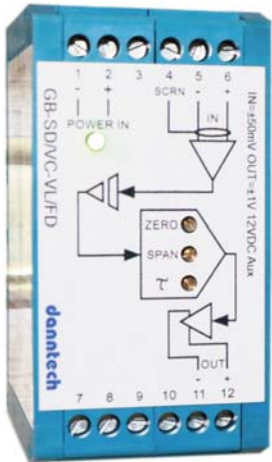


SIGNAL CONVERTER



★ Our range of signal converters provide a convenient and reliable way of converting almost any input voltage or current to commonly used process signal levels. Voltages from 20 mV up to 500 V and currents from 100 nA up to 10 A can be isolated and converted to a standard current or voltage output.

★ Customized input and output requirements can usually be met on request. A high precision instrumentation amplifier forms the input stage with galvanic isolation between input and output

★ A digital filter with adjustable time constant between 0 and 12 seconds is also provided for the filtering of noisy signals.

APPLICATIONS:

Filtering of noisy signals and elimination of the effects of ground loops from distributed process signals.

The protection of signals against common mode interferences such as motors, contactors and power line surges.

Process signal amplification in situations where the line impedance is too great to effectively drive the required instrumentation.

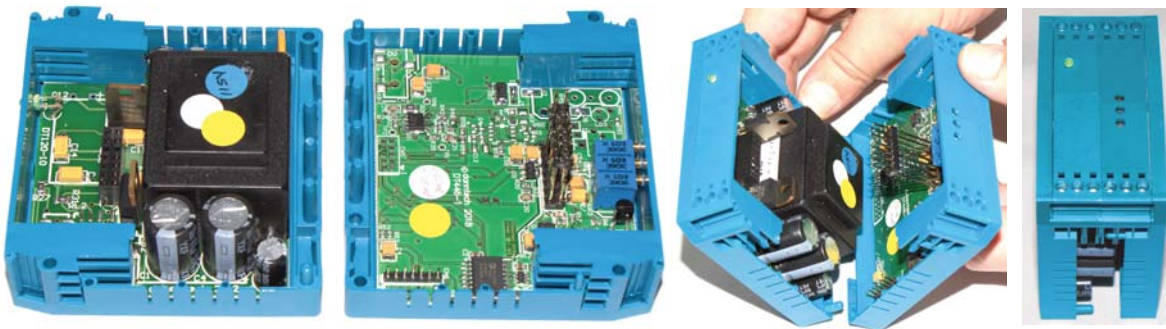
The outputs can drive a measurement loop of several kilometres.

Individual channel isolation and the elimination of common mode offsets for non-isolated computer and PLC inputs.

Square root extraction.

Absolute value conversion.

Danntech signal converters are designed as two parts or PCBs. The left side PCB provides power to the right PCB which does the actual signal conversion and isolation. The power supply consists of two dual rail isolated power supplies. One supply for the input circuitry and the other for the output circuit. We have several power supply PCB options from DC to mains and some options with relay outputs.



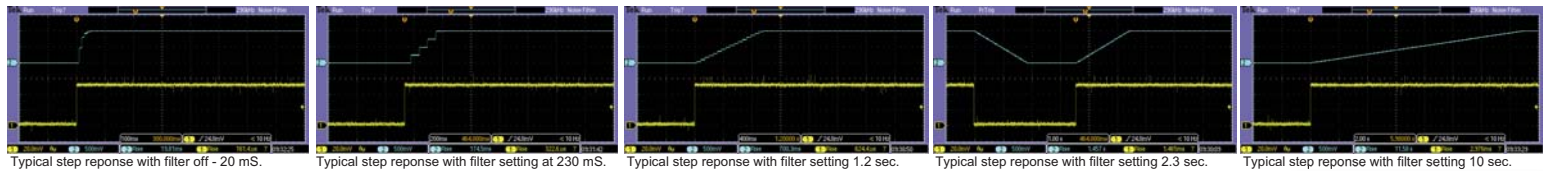
- Standard input signal ranges from 0-50 mV, 0-5 V, 1-5 V, ±10 V, 0-250 V, 0-500 V, 0-20 mA to 4-20 mA and many more.
- Bipolar input and output configurations.
- Customised input and output ranges on request.
- Input impedance of >100 kΩ for the voltage input and 50 Ω for the current input models.
- Maximum input signals of 500 V for voltage input and 10 A for the current input.
- Output signal ranges of 0-10V, 1-5 V, ±10 V, 4-20 mA and 0-20 mA and more.
- Output load >2 kΩ for the voltage output and 500 Ω maximum for the current output.
- Multi-turn trimpot adjustment for zero and span on the front of the unit which can be disabled.
- Adjustable filter with time constant from 0 to 12 seconds.
- Frequency response 50 Hz with filter disabled.
- Linearity better than 0.1% of full scale.
- Auxiliary supply 115/230 VAC ±10% 50/60 Hz or 12/24 VDC ±5% and other options.
- Isolation between input and output >1,500 VAC for AC powered versions and >1,000 VAC for DC powered versions.
- Operating temperature -10°C to 60°C.
- 24 hour operational burn-in.
- Calibration sheet provided for each unit manufactured.
- DIN rail mounting with dimensions 40 x 80 x 85 mm (W x H x D).



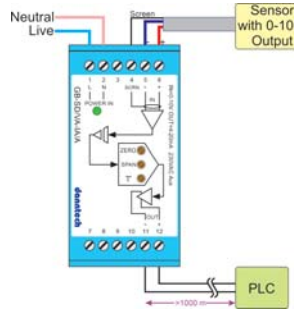
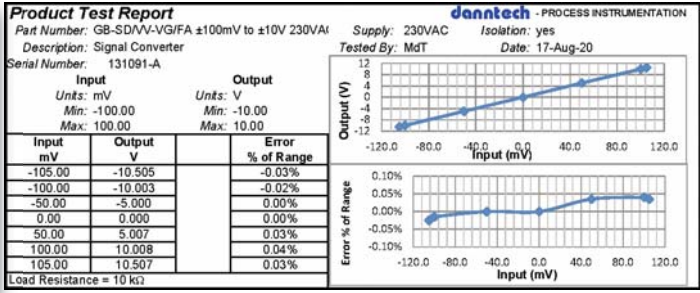
Danntech cc
 Reg. No. 1986/15338/23
 Tel: + 27 (0)11 792-1239
 Fax: + 27 (0)11 792-4687
 P O Box 1023, Fontainebleau, 2032
 Republic of South Africa
www.danntech.com
www.danntech.co.za

Danntech Ltd
 Co. No. 6510211
 Tel: +44 (0) 75 9069 1824
 4 Betty's Lane, Norton Canes, Cannock
 WS11 9NP, United Kingdom

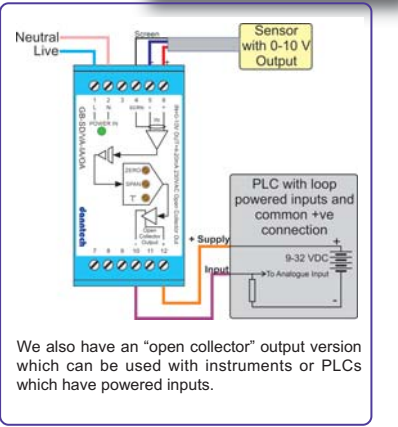
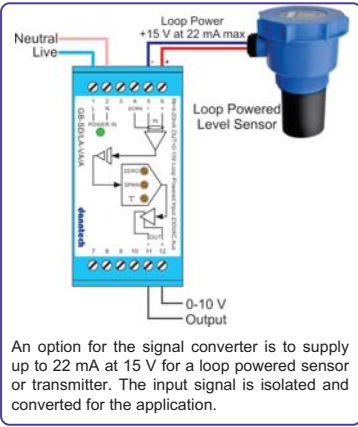
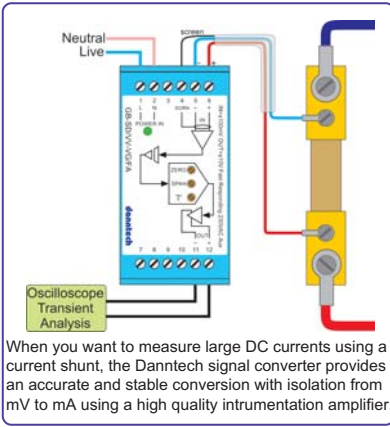
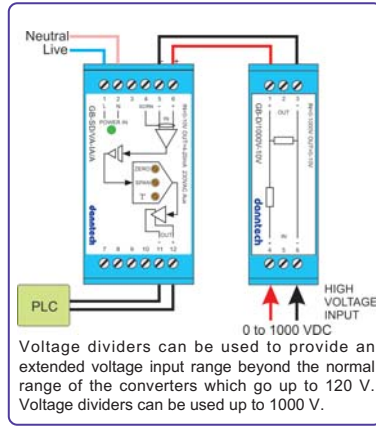




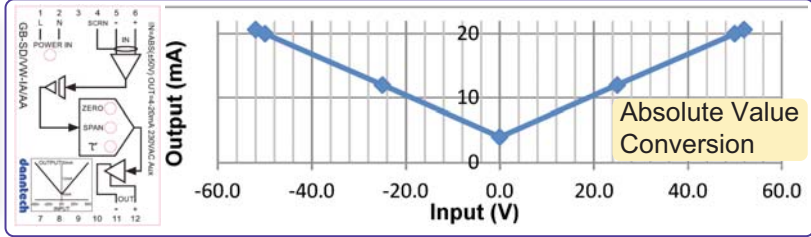
Each unit is burned in for 24 hours and then tested to provide a calibration certificate which is included with the unit. This test report is for a high speed unit designed to be used with a current shunt for fast, isolated DC current measurements.



Please contact us for resistance and frequency input applications. 24 V supply signal conversion options are best done using our Eco-Line Signal Converters. Three way galvanic isolation between the auxiliary supply, the input and the output. The Signal Converter provides 1,500 VAC isolation between input and output.



These signal converters are also available as High Input Impedance versions - up to 10 MΩ while maintaining accuracy, linearity and stability.

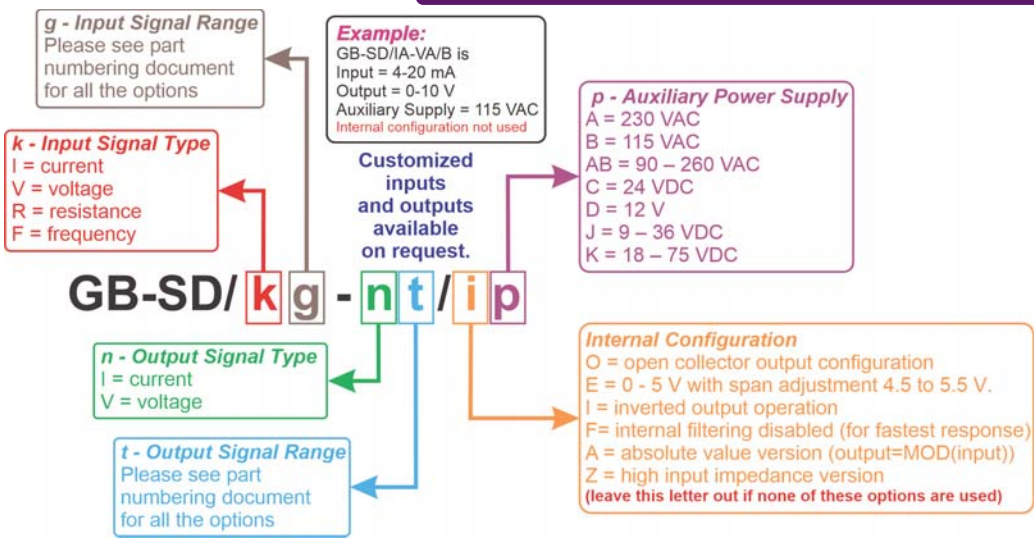


Output noise test results for ±50 mV input to ±1 V output.

Serial Numbers:	Measured output noise VAC using Fluke 287 as a percentage of the output range (2.0 V).			
	132763	132764	132765	132766
Input = +50 mVdc				
Max mVdc	0.04%	0.04%	0.04%	0.02%
Average mVdc	0.03%	0.03%	0.03%	0.01%
Min mVdc	0.02%	0.02%	0.02%	0.01%
Input = -50 mVdc				
Max mVdc	0.05%	0.04%	0.04%	0.03%
Average mVdc	0.03%	0.03%	0.03%	0.02%
Min mVdc	0.02%	0.02%	0.02%	0.01%

PART NUMBERING:

Signal_Converter_-_Digital_(SD)_Part_Numbering.pdf



Input options include the following:

IA = 4 - 20 mA	VJ = ±150 mV	VAG = 0 - 24 VDC	
IB = 0 - 20 mA	VK = 0 - 1 V	VAH = 0 - 150 VDC	
IC = ±5.5 mA	VL = 0 - 20 V	VAJ = 0 - 300 VDC	
ID = 0 - 1 mA	VM = 0 - 30 V	VAK = ±100 V	
IE = 0 - 5 mA	VN = ±200mV	VAL = 0 - 3 VDC	
IF = 0 - 50 mA	VO = ±20V	VAM = 0 - 60 VDC	
IG = ±5.0 mA	VP = ±1.25 V	VAN = 0 - 12 VDC	
IH = ±150mA	VQ = 0 - 60 mV	VAO = 0 - 30 mV	
IJ = 0 - 60mA	VR = ±1.5 V	VAP = 0 - 75 mV	
IL = 0 - 200 mA	VS = 0 - 200 mV	VAQ = 0 - 74 VDC	
IM = 0 - 800 mA	VT = 0 - 15 V	VAR = 0 - 180 VDC	
IN = 0 - 1A DC	VU = ±20 mV	VAS = 0 - 110 VDC	
IP = ±10.0 mA	VV = ±100 mV	VAT = ±1.0 V	
	VW = ±50 V	VAU = 0 - 240 VDC	
	VX = 0 - 3 V	VAV = 0 - 350 VDC	
	VY = 0 - 100 V	VAW = 0 - 500 VDC	
	VZ = 0 - 120 V	VAX = 0-25 VDC	
	VAA = 0 - 800 mV	VAY = ±60 V	
	VAB = ±400 mV	VAZ = 0 - 185 VDC	
	VAC = 0 - 1300 mV	VBA = 0 - 20 mV	
	VAD = 0-200 V	VBB = 0 - 250 VDC	
	VH = 0 - 100 mV	VAE = 0 - 50 V	VBC = 0 - 8 VDC
	VI = 0 - 150 mV	VAE = 0 - 50 V	VBD = ±180 VDC
		VAE = ±75 mV DC	

Output options include the following:

IA = 4 - 20 mA	VA = 0 - 10 V	VK = 0 - 1 V
IB = 0 - 20 mA	VB = 0 - 50 mV	VL = ±1 V
IC = 0 - 10 mA	VC = ±50 mV	VM = 0 - 20 mV
ID = 0 - 1 mA	VD = 0 - 5 V	VN = 0 - 100 mV
IE = 0 - 5 mA	VE = ±5 V	VO = ±100 mV
IF = 20 - 4 mA	VF = 1 - 5 V	VT = 0 - 15 V
IG = 0 - 2.5 mA	VG = ±10 V	



Danntech cc
Reg. No. 1986/15338/23
Tel: + 27 (0)11 792-1239
Fax: + 27 (0)11 792-4687
P O Box 1023, Fontainebleau, 2032
Republic of South Africa
www.danntech.com
www.danntech.co.za

Danntech Ltd
Co. No. 6510211
Tel: +44 (0) 75 9069 1824
4 Bettys Lane, Norton Canes, Cannock
WS11 9NP, United Kingdom

