

# EMCtools

Fiber optic remote switching system  
Type LWL-Relais-Box



**EMCtools**  
Dipl.-Ing. (FH) Armin Lenk  
Meginhardstrasse 50  
88356 Ostrach-Magenbuch  
Tel: 07585/3541  
Fax: 07585/3560  
[info@emctools.de](mailto:info@emctools.de)

**Introduction and use**

Functional tests e.g. in test-labs often require remote actuation of the device under test. For this purpose, the *EMCtools* LWL-Relais-Box provides eight independent, DC insulated remote controllable relay channels with common, normally open und normally closed contacts. Consisting of a control unit, a standard multimode optical fiber and the relay unit it is designed to be used in harsh electromagnetic environments during susceptibility tests in EMC-labs. Automated remote control is possible using an USB connection and a PC.



*EMCtools* LWL-Relais-Box

**Technical data control unit:**

power supply: wall power supply 100 - 240VAC, 9V DC / 2A,  
optional rechargeable Li-Ion battery 7.5V 2.2Ah, min. operating time 24 h

USB connector: Type B

**Technical data relay box:**

power supply: rechargeable Li-Ion battery 7.5V 2.2Ah, min. operating time 6h (all relays activated)  
Li-Ion battery charger

relay type: DIL Reed-Relay, in socket, 0.25A, 300V, 3W

field strength: full functionality at electromagnetic fields < 270 V/m

**Technical data system:**

ambient temperature: -10 °C – 50°C

fiber optic: F-SMA, standard multimode optical fiber 62.5/125µm or 50/125µm

fiber length : operation guaranteed for fiber length up to 200m

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

One control unit  
One relay box  
One USB-cable for PC remote control  
One wall power supply  
One Li-Ion charger (2 cell)  
One CD with drivers and manual  
One printed manual  
Two apapters 2mm (male) – 4 mm (female) - red  
Two apapters 2mm (male) – 4 mm (female) - black  
Sixteen pcs. plug 2mm (male)