

Model 4DS

Split AC Current Transducer

Made in the USA

- Input 10A to 1500A
- Output 2.5, 5, or 10VDC
- Accuracy: 0.5/1.0
- Windows from 0.5" to 8"



The Model 4DS is an AC current to DC voltage transducer that rectifies a 60Hz sine wave current to obtain a DC output. Since only internal passive rectifiers are used (no internal power supply), the conversion to DC is true RMS AC sine waves only. A true RMS version for non-sinewaves is available. The output voltage is set to 2.5, 5, or 10VDC at full scale input and is meant to be connected to high impedance. There is a tradeoff between ripple and response time.

Specifications

Input Current	1500AC current max, sinewave, single phase 50/60/400Hz
Voltage Rating	600VAC, tested with 2.5kVDC for 60 seconds
Output voltage	2.5, 5, or 10VDC at Full Range. True RMS Conversion for AC sine waves only
Ratio and Linearity Accuracy	±1% from 10% to 100% / ±3% at 5% of Full Scale/ ±5% at 2% of Full Scale
Response Time	Approximately 500 milliseconds from 10% to 90% of amplitude for CT's over 100A
Output Resistance	100 to 3,500Ω, depending on current rating
Interface Resistance	100kΩ minimum. Other instrument impedances can be interfaced on special order
Ambient Temperature	Less than 0.05% from -20°C to 55°C
Lead Wires	8ft. twisted black and red, 22AWG per UL1015. STP available upon request

MOST POPULAR SIZES

PART NUMBER	INPUT	OUTPUT	WINDOW SIZES
4DS-25A:2.5VDC-0.5"	25A	2.5VDC	0.5"
4DS-50A:2.5VDC-0.5"	50A	2.5VDC	0.5"
4DS-50A:2.5VDC-0.75"	50A	2.5VDC	0.75"
4DS-100A:5VDC-0.5"	100A	5VDC	0.5"
4DS-200A:5VDC-1.0"	200A	5VDC	1.0"
4DS-259A:5VDC-1.0"	250A	5VDC	1.0"
4DS-300A:10VDC-6.0"	300A	10VDC	6.0"
4DS-400A:5VDC-1.5"	400A	5VDC	1.5"
4DS-500A:5VDC-2.0"	500A	5VDC	2.0"
4DS-600A:5VDC-2.0"	600A	5VDC	2.0"
4DS-1200A:10VDC-2.0"	1200A	10VDC	2.0"
4DS-1500A:5VDC-2.5"	1500A	5VDC	2.5"
4DS-2000A:10VDC-2.0"	2000A	10VDC	2.0"
4DS-2800A:10VDC-4.0"	2800A	10VDC	4.0"
4DS-4200A:10VDC-8.0"	4200A	10VDC	8.0"
4DS-6000A:10VDC-8.0"	6000A	10VDC	8.0"

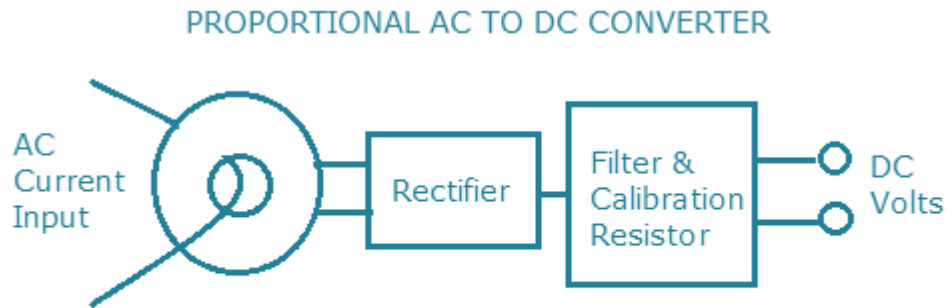
HOW TO ORDER

Part Number: 4DS-XXX: YY-WxL

- XXX=Input Full Scale Current
- YY=Output VDC
- W= Width of Window
- L=Length of Window

Example: 4DS-100A:5VDC-0.5x0.5

Schematic



DC Output will be True RMS for Sine waves only
For non-sine waves use a True RMS Current Transformer