



Fibre Optic Converter for Car Charging Stations

The growing market of e-mobility demands certification of the cars and the corresponding charging stations. As the lines for power and data communication are combined in one cable, the cables need to be split up. The cables are not supplied by Audivo. The lines then need to be connected to a terminal block inside the enclosure.

The fibre optic converters for the high frequency data lines are located in a special shielded box within the protective enclosure.

The powerlines need to be fed via appropriate filters, whereas the data lines are converted to fibre optic signals.

As Powerline, Control Pilot signal (PWM) and CAN bus are available, the converter can be used for AC and DC charging.

The versatile concept of the PONTIS EMC converter may be used with most international standards.

Both sides (car and EVSE) are shielded and may be used inside the EMC chamber.

As some standards are still in draft status, the exact standard(s) required needs to be specified by customer.

Features:

- Shielded transmission for car charging stations
- Data and power are split up
- Data transmission via fibre optics
- For AC and DC charging
- Most international standards supported
- RF-immunity 200 V/m up to 18 GHz

Accessories:

required:

- Fibre optic cables: variable lengths ST/FSMA-connector (PONTIS EMC)
- Cable with appropriate connector for the charging station (third party)

Technical Data

Data communication	Control Pilot Circuit (PWM) Pilot Circuit (PWM) PLC (HomePlug Green) up to 10 Mbps CAN bus ISO 11898-1 (Bosch CAN specification 2.0 part A,B) Bosch CAN FD specification V1.0. In ChadeMo:CAN communication baudrate 250 kbs In GB/T:CAN communication baudrate 500 kbs Standard frame mode and extended frame mode are supported
Data link	Glass fibre 50/125 µm, ST connector
Operating temperature/humidity	0 ° to +50 °C / 20 to 80 % RH
Housing	coated aluminium
Colour	light grey (RAL 7035) / petrol
External dimensions	tbd
Weight	tbd
Immunity	200 V/m up to 18 GHz

Standards Supported



EC 61851-1 AC and DC



GBT-18487.1 AC and DC



CHAdeMO DC



SAE J1772 AC and DC

Specifications are subject to change without notice!

PONTIS
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A BRAND OF AUDIOVO

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