Isolation Converter

AD-TW 201 ST, TWB 201 ST

Description

The separation converter AD-TW 201 ST serves the galvanic separation of impressed currents. It obtains its auxiliary energy form the input signal. The connection of an additional auxiliary voltage is not necessary. The output current is independent of the connected load up to the maximum value. When the output current loop is disconnected, the input of the isolating transformer becomes high-impedance. If this causes problems in the system, the AD-TWB 201 ST device variant can be used. This variant has an internal electronic bypass that keeps the current flow at the input.

Application

Economic separation of computer inputs, protection of sensitive units against potential delay, galvanic decoupling in complex measuring units.The device is designed in plug-in module technology.



Business data

Order number

AD-TW 201 ST	without bypass
AD-TWB 201 ST	with bypass

Information

Downloads

Safety instructions	ad-safety-instructions.pdf

Technical specifications

Input current

Measuring range	0/4 ... 20 mA
Input voltage	< 25 V
Self-voltage consumption AD-TW 201 ST	< 2,5 V
Self-voltage consumption AD-TWB 201 ST	< 3,5 V
Oscillation current	< 80 µA

Output current

Output range	0/4 ... 20 mA
Max. burden	500 Ohm
Burden error	-0,03% / 100 Ohm
Residual ripple	0,5 % (500 Ohm; 20 mA)

Transmission behaviour

Basic accuracy	< 0,3 %
Input / output	1 : 1
Temperature influence	50 ppm/K
Response time	~ 20 ms
Transmission frequency	500 Hz (500 Ohm)

Housing

Dimensions (WxHxD)	20x30x16,5 mm
Type of protection	IP 20
Connection method	Plug-in module
Weight	~ 80 g

Environmental conditions

Ambient temperature	-10 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)

EMC

Product family standard	EN 61326-1 [1]
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1

Galvanic isolation

Base isolation, functional separation	
Working voltage	50 V DC
Test voltages input / output	500 V, 50 Hz (1 min.)

[1] During checking, slight signal deviations are possible.

SALES & ADVICE

GRUBATEC MESS- UND REGELTECHNIK

MANUFACTURER

ADAMCZEWSKI Elektronische Messtechnik

Grubatec AG · Wölferstrasse 5 · CH-4414 Füllinsdorf

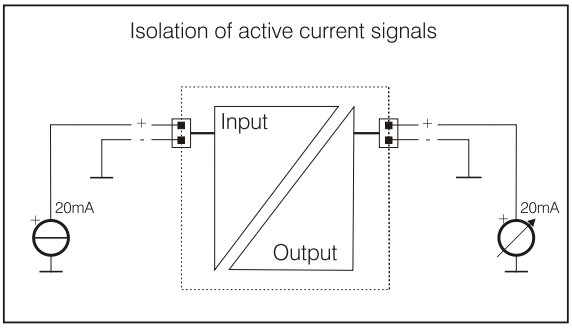
+41 55 617 00 80 · info@grubatec.ch · www.grubatec.ch

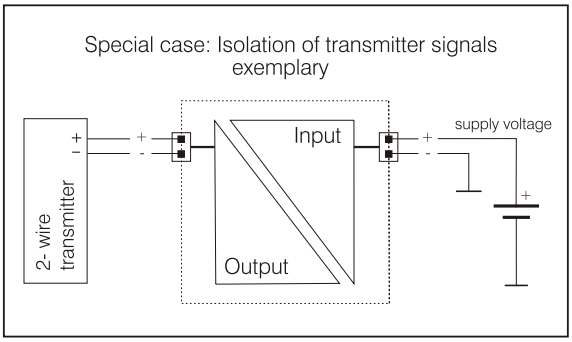
Subject to technical changes and printing errors.

Isolation Converter

AD-TW 201 ST, TWB 201 ST

Block and wiring diagram





Dimensions

