Current Clamp-On - MK500ID

High precision DC and AC current clamp-on for galvanically isolated measurement up to 750 A

Features

- High precision clamp-on current transducer based on the ultra stable Danisense closed loop flux gate technology
- Ø39 mm aperture
- 50-60Hz current measurement accuracy ±0.1%
- High Frequency bandwidth
- 4 meter cable
- Current output with D-sub-9
- Voltage output accessories available
- Linearity error 20 ppm
- Operating temperature range -40°C to 85°C

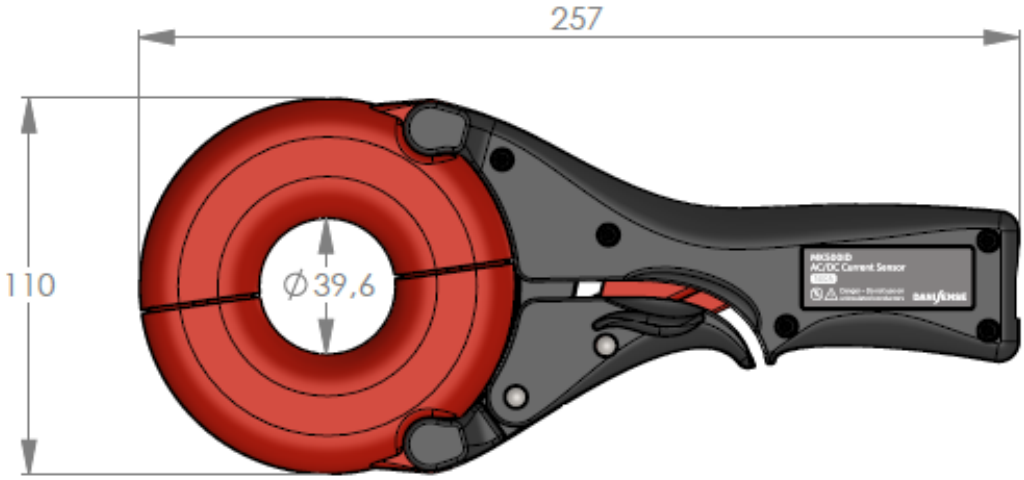
Applications

- EV battery testing
- Temporary installations
- Calibration and in-field analysis
- EV inverter evaluation
- PV power generation
- Retrofit and maintenance purposes
- Transmission and distribution
- Wind, solar and energy

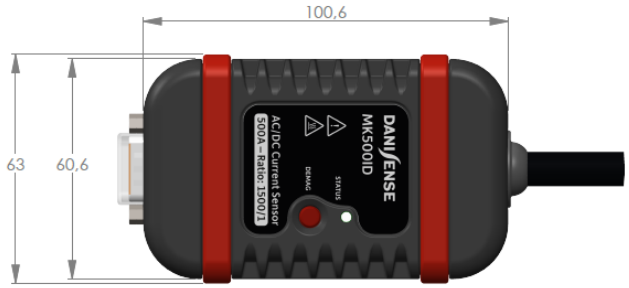
Electrical specifications at Ta=23°C, Vs = ±15 V supply voltage

Parameter		Symbol	Unit	Min	Typ.	Max	Comment
Nominal primary AC current		I_{PN} AC	Arms			500	
Nominal primary DC current		I_{PN} DC	A	-500		500	
Measuring range		I_{PM}	A	-750		750	
Overload capacity		$\hat{I}_{OL}$	A			1500	Non-measured, 100ms
Nominal secondary current		I_{SN}	mA	-333		333	At nominal primary current
Primary / secondary ratio				1500		1500	$I_{primary}/I_{secondary}$
Measuring resistance		R_M	Ω		3		
Linearity error		ε_L	%	0.002%			% refers to reading
Total accuracy	DC to 100Hz	Ɛtot	%	0.1%			% refers to nominal current
	<1kHz			0.2%			
	<10kHz			0.4%			
	<100kHz			10%			
Phase shift	DC to 100Hz	ɵ	°	0.05°			
	<1kHz			0.1°			
	<10kHz			1°			
	<100kHz			10°			
Power supply voltages			V	±14.25		±15.75	
Operating temperature range			°C	-40		85	


MK500ID
500A – Ratio: 1500/1
DANISENSE

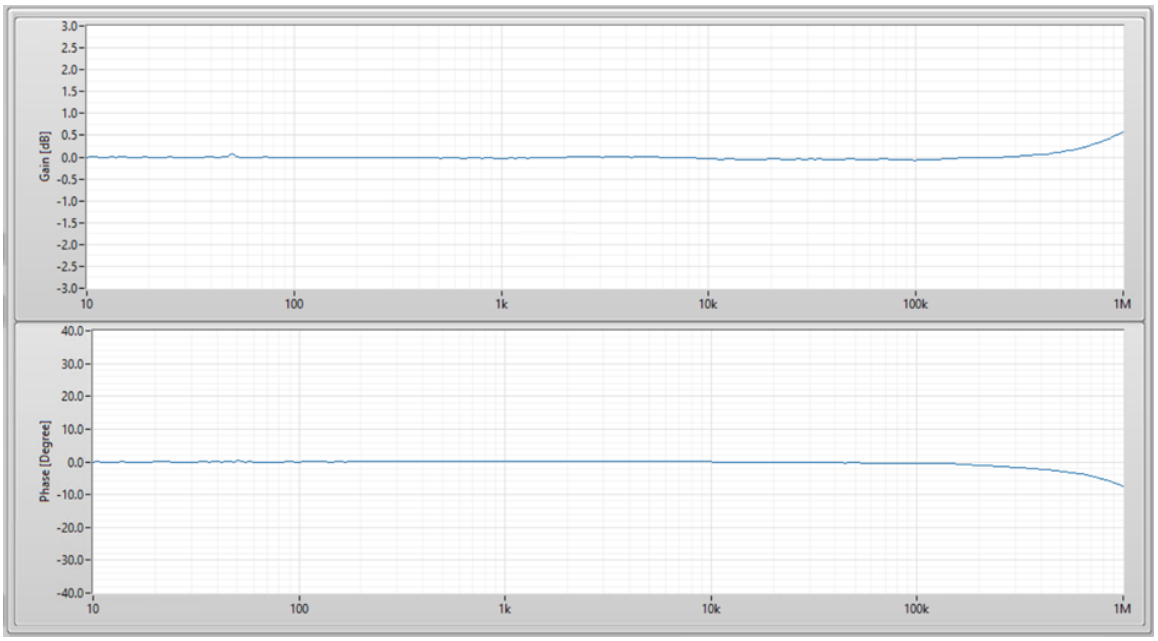

257
110
Ø39,6


35
27


100,6
63
60,6
DANISENSE
MK500ID
AC/DC Current Sensor
500A – Ratio: 1500/1


37,4
34,4

Frequency characteristics



Pin out description

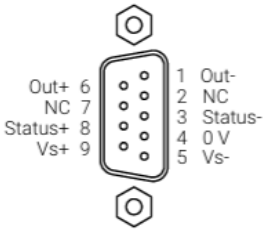
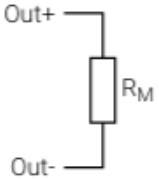


Figure 7: D-sub-9 connection pinout

1	Out-	Measurement output negative terminal
2	NC	No connection
3	Status-	Status signal negative terminal
4	0 V	0 V connection for supply voltage
5	V_S-	Negative supply voltage
6	Out+	Measurement output positive terminal
7	NC	No connection
8	Status+	Status signal positive terminal
9	V_S+	Positive supply voltage



External measurement resistor connection