Isolation Amplifier

Isolation Amplifier For Voltage Signals

AD-TV 10 GVB

Description

The isolation amplifier AD-TV 10 GVB serves the galvanic separation and amplification of DC voltage signals (0/2-10V). The output signal follows the input variable linear and is independent of the connected burden up to a limiting value. Additionally, the separation amplifier has a special voltage input, which can be realised according to customer data, up to a maximum of 300 VDC. Input, output and supply voltage are separated from each other with high insulation. An internal electronic power pack with high efficiency and a voltage range of 11 to 30 VDC prevents a strong temperature rise and allows high output burdens. Therefore, the separation amplifier is also optimally suitable for battery operation. High packaging density and working ergonomics are achieved in combination with detachable terminal clamps and a construction width of 13 mm.

Application

Burden amplification and galvanic decoupling of DC voltage signals in the lower supply voltage range.



Specific characteristics

- supply voltage range: 11 ... 30 V DC
- special voltage input up to 300 V DC

Business data

Order number

AD-TV 10 GVB

Information

Downloads

Tender text	tv10gvb.zip
Safety instructions	ad-safety-instructions.pdf

Technical specifications

Input	
Input voltage	0 ... 10 V (Rin: 100 kOhm)
Special voltage input	max. 0 ... 300 V (customer data)
Output	
Output voltage	0 ... 10 V
Minimum load	min. 5 kOhm
Residual ripple	max. 50 mVss
Supply	
Voltage range	11 ... 30 V DC
Nominal voltage	12 V DC / 24 V DC
Power consumption	max. 0,4 W
Accuracy	
Accuracy	< 0,2 %
Temperature influence	50 ppm/K
Response time	max. 2 ms
Housing	
Dimensions (WxHxD)	13x110x134 mm
Type of protection	IP 20
Connection method	detachable terminal clamp (2,5 mm² flex wire / 4 mm² one wire)
Bolting torque terminals	0,5 Nm
Weight	~ 98 g
Manner of fastening	DIN rail 35mm (EN 50022)
Environmental conditions	
Ambient temperature	-10 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)
EMC	
Product family standard	EN 61326-1
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1
Electrical safety requirements	
Product family standard	EN 61010-1
Galvanic isolation, test voltages, overvoltage category II	
Input / output	3,75 kV (1 min.)
Signal / supply unit	4 kV (1 min.)
Protection circuits	
Input	electrical surge protection
Output	electrical surge protection
Power supply	electrical surge and reverse current protection

SALES & ADVICE

GRUBATEC MESS- UND REGELTECHNIK

MANUFACTURER

ADAMCZEWSKI Elektronische Messtechnik

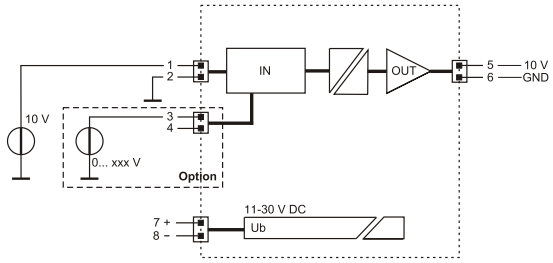
Grubatec AG · Wölferstrasse 5 · CH-4414 Füllinsdorf
+41 55 617 00 80 · info@grubatec.ch · www.grubatec.ch

Subject to technical changes and printing errors.

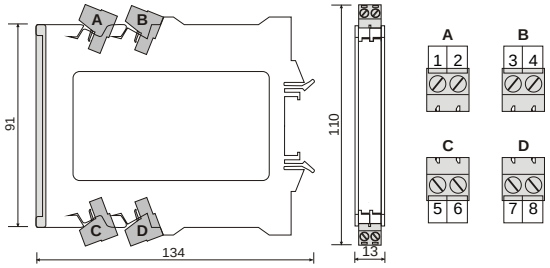
Isolation Amplifier For Voltage Signals

AD-TV 10 GVB

Block and wiring diagram



Dimensions



Subject to technical changes and printing errors.