

## Field of application and characteristics

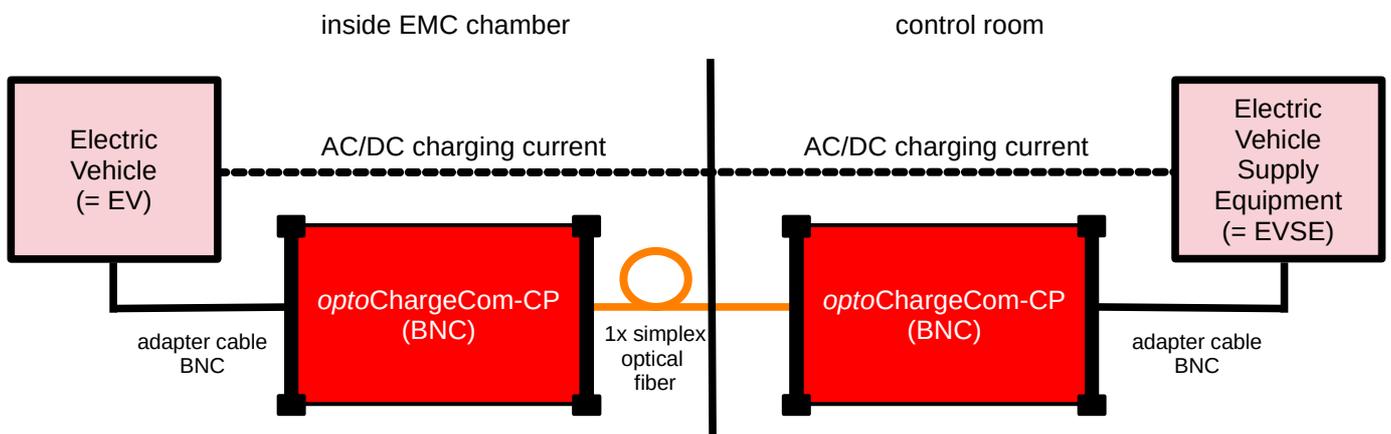
The **optoChargeCom-CP** system (CP = Control Pilot) is a bidirectional optical transmission device that transmits communication data between an Electric Vehicle Supply Equipment (= EVSE), i.e. a charging Station, and an Electric Vehicle (= EV).

It consists of two battery supplied devices that are connected to each other via an optical fiber. With the optical transmission and the shielded case, this system is suitable for the high requirements during automotive EMI and EME tests (for example CISPR 25 class 5).

Please note: Not all charging standards and additional features are implemented yet.



## Application



## Technical data

<b>Charging standards:</b>	Control Pilot (= CP), CCS1, CCS2, Power Line Communication (= PLC) CCS1/CCS2 evaluated / verified with Vector test hardware GB/T, CHAdeMO on request
<b>Data signal interfaces:</b>	Control Pilot (PWM, PLC)
<b>Data direction:</b>	bidirectional
<b>Input (Transmitter):</b>	BNC connector (for Control Pilot)
<b>Output (Receiver):</b>	BNC connector (for Control Pilot)
<b>Power supply:</b>	integrated batteries 4 Ah, consisting of 7x NiMH cells, 8.4 V operating time with fully charged batteries: approx. 10 h operating time can be extended with an external battery pack
<b>Charging connector:</b>	Binder 712 or push-pull 12 mm PP12 (9 mm PP9 on request)

<b>Housing:</b>	anodized aluminum with rubber protectors (stackable) 140 mm x 86 mm x 65 mm 4 mm connector for grounding
<b>Set-up interface:</b>	USB Type B (cable is not included)
<b>Weight:</b>	approx. 760 g
<b>Optical connector:</b>	1x FSMA / simplex multimode fiber 62.5/125 µm, 850 nm, OM1

## Scope of delivery

- 1x **optoChargeCom-CP** Transmitter (EV)
- 1x **optoChargeCom-CP** Receiver (EVSE)
- 1x 20 m simplex multimode optical fiber (OM1) FSMA/FSMA
- 2x charger for the integrated batteries, AC plug types available: A (US), C (EU), G (UK) and I (AUS)

## Accessories and options

<b>Optical fiber - types:</b>	FSMA, ST, FC, LC, E2000 (combinations possible), 62.5/125 µm or 50 µm
<b>Optical fiber - lengths:</b>	0.5 m – >100 m
<b>Optical fiber - feedthrough</b>	FSMA/FSMA, ST/FSMA, ST/ST, FC/FC
<b>Optical fiber – cleaning:</b>	Fiber optic cleaning set
<b>Optical fiber - protective caps:</b>	protective cap/cover for male FSMA optical fibers captive cap/cover for male FSMA optical fibers
<b>Optical connector - protective caps:</b>	protective cap/cover of FSMA optical input/output of mk devices captive cap/cover of FSMA optical input/output of mk devices
<b>External battery pack BP84:</b>	for run time enhancement of the device in the EMC chamber 4 Ah or 10 Ah (high capacity charger needed for 10 Ah batteries)
<b>Power supply PS120:</b>	for constantly powering the device in the control room