

Charge Control C

Introduction

The Charge Control C is a proven ISO15118 compliant charging controller platform for Electric Vehicle Supply Equipment (EVSE).

For basic charging communication between EVSE and EV it supports Control Pilot, Proximity Pilot as well as PWM signaling. Green PHY communication for high level charging is on board as well.

Controlling and sensing different kind of actuators and sensors like LED, relays, RFID readers, contactors and RCDs through its digital I/Os is possible. The board is provided with an open Linux-based operating system based on Everest. The open and flexible firmware stack allows a virtually endless number of use cases and configurations.

Key Features

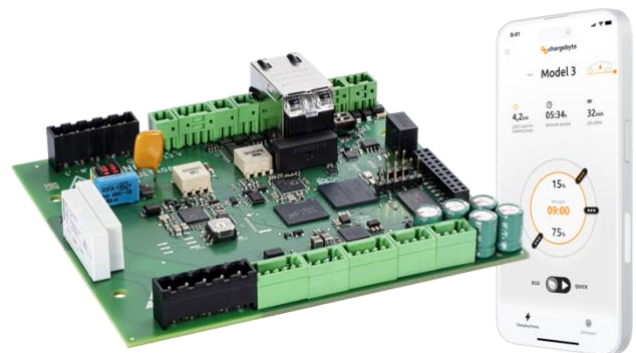
- Charging stack for ISO 15118 (AC)
- OCPP 1.6 and 2.0.1
- Network interfaces: Fast Ethernet 100 Mbit/s and HomePlug AV GreenPHY 10 Mbit/s
- Supported Standards: ISO 15118, Ethernet (IEEE 802.3), EIA-485 (RS-485), ARP, ICMP, IGMPv2, IPv4, IPv6, DHCPv4, TCP, UDP, HTTP, IEC 61851-1
- Filtered output for an auxiliary power supply to improve PLC performance
- Optional App control, solar charging, dynamic tariffs, load balancing and more (CB Energy).

Application

Modern, high-end electric vehicle supply equipment (EVSE) for AC applications.

Operational

Parameter	Value
Temperature range	-20 °C - +70 °C
RoHS / REACH	Compliant
Power supply	12 V
Power consumption	max. 13 W
Outline dimension	120 mm (±300 µm) x 107.3 mm (±300 µm) x 27.6 mm
Weight	110 g



Interfaces

- CP / PP
- Ethernet
- PLC over mains (optional)
- 2 relay outputs (250 VAC/ 6 A) with sense feedback for phase switching and ventilation
- RS-485 (not galvanically isolated, with failsafe biasing)
- USB
- 1-Wire Temperature Interface
- Locking Motor Interface
- Generic I/O