EmpirBus Connect 50 is a 31-channel DC module aimed to provide state of the art technology to Digital Switching. Based on components designed for the automotive industry, the Connect 50 have been given an outstanding cost/performance ratio and at the same time provide new features to the market.

The outputs have been fitted with high accuracy current feedback that enables real time readout of the current consumption per channel. A new design of the NMEA connection provides galvanically isolated connection, without the need for a powered NMEA bus. The power consumption from the NMEA bus is ZERO for the Connect 50!

The Connect 50 comes as standard with 11 input channels and 20 output channels. As an option it can be equipped with ports for additional galvanic isolated CAN and serial interface. In addition there is also an option to fit the Connect 50 with WiFi for wireless control and connectivity.

Reverse polarity on two channels to control of tables, windows, hatches etc. is supplied as standard as well as capability of controlling and synchronizing window wipers.

As on the EmpirBus NXT DCM, main power is connected by two M6 stainless steel bolts. The casing is IP65 rated, made from high-grade polycarbonate to deliver the robustness needed when operating under tougher conditions.

Connecting equipment is done by two 16 way Molex MX150L connectors known from the EmpirBus NXT. This is a guarantee for long lasting connections without risk of corrosion or glitches – at the same time offering quick connection and simplified installation.

www.empirbus.com
Connect 50 - DC Module

Features

- **NMEA 2000 DC Module**
- **12/24 VDC operation, 50A Rating, Reverse polarity protection**
- **IP65**
- **NMEA 2000, no bus power needed (zero load from NMEA bus power supply)**
- **Self adapting**
- **20 outputs channels**
  - Electronic over-current protection and undercurrent detection, programmable fuse size
  - Discrete 10A operation, parallel operation for increased capacity
  - Manual Set / Reset of any channel direct from DC Module in real time
  - Soft start / Soft Stop / Dimmable
  - Real time current feedback
  - Wiper control, including parking, interval and multiple speed
  - 2 channels programmable polarity reversal (High Side & Low Side Switching)
- **11 input channels**
  - Inputs with indication
  - Multiplexed inputs – up to four switches per channel (no individual running / error indication)
  - Analogue inputs
    - Voltage 0–16V / 0–32V
    - Resistance 0–1 500 ohm
    - 2 counter inputs (0–10 kHz)

### Channel configuration

**Output:**
- High side: 20 ch 1-10A
- Low side: 4 ch 6A

**Digital input:**
- 12V power peak/average: 170mA/1mA
- 24V power peak/average: 340mA/2mA
- Week signal low side/high side: 1mA/4mA
- Current drive: 50mA

**Analog input:**
- Volt: 0–16/0–32V +/-1%
- Resistance: 0–1500 ohm +/-5%

**Power supply:**
- Maximum current: 50A
- Power consumption: 1.5mA
- Supply voltage 12V: 9-16VDC
- Supply voltage 24V: 9-32VDC

**Communication:**
- CAN-bus NMEA 2000
- CAN-bus galvanic isolated*
- RS485 galvanic isolated*
- WiFi*

**Connector:**
- NMEA 2000: Micro Spin M12 Male
- Channels: Molex MX150L 16 circuits
- Power supply: M6 bolt

**Ambient temp.:**
- -20°C to +55°C

**Enclosure:**
- Ingress Protection IP65

**Dimensions:**
- 230 x 106 x 38 mm
- Weight: 0.4 kg

**Regulation comp.:**
- ABYC, RoHS, CE, RCM, FCC

* Optional

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