chargebyte GmbH

Charge Control C

Introduction

Charge Control C is an ISO 15118 compliant charging controller for Electric Vehicle Supply Equipment (EVSE). For communication between EVSE and PEV it supports Control Pilot, Proximity Pilot as well as PWM signaling including Green PHY communication. This charging controller is also capable of controlling and sensing different kind of actuators and sensors like LED, relays, contactors and RCDs through its digital I/Os. The board is provided with a Linux operating system.

Key Features

- Charging stack for ISO 15118 (AC only) with an optional MQTT interface
- Compatible with OCPP 1.6J backend systems
- Supporting your own additional controlling software
- Network interface for Backend Connectivity: 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

Application

Charge controller in electric vehicle supply equipment (EVSE) and EVSE simulator for PEV testing purposes

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
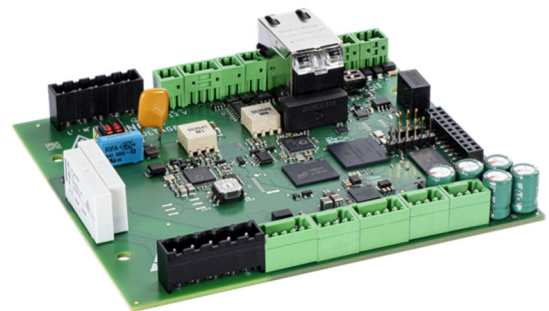
Interfaces

- Ethernet
- PLC over mains
- Relay outputs (250 VAC/ 6 A) with sense feedback
- RS-485 (not galvaniacally isolated, with failsafe biasing)
- USB
- 1-Wire Temperature Interface
- Locking Motor Interface
- Fan output