

# **BIT-2100B**

## **Series Switch System**

### **Datasheet 2.20**



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# Notices

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## Edition

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## Safety Notices

### CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

### WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

## Product Labels



BitifEye The BitifEye Logo.



This electronic product is in compliance with the EMC and Safety regulations of the European Community.



Read the instructions in the BIT-2100 datasheet, as well as this manual, before using this electronic product.



This electronic product must be operated with AC power.



Ethernet port to connect to a LAN.



USB device port to connect to a USB host.



USB host port to connect to a USB device.



Attachment point for Kensington lock.

## Technical Assistance

If you need product assistance or if you have suggestions, contact BitifEye. You will find the contact information on the BitifEye homepage at:

<http://www.bitifeye.com>

Representatives of BitifEye are available during standard German business hours.

Before you contact BitifEye, please note the actions you took before you experienced the problem. Then describe those actions and the problem to the technical support engineer.

### Find a Mistake?

We encourage comments about this publication. Please report any mistakes to BitifEye ([support@bitifeye.com](mailto:support@bitifeye.com))

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## Focus

This datasheet applies to the BIT-2100B Series Switch System. It does *not* apply to the BIT-2100A Series Switch System.

The following components are covered by this document:

Description	Product Number	Article Number
BIT-2100 Series Switch System Mainframe	BIT-2100B	BIT-4000-2105-1
4:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T14B	BIT-4000-2114-1
4:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U14B	BIT-4000-2115-1
6:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T16B	BIT-4000-2116-1
6:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U16B	BIT-4000-2117-1
8:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T18B	BIT-4000-2118-2
8:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U18B	BIT-4000-2119-1
16:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T116B	BIT-4000-2130-1
16:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U116B	BIT-4000-2131-1
2x 2:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T22B	BIT-4000-2123-1
2x 2:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U22B	BIT-4000-2122-1
4x 2:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T42B	BIT-4000-2143-1
4x 2:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U42B	BIT-4000-2142-1
6x 2:1 Switch Module, DC to 26.5 GHz, Terminated	BIT-21T62B	BIT-4000-2163-1
6x 2:1 Switch Module, DC to 26.5 GHz, Unterminated	BIT-21U62B	BIT-4000-2162-1

This datasheet is only intended to provide the user a quick overview of the features and regulations of the instrument. For detailed information about usage, please refer to the BIT-2100B User Manual (available from the BitifEye website, <https://www.bitifeye.com>).

# 1. Electrical Specifications

## Supply

Supply Voltage	110–240 V AC, 50-60 Hz
Electrical Power	80 W
Overvoltage Category	II
Isolation	3 kV
Fuses	2× 1.6 A 250 V slow blow
AC Cable	Cold device cable, 3-wire with grounding terminal 0.75 mm <sup>2</sup> or 18 AWG minimum

## Relay Features

Product Number	Relays per Module	Paths per Relay	Termination	Disconnect All	Latching
BIT-21T14B	1	4	terminated	yes	yes
BIT-21U14B	1	4	unterminated	yes	yes
BIT-21T16B	1	6	terminated	yes	yes
BIT-21U16B	1	6	unterminated	yes	yes
BIT-21T18B	1	8	terminated	yes	no <sup>1</sup>
BIT-21U18B	1	8	unterminated	yes	no <sup>1</sup>
BIT-21T116B	1	16	terminated	yes	no <sup>1</sup>
BIT-21U116B	1	16	unterminated	yes	no <sup>1</sup>
BIT-21T22B	2	2	terminated	no	yes
BIT-21U22B	2	2	unterminated	no	yes
BIT-21T42B	4	2	terminated	no	yes
BIT-21U42B	4	2	unterminated	no	yes
BIT-21T62B	6	2	terminated	no	yes
BIT-21U62B	6	2	unterminated	no	yes

<sup>1</sup> disconnects all terminals (path 0) after power-off

## Relay RF Characteristics

Product Number	IL at 26.5 GHz (max.)	SWR at 26.5 GHz (max.)	Design Life (min. cycles)
BIT-21T14B, BIT-21U14B	0.7 dB	1.7	2,000,000
BIT-21T16B, BIT-21U16B	0.7 dB	1.7	2,000,000
BIT-21T18B	0.8 dB	1.9	1,000,000
BIT-21U18B	0.8 dB	1.9	1,000,000
BIT-21T116B			1,000,000
BIT-21U116B			1,000,000
BIT-21T22B, BIT-21T42B, BIT-21T62B	0.7 dB	1.7	1,000,000
BIT-21U22B, BIT-21U42B, BIT-21U62B	0.8 dB	1.7	1,000,000



## 2. Mechanical Specifications

### Physical Dimensions

Weight	Approx. 5 kg to 7.5 kg, depending on equipped modules
Dimensions	482 mm wide, 147 mm tall, 435 mm deep

### Mounting

Ventilation	Keep min. 5 cm distance to all ventilation slots
Rack Mounting	4 RU minimum

### 3. Compliance Specifications

#### Environmental Conditions

Temperature	+5 °C to +40 °C (stability $\pm 15$ °C)
Humidity	up to 80% relative humidity (non-condensing)
Altitude	up to 2000 m above sea level
Pollution Degree	2

#### Electromagnetic Compatibility

The BIT-2100B Series Switch System is compliant with the following EMC specifications:

- EN 61326-1:2013
- IEC 61326-1:2012
- DIN EN 61326-1:2013

These specifications only apply when the instrument is used in accordance with this datasheet and the user manual. Only use shielded coaxial signal cables on the RF connectors no longer than 3 m. Only use shielded Ethernet cables on the LAN ports no longer than 30 m. Only use shielded USB cables on the USB ports no longer than 3 m.

#### Safety

The BIT-2100B Series Switch System is compliant with the following safety specifications:

- EN 61010-1:2010
- IEC 61010-1:2010
- DIN EN 61010-1:2011

## 4. List Of Acronyms

CPU	central processing unit
EMC	electromagnetic compatibility
GND	ground
LAN	local area network
RF	Radio Frequency
RU	rack unit