



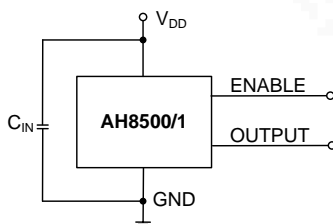
# New Product Announcement

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AH8500/1 & AH8502/3

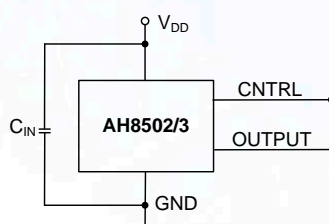
## AH8500/1 & AH8502/3 – Micropower Linear Hall Effect Sensor Family with Enable/Control Pin and High Accuracy Options

### Typical Application Circuit

**AH8500/AH8501**



**AH8502/AH8503**



### Electrical Characteristics

Part Number	Operating Voltage	Typical IC supply current	Typical Sensitivity	Sensitivity Accuracy at 25C	Typical Linear Magnetic Range	Output Voltage Span	V Null (B = 0G)	Operating Temp.	Package
	(V)	(mA)	(mV/G)	(%)	(G)	(V)	(V)	(°C)	
AH8500	1.6 to 3.6	8.9uA in Sleep Mode 12uA at 20Hz 1.0mA in Auto-Run Mode	2.10 @ 1.8V 3.55 @ 3V 3.82 @ 3.3V	±15%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6
AH8501	1.6 to 3.6	8.9uA in Sleep Mode 12uA at 20Hz 1.0mA Auto-Run Mode	2.25 @ 1.8V 3.80 @ 3V 4.11 @ 3.3V	±3%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6
AH8502	1.6 to 3.6	13uA in Micropower Mode 1.0mA in Turbo Mode	2.10 @ 1.8V 3.55 @ 3V 3.82 @ 3.3V	±15%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6
AH8503	1.6 to 3.6	13uA Micropower Mode 1.0mA in Turbo Mode	2.25 @ 1.8V 3.80 @ 3V 4.11 @ 3.3V	±3%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6

### Ordering Information

Device	Packaging (Note 1 and 2)	Reel size or Bulk	Tape width	Quantity
AH8500-FDC-7	U-DFN2020-6	7"	8mm	3k
AH8501-FDC-7	U-DFN2020-6	7"	8mm	3k
AH8502-FDC-7	U-DFN2020-6	7"	8mm	3k
AH8503-FDC-7	U-DFN2020-6	7"	8mm	3k



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**AH8500/1 & AH8502/3**

## AH8500/1 & AH8502/3 – Micropower Linear Hall Effect Sensor Family with Enable/Control Pin and High Accuracy Options

### Linear Hall Portfolio

Part Number	Operating Voltage	Typical IC Supply Current	Typical Sensitivity	Sensitivity Accuracy at 25C	Typical Linear Magnetic Range	Output Voltage Span	V Null (B = 0G)	Operating Temp.	Package
	(V)	(mA)	(mV/G)	(%)	(G)	(V)	(V)	(°C)	
AH49E	3 to 6.5	3.5	1.6		±1000	0.8 to V <sub>CC</sub> -0.8	V <sub>CC</sub> /2	-40 to 85	TO92S SOT23
AH49F	3 to 8	3	2.1	±19%	±800	0.8 to V <sub>CC</sub> -0.8	V <sub>CC</sub> /2	-40 to 105	TO92S SOT23 U-DFN2020-6
AH49H	3 to 8	2	0.33		±3000	0.8 to V <sub>CC</sub> -0.8	V <sub>CC</sub> /2	-40 to 105	TO92S SOT23
AH8500	1.6 to 3.6	8.9uA in Sleep Mode 12uA at 20Hz 1.0mA in Auto-Run Mode	2.10 @ 1.8V 3.55 @ 3V 3.82 @ 3.3V	±15%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6
AH8501	1.6 to 3.6	8.9uA in Sleep Mode 12uA at 20Hz 1.0mA Auto-Run Mode	2.25 @ 1.8V 3.80 @ 3V 4.11 @ 3.3V	±3%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6
AH8502	1.6 to 3.6	13uA in Micropower Mode 1.0mA in Turbo Mode	2.10 @ 1.8V 3.55 @ 3V 3.82 @ 3.3	±15%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6
AH8503	1.6 to 3.6	13uA Micropower Mode 1.0mA in Turbo Mode	2.25 @ 1.8V 3.80 @ 3V 4.11 @ 3.3V	±3%	±430	0 to V <sub>DD</sub>	V <sub>DD</sub> /2	-40 to 85	U-DFN2020-6

### To find out more information:

Linear Hall Portfolio page:

<http://www.diodes.com/products/catalog/browse.php?parent-id=198>

AH8500 Datasheet:

<http://www.diodes.com/datasheets/AH8500.pdf>

AH8501 Datasheet:

<http://www.diodes.com/datasheets/AH8501.pdf>

AH8502 Datasheet:

<http://www.diodes.com/datasheets/AH8502.pdf>

AH8503 Datasheet:

<http://www.diodes.com/datasheets/AH8503.pdf>