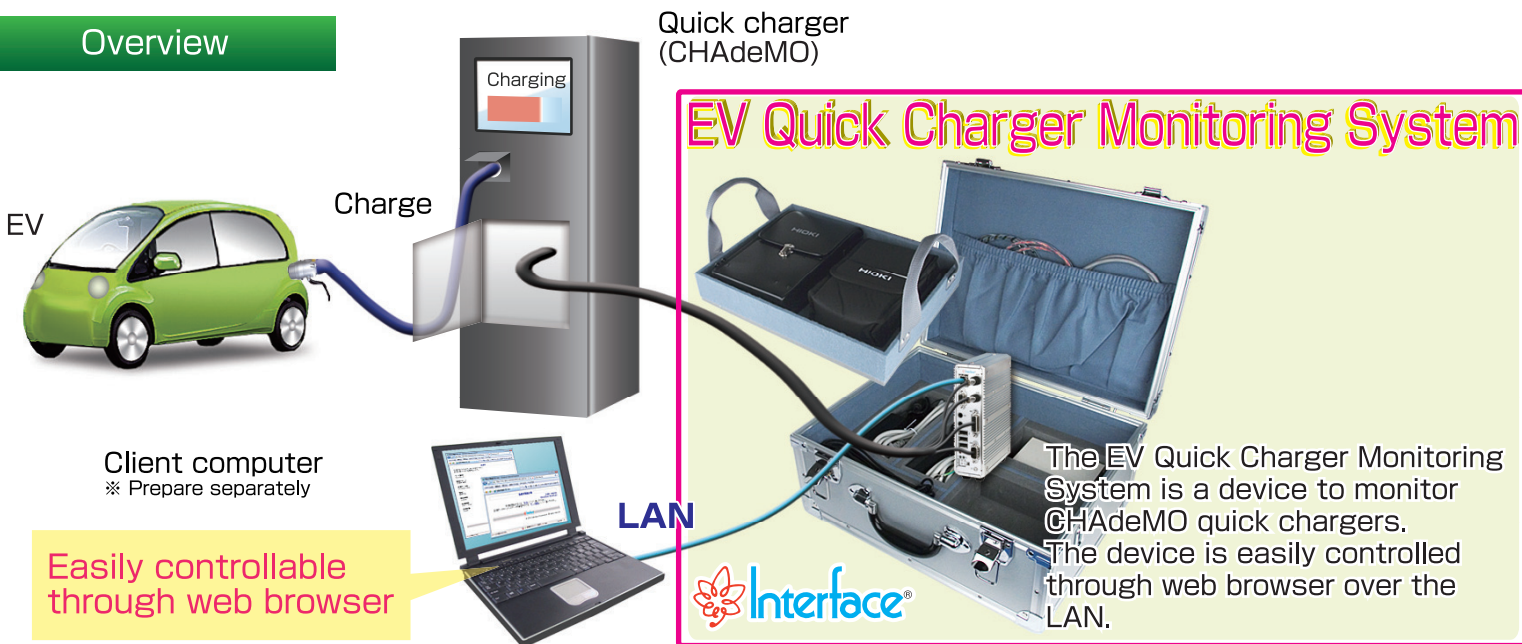
**Interface®**
**Made in 日本**

# EV Quick Charger Monitoring System

## What is CHAdeMO?

CHAdeMO is a standard for a quick charging method for electric vehicles delivering up to 62.5 kW of high-voltage direct current (DC) via a special electrical connector. It is proposed as a global industry standard by CHAdeMo Association.

The CHAdeMo method achieves quick charge in a short time without damage to the battery. The Electronic control unit (ECU) of electric vehicle (EV) specifies the optimal charging current depending on the battery conditions. And an external charger delivers DC to an EV in accordance with the commands from the ECU.

## Overview

Quick charger (CHAdeMO)

Charging

EV

Charge

Client computer
※ Prepare separately

**Easily controllable through web browser**

LAN



**EV Quick Charger Monitoring System**

The EV Quick Charger Monitoring System is a device to monitor CHAdeMO quick chargers. The device is easily controlled through web browser over the LAN.

**Interface®**

## Easily Controllable Web Application

EV Quick Charger Monitoring System monitors the quick charger and EV through web browser by connecting with a cliant computer using LAN.

It monitors CAN messages, charging current value, and the status of control signals for up to 15 minutes consecutively. The monitoring data can be saved as a file.

The Web application is easy to operate, just select an analysis pattern and press a button.

▶ **How to operate**

(1) Select "Measuremet" or "Data management" in the opening page.

(2) Select an analysis pattern to start measuring.

- Normal/vehicle
- Normal/charger
- Abnormal/charging/vehicle
- Abnormal/charging/charger
- Abnormal/before charging/vehicle
- Abnormal/before charging/charger

(3) Measurement settings, start time, elapsed time, and number of measurement data are displayed on the screen during measuring. After completion of measurement, the analysis result is downloaded to your computer.

(4) Measurement data are displayed in Data management page. Select data to analyze or delete.
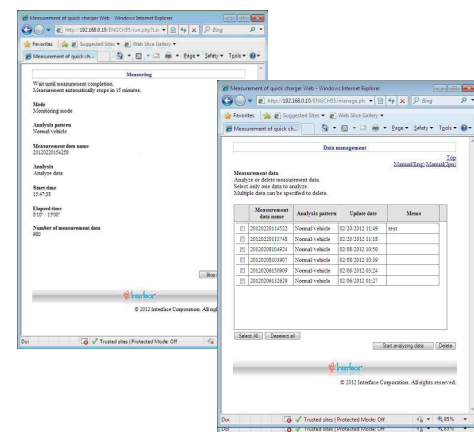
## Measurement Result

The result measured by EV Quick Charger Monitoring System is saved in CSV file.
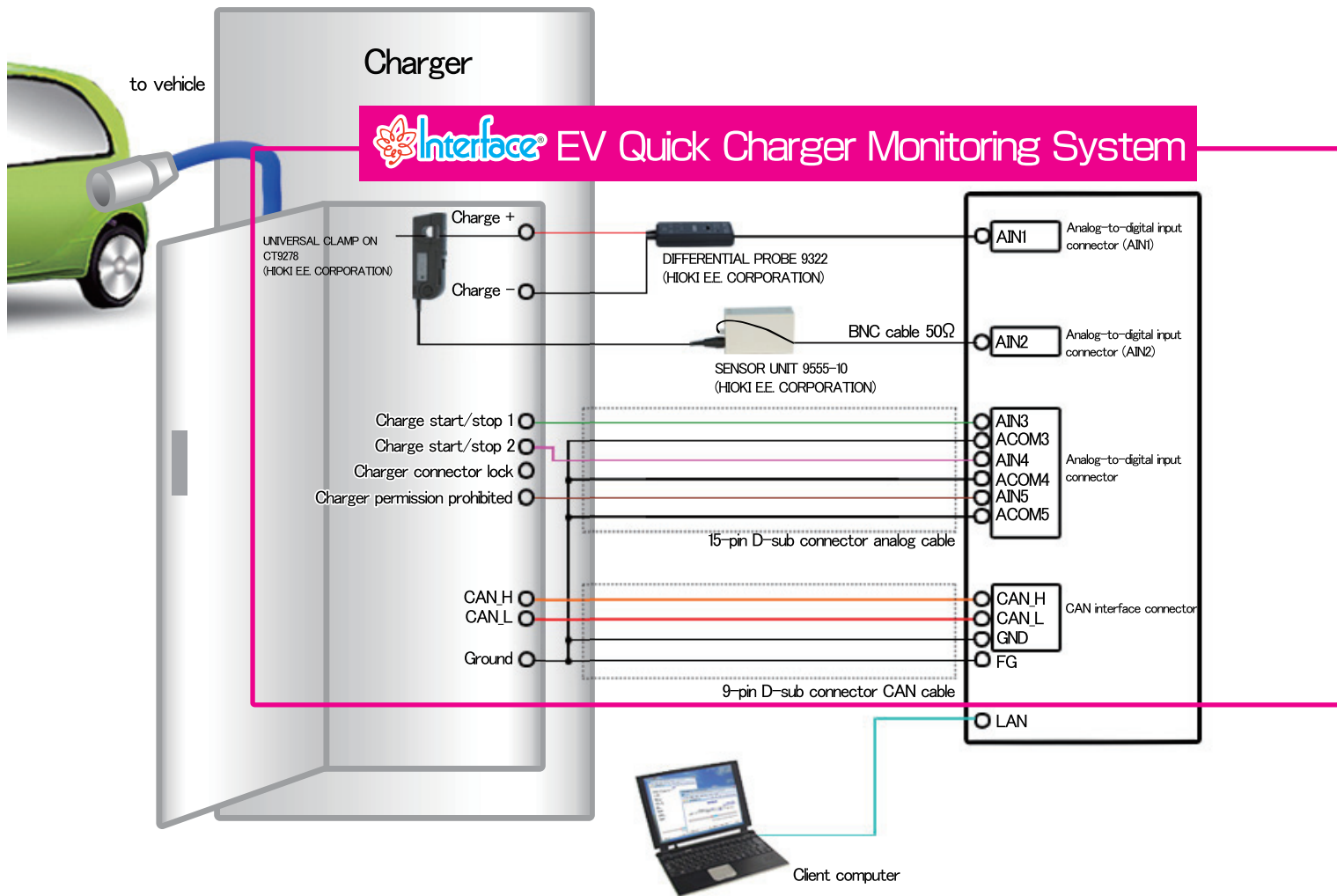
The measurement time, CAN receive data, analog-to-digital input data are included in the file.

The measurement data and evaluation result in every test case are shown by reading the CSV file with Microsoft Excel.

**Charger**

to vehicle

**Interface® EV Quick Charger Monitoring System**

Charge +

UNIVERSAL CLAMP ON
CT9278
(HIOKI E.E. CORPORATION)

Charge −

DIFFERENTIAL PROBE 9322
(HIOKI E.E. CORPORATION)

AIN1 — Analog-to-digital input connector (AIN1)

BNC cable 50Ω

AIN2 — Analog-to-digital input connector (AIN2)

SENSOR UNIT 9555-10
(HIOKI E.E. CORPORATION)

Charge start/stop 1 — AIN3
Charge start/stop 2 — ACOM3 / AIN4
Charger connector lock — ACOM4 / AIN5
Charger permission prohibited — ACOM5

Analog-to-digital input connector

15-pin D-sub connector analog cable

CAN_H — CAN_H
CAN_L — CAN_L
— GND
Ground — FG

CAN interface connector

9-pin D-sub connector CAN cable

LAN

Client computer

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**Components**

The following components of the EV Quick Charger Monitoring System are stored in a hard attache case.

**Hard attache case**
(with a shoulder belt and keys)

**Monitoring System,**
**AC adapter**

**DIFFERENTIAL PROBE 9322,**
(HIOKI E.E. CORPORATION)

**AC adapter, power cable**

**UNIVERSAL CLAMP ON**
CT9278
(HIOKI E.E. CORPORATION)

**SENSOR UNIT 9555-10,**
**AC adapter, power cable**
(HIOKI E.E. CORPORATION)

Recovery media

**9-pin D-sub connector**
**CAN cable**

**15-pin D-sub connector**
**analog input cable**

**BNC cable**

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Some components are not shown in the table above.

* The pictures are for reference purpose only.