# EMCtools

Fiber optic CAN / LIN transceiver Type Canbox Highspeed / Mix



## EMCtools - lab life made easy

*MCt*oo/s Canbox

#### Introduction and use

Functional tests e.g. in test-labs often require insulated CAN- (Controller Area Network) and LIN-busses (Local Interconnect Network) to control the device under test. For this purpose, the *EMCtools* Canbox provides 5 independent bidirectional fiber optic bus connections.

*EMCtools* Microbox fiber optic CAN-/LIN transceivers are well-established in EMC-labs all over the world. These transceivers have been designed for emission and susceptibility tests. Using multilayer technology and sophisticated circuit design, full CAN/LIN compatibility and the ability to perform tests at electromagnetic field levels of 270 V/m and above could be achieved.

Usually to identical transceivers are used both in- and outside the shielded enclosure. We designed the *EMCtools* Canbox as a reliable substitute when high susceptibility of bus transceivers is not needed (e.g. outside shielded rooms). It replaces up to 5 single transceivers and allows easy and direct connection of the electrical bus (e.g. CAN-/LIN-Cab) via standard 9-pin Sub-D.

If more channels are necessary our Canbox 19" Rack is available.

#### The Canbox channel configuration can be freely specified by the customer

#### **Available Bus-Channels:**

- High-Speed CAN / CAN FD (Flexible datarate)
- Low-Speed CAN
- Low-Speed Single Wire CAN
- LIN-Bus
- K/L-Line
- FlexRay
- J1850
- J1709
- RS-232
- RS-485
- Sent Bus (unidirectional)

#### **Technical data**

Power supply: Plug in Wall power supply 12V DC, DC-Plug 5.5/2.5mm, center pin positive

Fiber optic: F-SMA, standard multimode optical fiber 50 or 62,5/125µm

F-ST on request, standard multimode optical fiber 50 or 62,5/125µm

BUS-connector: 9-pin Sub-D (f) Ambient temperature:  $-10^{\circ}\text{C} - 50^{\circ}\text{C}$ 

Compatibility: EMCtools Canbox can be combined with corresponding Microbox

### **Delivered devices of the system and accessories:**

1 pcs EMCtools Canbox

1 pcs Wall power supply

1 pcs Printed manual