



SURFACE VEHICLE INFORMATION REPORT

J2836™-2

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(R) Use Cases for Communication Between Plug-in Vehicles and Off-Board DC Charger

RATIONALE

This document is being updated to match changes in SAE J1772.

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1. SCOPE

This SAE Information Report, SAE J2836-2, establishes use cases and general information for communication between plug-in electric vehicles (PEVs) and the DC off-board charger. Where relevant, this document notes, but does not formally specify, interactions between the vehicle and vehicle operator.

This applies to the off-board DC charger for conductive charging, which supplies DC current to the vehicle battery of the electric vehicle through a SAE J1772 hybrid coupler or SAE J1772 AC Level 2-type coupler on DC power lines, using the AC power lines or the pilot line for power line communication (PLC), or dedicated communication lines that are further described in SAE J2847-2.

The specification supports DC energy transfer via forward power flow (FPF) from grid-to-vehicle.

The relationship of this document to the others that address PEV communications is further explained in Section 5.

1.1 Purpose

The purpose of SAE J2836-2 is to document the general information which must be supported by SAE Recommended Practice SAE J2847-2.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

- SAE J1772 SAE Electric Vehicle and Plug-in Hybrid Electric Vehicle Conductive Charge Coupler
- SAE J2836-1 Use Cases for Communication Between Plug-in Vehicles and the Utility Grid
- SAE J2836/3 Use Cases for Plug-in Vehicle Communication as a Distributed Energy Resource
- SAE J2847-1 Communication for Smart Charging of Plug-in Electric Vehicles Using Smart Energy Profile 2.0
- SAE J2847-2 Communication Between Plug-in Vehicles and Off-Board DC Chargers
- SAE J2847/3 Communication for Plug-in Vehicles as a Distributed Energy Resource
- SAE J2931/1 Digital Communications for Plug-in Electric Vehicles
- SAE J2931/4 Broadband PLC Communication for Plug-in Electric Vehicles
- SAE J2953/4 Plug-in Electrical Vehicle Charge Rate Reporting and Test Procedures

2.1.2 IEC Publications

Available from IEC Central Office, 3, rue de Varembe, P.O. Box 131, CH-1211 Geneva 20, Switzerland, Tel: +41 22 919 02 11, www.iec.ch.

- IEC 61851-1 Electric vehicle conductive charging system – Part 1: General requirements
- IEC 62196-3-1 Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles