

The NVE GMR Current Sensor Evaluation Assembly (PN AG003-01) was created to facilitate laboratory experimentation and development using GMR current sensors. The kit consists of four NVE current sensors (PN AA003-02)* assembled to a printed circuit board PN AG002-01). The PCB has four trace geometries to simulate various PCB current ranges. The details are as follows:



Trace Number	Trace Width (inches)	Maximum Trace Input Current (A)	Nominal Sensitivity ($[\text{mV/V}]_{\text{OUT}}/A_{\text{IN}}$)
1	0.090	± 9.0	3.5
2	0.060	± 6.0	3.7
3	0.010	± 0.25	4.0
4	7X0.010	± 0.25	20.0

Notes:

1. The maximum current is based on the rated current carrying capability of each trace geometry.
2. The minimum current the assembly can sense is arbitrary. The absolute value is dependent on many system design parameters and must be determined by the user.
3. For functional characteristics of the AA003-02 current sensor, refer to the AA003-02 Sensor Bulletin.
4. Refer to NVE's Engineering & Application Notes, Appendix APP 003, "GMR Current Sensing" for additional technical details.
5. The AG003-01 assembly can be subdivided into four separate sub-assemblies. All connections to each input trace and current sensor are isolated on each sub-section.
6. The AC004-01 part number has been changed to AA003-02.

