DATA SHEET DSIi-10A

For more information, please visit: www.dewesoft.com

Product Overview

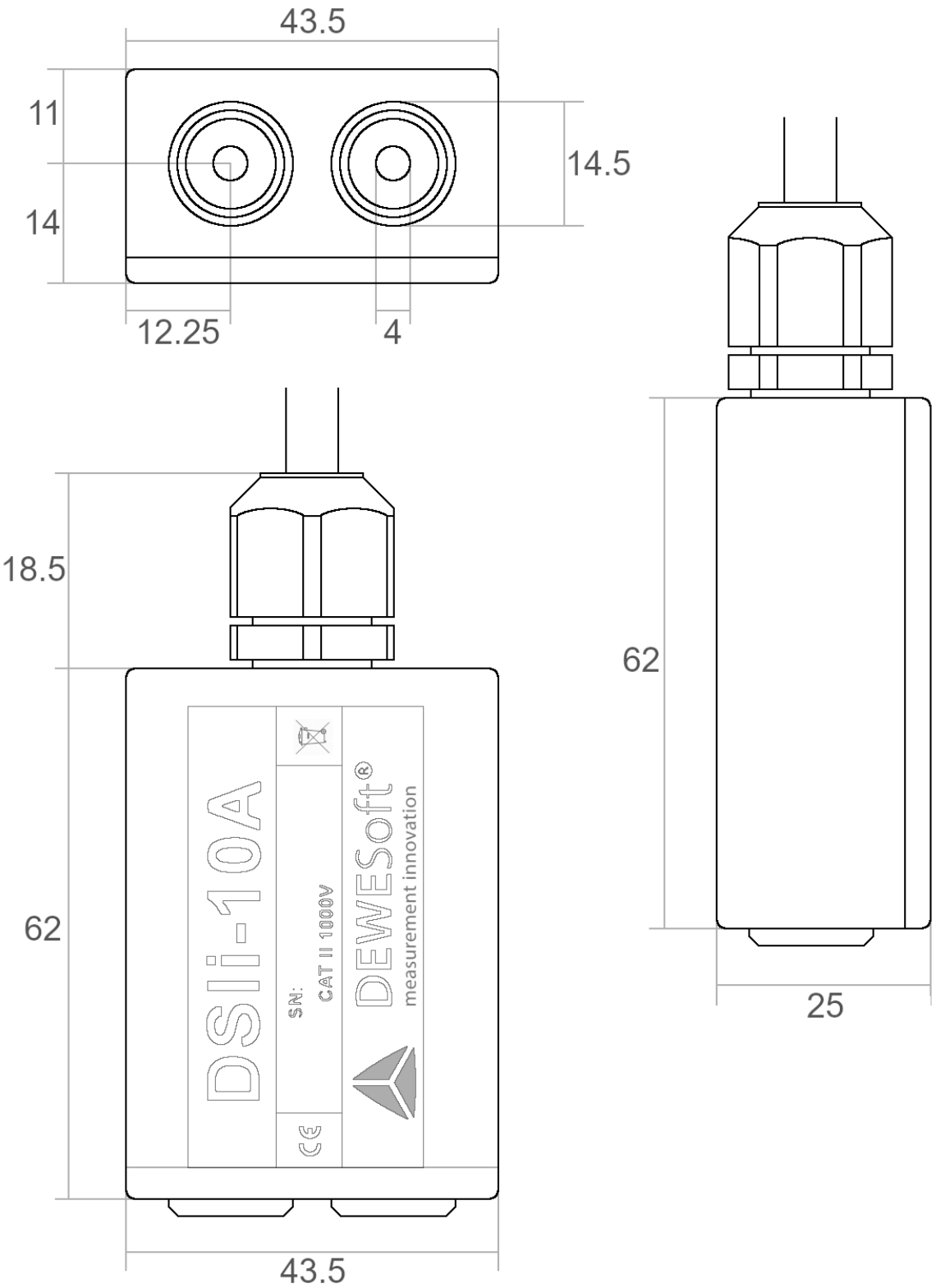
The DSI shunt adapter is an adapter for current measurement on any DSUB9 connector except for the DEW43 amplifier. The technology is based on the hall effect..

Working principle:

These types of current transducers measure the magnitude of the magnetic field that is created by the flow of current. A voltage is generated by the transducer that is known as a Hall voltage that is induced by the magnetic field, the transducer then measures the magnetic flux density of the field.

Therefore the working principle of this type of transducer is based on the Hall voltage principle. In essence this principle states that if a conductor (or semiconductor) that has a current flowing through it in one direction, is brought in contact with a magnetic field, a voltage can be measured.

Dimensions

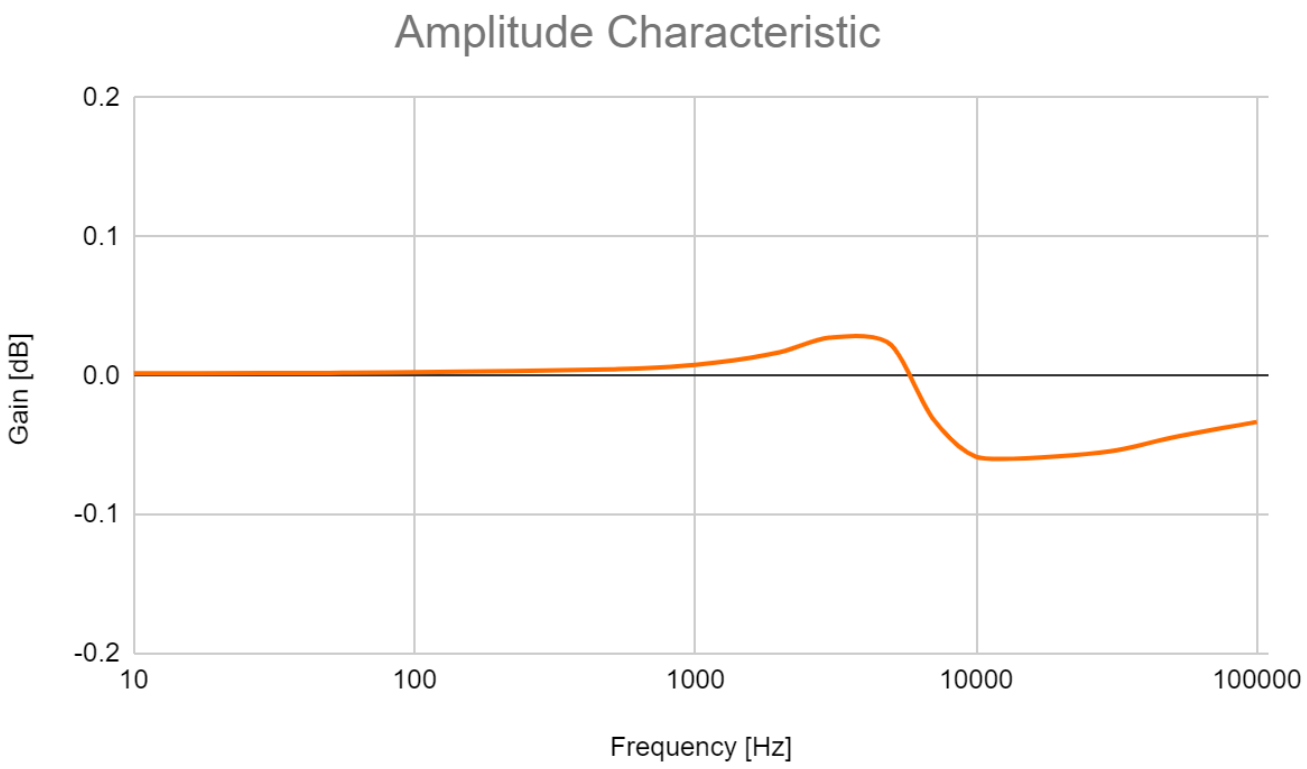


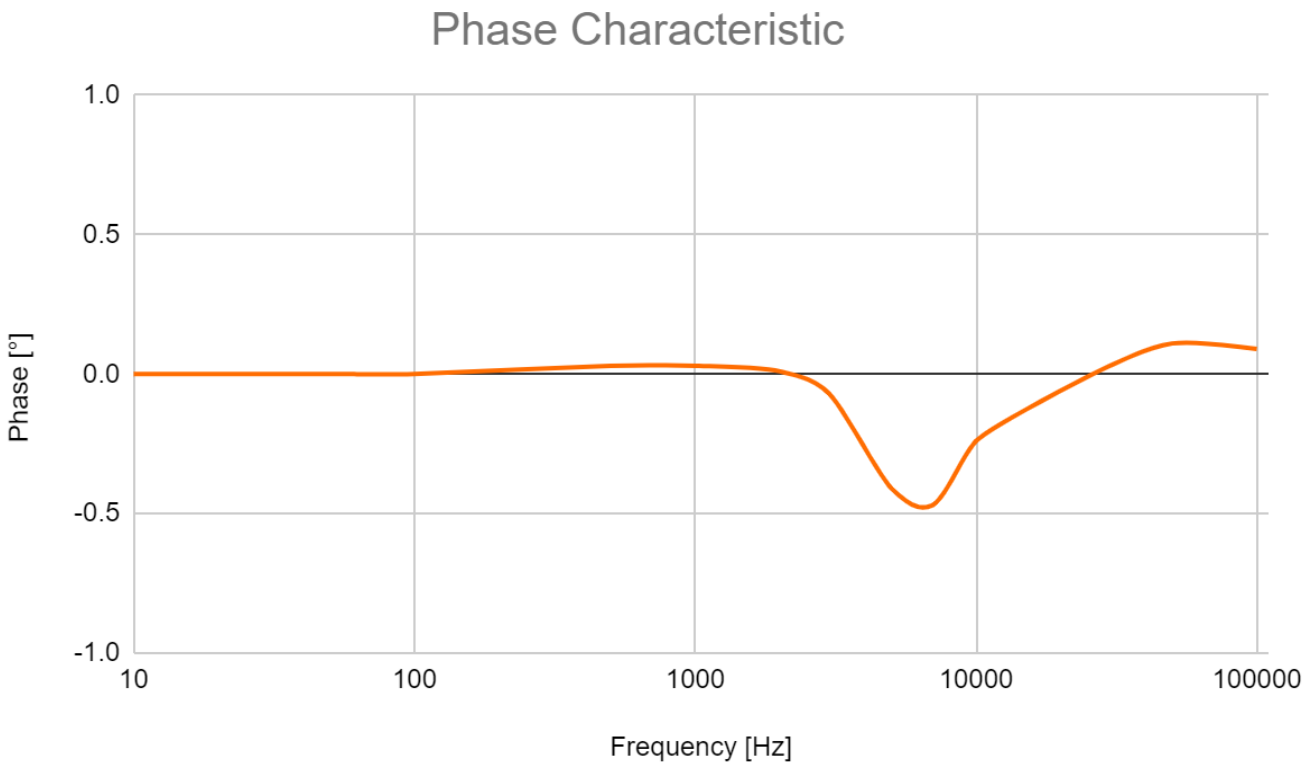
All dimensions are in [mm]

Specifications

DSI 10A			
Input Specifications		**Environmental specifications**	
Input connector type	4 mm Banana	**Dimensions**	65 x 44 x 24 mm
Current range	10 A dc or ACpeak	**Power supply**	5 V
Accuracy	0,5% of reading	**Current consumption**	max. 30 mA
Phase error	< 0.1° (50 Hz)	**Operating temperature**	-40 °C to +55 °C
Bandwidth	1 kHz (0.05 dB, 0.1°) 10 kHz (0.1 dB, 1.5°) 100 kHz (0.2 dB, 6°)	**Isolation**	4 kVp
TEDS	Fully Supported	**Safety**	600 V CAT III
Overload capability	100 A nominal current for < 1 sec		
Zero offset	20 mA		
Temperature coefficient	40 ppm/K		

Amplitude and Phase Characteristics





Document version history

Revision Number: 1
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Version	Date [yyyy.mm]	Notes
V21-1	2021-08	Initial document creation