

50~10,000A

High Accuracy & Low Phase Shift

CURRENT TRANSDUCERS for Power Meters



		DS50ID	DS200ID	DS300ID	DS600ID	DM1200ID	DL2000ID	DR5000IM	DR10000IM
Measuring range	I_{PM}	150A	370A	500A	1000A	1800A	3000A	8000A	11000A
Nominal I _{AC}	I_{PN_AC}	50Arms	200Arms	300Arms	600Arms	1200Arms	2000Arms	5000Arms	7000Arms
Nominal I _{DC}	I_{PN_DC}	75A	300A	450A	900A	1500A	3000A	8000A	10000A
Conversion ratio	(n1:n2)	1:500	1:500	1:1000	1:1500	1:1500	1:1500	1:2500	1:2500
Linearity	ϵ_L	1.2μA / 8ppm	1.2μA / 2ppm	0.7μA / 1.5ppm	0.6μA / 1ppm	1μA / 1ppm	2μA / 1ppm	3.2μA / 1ppm	4μA / 1ppm
Electric offset	I_{OE}	12μA / 80ppm	12μA / 20ppm	6.3μA / 14ppm	5μA / 8.33ppm	12μA / 12ppm	12μA / 6ppm	9.6μA / 3ppm	20μA / 5ppm
Bandwidth (-3dB)	$f_{(-3dB)}$	>1MHz	>1MHz	>1MHz	>500kHz	>300kHz	>300kHz	>100kHz	>100kHz
Amplitude error (small signal)	ϵ_G	10Hz - 5kHz 0.01% 5kHz - 100kHz 1.0% 100kHz - 1MHz 20.0%	10Hz - 5kHz 0.01% 5kHz - 100kHz 1.0% 100kHz - 1MHz 20.0%	10Hz - 2kHz 0.08% 2kHz - 10kHz 0.12% 10kHz - 100kHz 2.10%	10Hz - 2kHz 0.01% 2kHz - 10kHz 0.20% 10kHz - 100kHz 2.50%	10Hz - 2kHz 0.01% 2kHz - 10kHz 1.50% 10kHz - 100kHz 3.00%	10Hz - 2kHz 0.01% 2kHz - 10kHz 1.50% 10kHz - 100kHz 3.00%	10Hz - 1kHz 0.05% 1kHz - 5kHz 1.50% 5kHz - 30kHz 15.00%	10Hz - 1kHz 0.05% 1kHz - 5kHz 1.50% 5kHz - 30kHz 15.00%
Phase shift (small signal)	θ	10Hz - 5kHz 0.1° 5kHz - 100kHz 0.5° 100kHz - 1MHz 5.0°	10Hz - 5kHz 0.1° 5kHz - 100kHz 0.5° 100kHz - 1MHz 5.0°	10Hz - 2kHz 0.02° 2kHz - 10kHz 0.03° 10kHz - 100kHz 1.40°	10Hz - 2kHz 0.03° 2kHz - 10kHz 0.04° 10kHz - 100kHz 1.00°	10Hz - 2kHz 0.04° 2kHz - 10kHz 0.50° 10kHz - 100kHz 3.00°	10Hz - 2kHz 0.04° 2kHz - 10kHz 0.50° 10kHz - 100kHz 3.00°	10Hz - 1kHz 0.05° 1kHz - 5kHz 0.50° 5kHz - 30kHz 3.00°	10Hz - 1kHz 0.05° 1kHz - 5kHz 0.50° 5kHz - 30kHz 3.00°
Power supply	U_c	±15V±5%	±15V±5%	±15V±5%	±15V±5%	±15V±5%	±15V±5%	AC: 90V to 295V 50/60Hz	
Operating temp.	T_a	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +65°C	-40°C to +65°C	Head 0~+70°C; Controller 0~+45°C	
Diameter of hole	ϕ	27.6mm	27.6mm	27.6mm	27.6mm	45.0mm	68.0mm	150.0mm	140.0mm

Please consult us for 1V (or 10V) voltage output models

Double core balanced Fluxgate technology

- High EMC immunity
- Excellent linearity: <0.001%
- Extremely low phase shift: <0.04° (10Hz~2kHz)
- Large bandwidth
- AC error: <0.01%

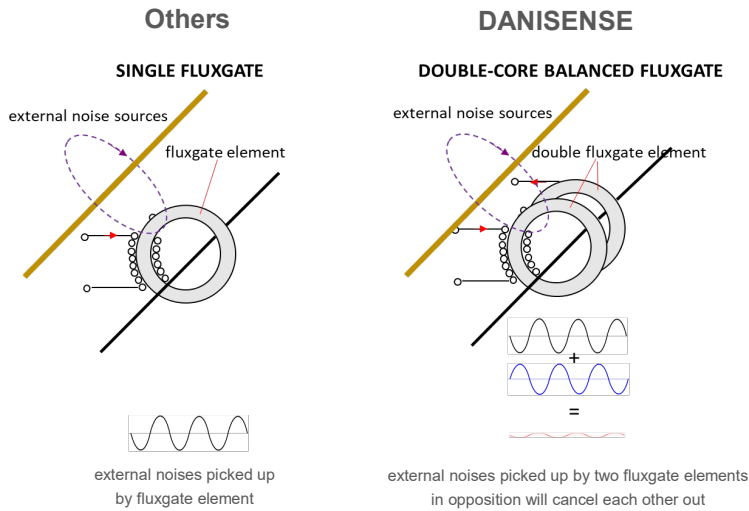


ISO 9001:2015

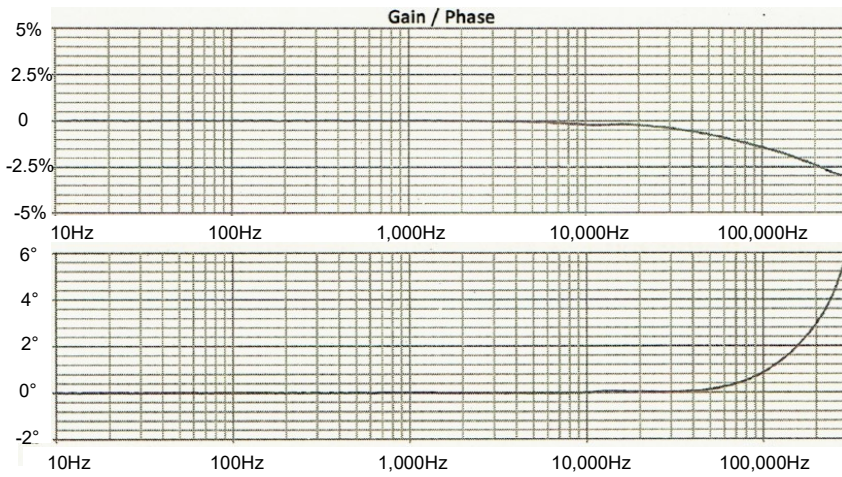
Compatible with most major power meters in the market



High EMC immunity

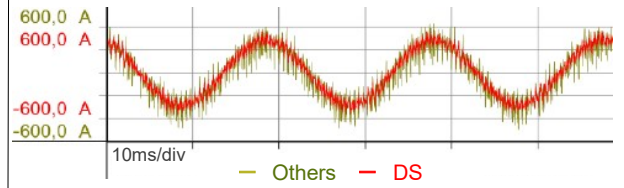


Excellent frequency characteristics (DS600ID)

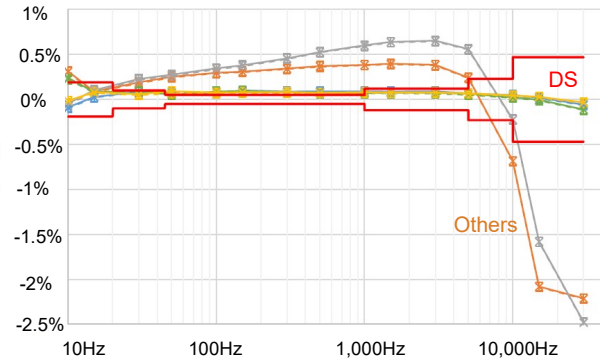


DS600ID benchmark

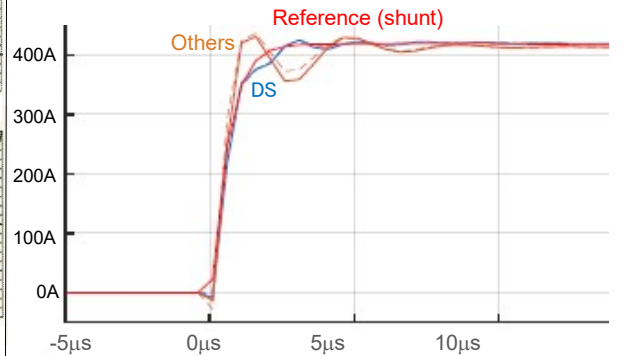
Inverter's noises



Amplitude error vs. frequency



Step response (0 → 400A)



Example of an inverter evaluation circuit

