



## Connect 50 DC Module

**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.

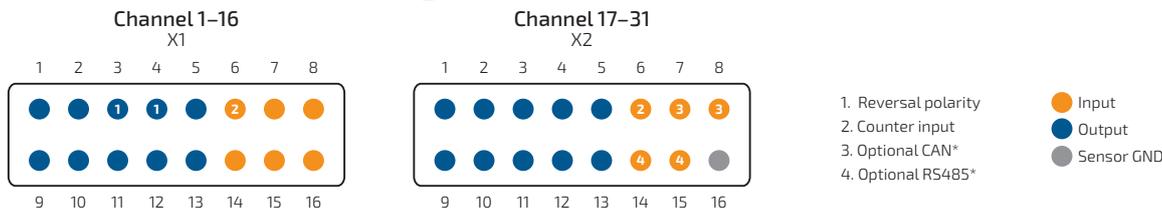
Connecting equipment is done by two 16 way Molex MX150L connectors known from the EmpirBus NXT. This is a guarantee for long lasting connections without risk of corrosion or glitches – at the same time offering quick connection and simplified installation.

# Connect 50 – DC Module

## Features

- **NMEA 2000 DC Module**
- **12 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 – 32V
    - Resistance 0 – 1 500 ohm
    - 2 counter inputs (0 – 10 kHz)

## Channel configuration



\* Optional

## Specifications

### Output:

High side: 20 ch 1-10A  
Low side: 2 ch 6A

### Digital input:

Standard input peak/average: 170mA/1mA  
Week signal low side/high side 1mA/4mA  
Current drive: 50mA

### Analog input:

Volt: 0-32V +/--1%  
Resistance: 0-1500 ohm +/--5%

### Power supply:

Maximum current: 50A  
Power consumption: 1,5mA  
Supply voltage 12V: 9-16VDC

### Communication:

CAN-bus NMEA 2000  
CAN-bus galvanic isolated\*  
RS485 galvanic isolated\*  
WiFi\*

### Connector:

NMEA 2000: Micro 5pin M12 Male  
Channels: Molex MX150L 16 circuits  
Power supply: M6 bolt

### Ambient temp.:

-20 to +70 degrees Celsius (dry)

### Enclosure:

IP65, Polycarbonate

### Dimensions:

230 x 106 x 38 mm

### Weight:

0,4 kg

### Regulation comp:

ABYC, RoHS, CE, RCM, FCC

\* Optional