

MultiPortSwitch



USB switch

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1 Function

1.1 General

The USB-Switch is equipped with three USB connectors which are mounted on the front cover:

- Plug socket A (USB Type B)
- Plug socket Common (X) (USB Type A)
- Plug socket B (USB Type B)

1.2 Change-over function

The change-over function redirects all signal lines of each USB plug connector. The active signal line (**A** ↔ **Common** and **B** ↔ **Common** respectively) is displayed via LED (see page 7 - Illustration: Operating mode).

Im stromlosen Zustand ist immer die Verbindung (**A** ↔ **Common**) aktiv.

Nach dem Einschalten, wird immer der zuletzt angewählte Datenpfad durchgeschaltet:

- **A** ↔ **Common** ➔ [Netz aus] ➔ **A** ↔ **Common** ➔ [Netz ein] ➔ **A** ↔ **Common**
- **B** ↔ **Common** ➔ [Netz aus] ➔ **A** ↔ **Common** ➔ [Netz ein] ➔ **B** ↔ **Common**

1.3 Installation

The USB-Switch is a passive IT-product that is used in connection with IT-components, such as PCs, PC-networks, network-components, etc. The USB-Switch is installed into active data channels of respective IT-devices. Therefore, its installation may be carried out only by experienced IT-specialists.

Disconnect all components and devices from their electricity supply before installing the USB-Switch.

Exercise great caution while connecting the cables: Make sure that a particular data channel's wires are connected only to the respectively labelled plug sockets on the USB-Switch.

Any improper connection of the wires to the USB-Switch (i.e. accidental permutation of wires or the use of external wires) may result in faulty service, severe system damage up to destruction of all connected components

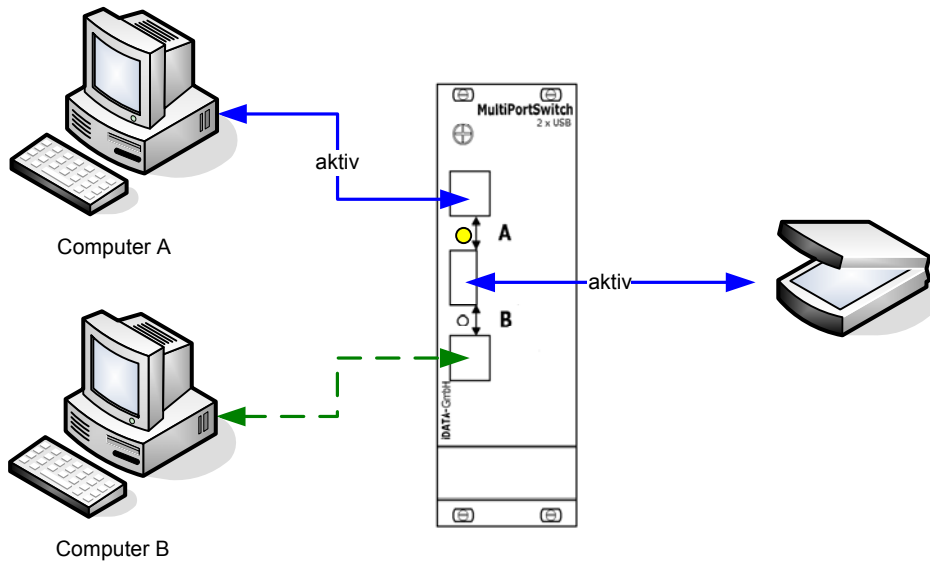
1.4 Benutzungshinweise und Einschränkung

The USB-Switch facilitates physical redirection of data channels, which is tantamount to dis-/connecting data channels by manually plugging or unplugging wires.

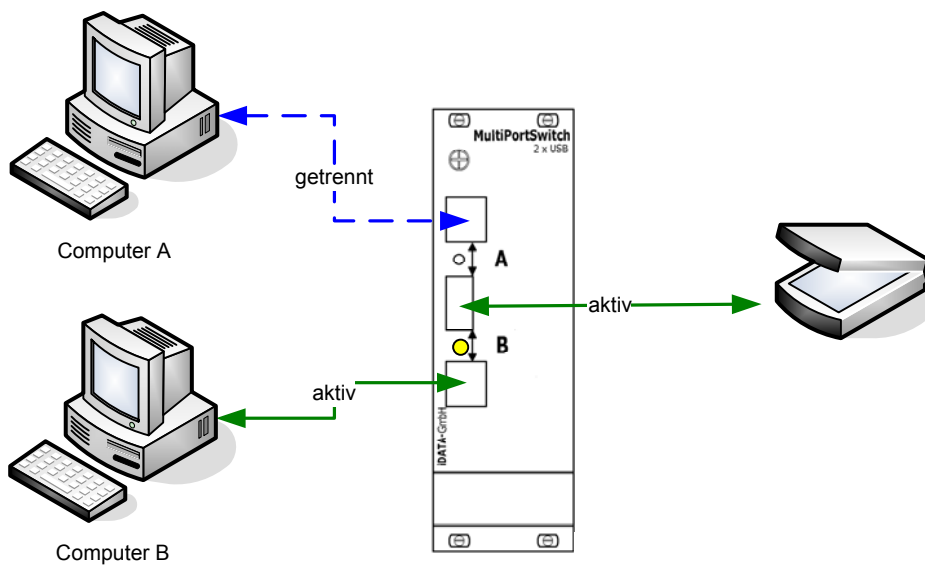
This implies that any accidental switching, i.e. while data transfer is in progress, may lead to defective system performance.

2 Illustration: Operating mode

Funktion: A ↔ Common



Funktion: B ↔ Common



3 Hardware

3.1 Casing

Front cover	Aluminium
Colour	light grey (RAL 7035)
Height	3 HE
Width	8 TE
Depth	172 mm (without handle bar)

3.2 Mounting options

Available casings

- 19"-table-mounted casing
- 19"-slide-in casing

Mounting direction

- front panel (Optional - please specify when ordering)
- rear panel (Standard)

3.3 Plug versions

- Plug socket A USB Type B
- Plug socket Common USB Type A
- Plug socket B USB Type B

3.4 Compatibility

All data lines are compatible with the above data-services:

USB 1.0, USB 1.1, USB 2.0

3.5 Switching characteristics

The change-over of all eight signal conductors implemented in the RJ45 plug sockets is carried out by mechanical relays. Each of these relays is capable of approx. 5×10^5 circuits at 20 switches/minute and 1 ampere load current.

3.6 EMC-performance

In order to improve EMC-performance, the LAN/RJ45-Switch circuit board is constructed using multilayer-technology with extra shielding layers

3.7 Voltage supply

- 24 volts via the MultiPortSwitch slide-in power supply unit.

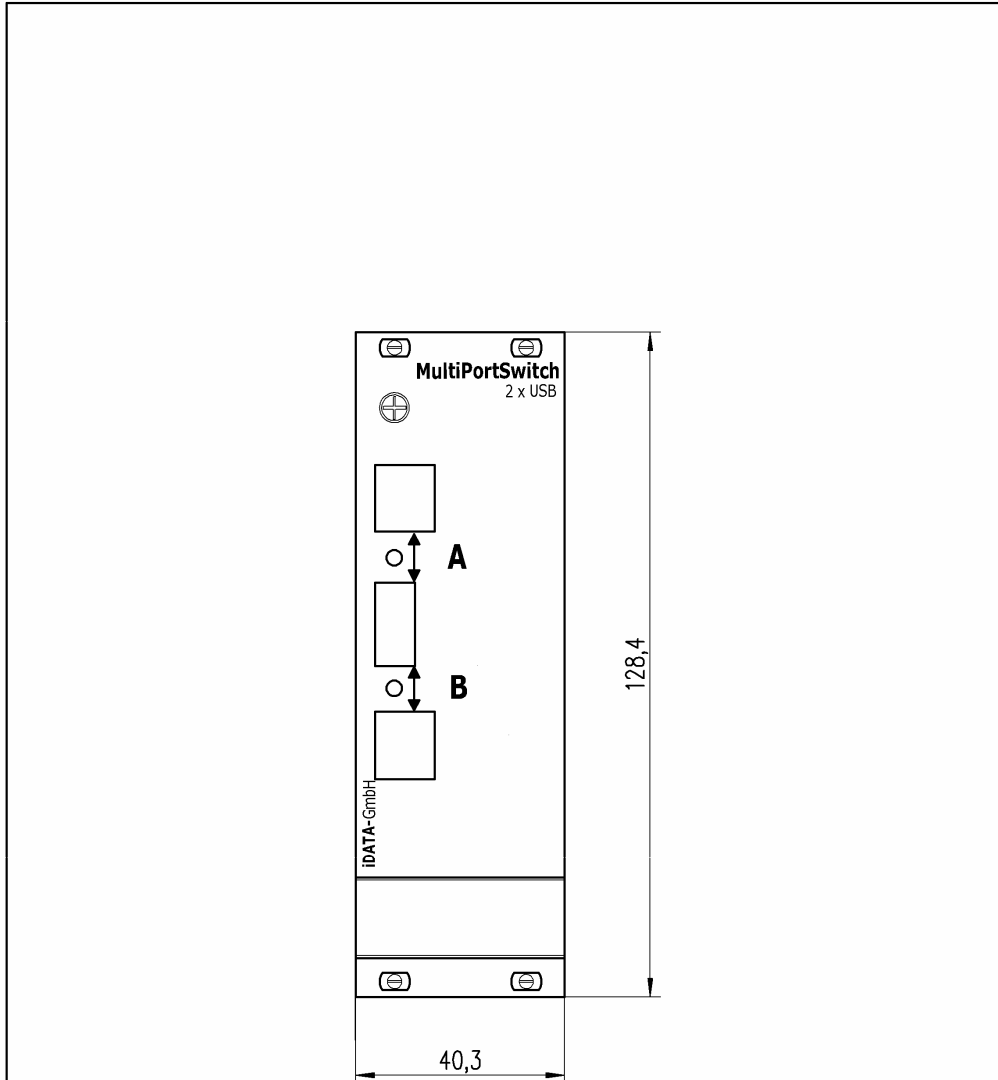
3.8 Idle state

Data channel (**A** ↔ **Common**) is activated - **regardless** of the current switch setting - when the USB-Switch is in idle state

3.9 Warranty

The USB-Switch is provided with a 36 month bring-in warranty. All damage caused by improper handling is exempt from that warranty

4 Illustration: Front cover



FPL_USB_UMSCH_Datenblatt.dcd

iData GmbH Starnberger Straße 22 82131 Gauting Tel. 089/893565 - 0				Maßstab	1:1	(Gewicht)
				Frontplatte für USB - Umschalter		
		Datum	Name			
		Bearb. 23.01.2007	Wupp.			
		Gepr.	—	D100-A065-L01-03		
		Norm				
						Blatt
						Blätter
Zust.	Anderung	Datum	Name	Urspr.	Ers. für:	Ers. durch:

5 PIN-definition 96-polige connector

Pin-Belegung MultiPortSwitch Baugruppen
96 pol. Stiftheiste DIN 41612

Pin	Signalname / Funktion
a1	0 Volt
b1	0 Volt
c1	0 Volt
a2	unbelegt
b2	unbelegt
c2	unbelegt
a3	+24V
b3	+24V
c3	+24V
a9	Selektion A: = offen oder +24V oder Baugr.stromlos Selektion B = 0-Volt (siehe Hinweis)
b9	
c9	
	alle nicht aufgeführten Pin sind unbelegt
a31	reserviert
b31	reserviert
c31	reserviert
a32	reserviert
b32	reserviert
c32	reserviert

Hinweis: Bei Verwendung der MPS-Power-Unit ab Version 6 bleibt die letzte Selektion bei Wiedereinschaltung der Netzspannung erhalten.

Steckerbelegung_96pol_Stiftheiste.dcd

iData GmbH Starnberger Straße 22 82131 Gauting Tel.089/893565 - 0				Maßstab 1:1		(Gewicht)
				MultiPortSwitch Pin - Belegung 96 pol. Stiftheiste		
			Datum	Name		
			Bearb. 14.03.2006	Wupp.		
			Gepr.			
			Norm			
					D100 - A061 - H05- 01	Blatt
						Blätter
Zust.	Änderung	Datum	Name	Urspr.	Ers. für:	Ers. durch: