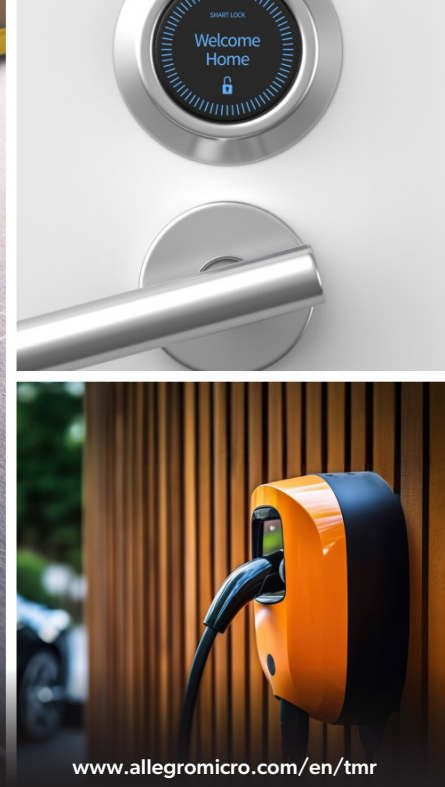




# The Future of Sensing: XtremeSense™ TMR Technology

Revolutionary advances in magnetic sensor capabilities



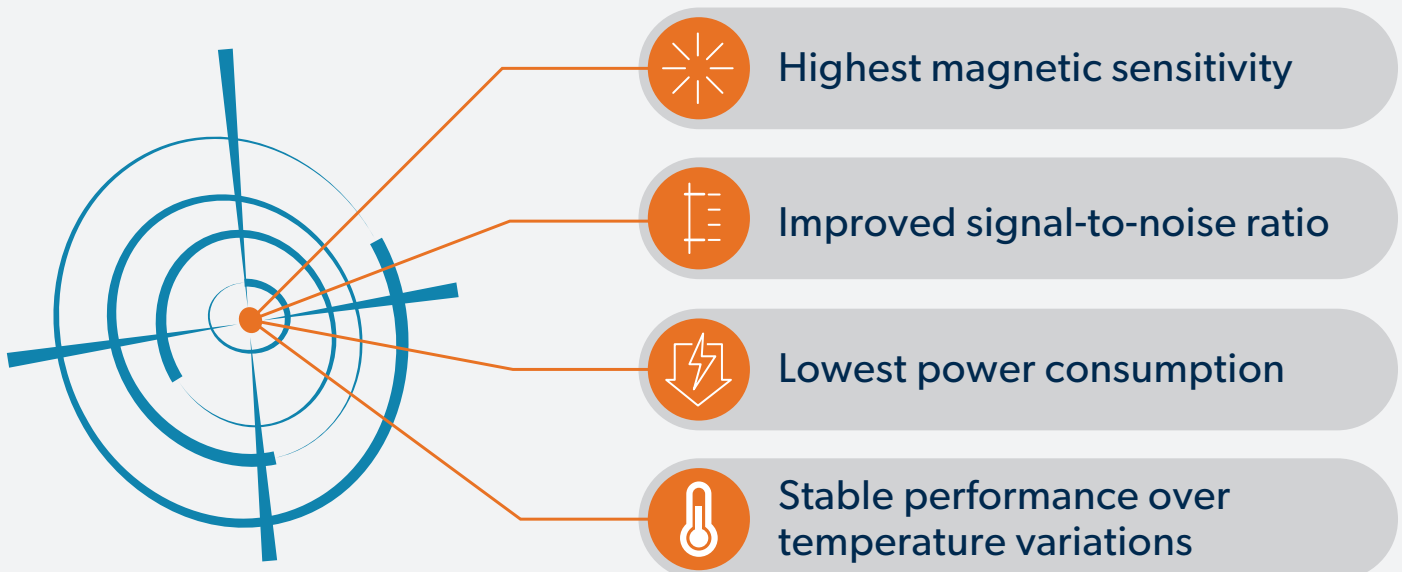
[www.allegromicro.com/en/tmr](http://www.allegromicro.com/en/tmr)

Allegro's XtremeSense™ TMR technology (Tunnel Magnetoresistance) provides the highest magnetic sensitivity, the lowest power consumption, stability over temperature variations and the smallest size by comparison to other magnetic technologies such as Hall, AMR, and GMR. Accelerating various applications from renewable energy systems, xEV, and connected consumer devices, Allegro's XtremeSense™ TMR technology enables current and position sensors to achieve industry-leading performance figures and cost levels.

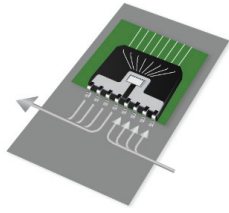
## Allegro XtremeSense™ TMR technology provides:

- 1. Efficient power conversion:** Accurately measures the full dynamic range and provides a cleaner signal.
- 2. Adoption of wide bandgap transistors:** Utilize wide bandgap transistors such as GaN and SiC, which require high bandwidth current sensors, without sacrificing accuracy and resolution.
- 3. Reduce energy footprint:** Delivers the lowest power consumption in any magnetic sensing product category.

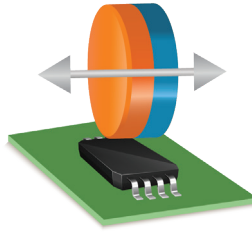
Allegro's XtremeSense™ TMR technology enables current and position sensors to achieve industry-leading performance figures.



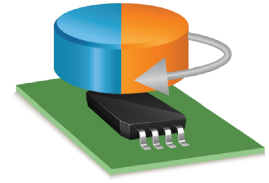
XtremeSense™ TMR technology is an ideal fit for high growth automotive, industrial and consumer applications requiring greater accuracy and speed.



Current Sensor



Position Sensor



Angle Sensor

## Key Products and Solution for TMR Applications

Product Portfolio	XtremeSense Product	Key Description
Current Sensors (0 - 50A)	<a href="#">CT110</a>	High Linearity/High Resolution Contact Current Sensor
	<a href="#">CT415</a>	TMR Current Sensor with Ultra-Low Noise and <1% Total Error
	<a href="#">CT416</a>	
	<a href="#">CT417</a>	
	<a href="#">CT418</a>	
	<a href="#">CT425</a>	TMR Current Sensor with Ultra-Low Noise and <0.7% Total Error
	<a href="#">CT426</a>	
	<a href="#">CT427</a>	
	<a href="#">CT428</a>	
	<a href="#">CT430</a>	TMR Current Sensor with Ultra-Low Noise, <0.7% Total Error and Common-Mode Field Rejection in SOICW-16 Package
	<a href="#">CT431</a>	
	<a href="#">CT432</a>	
	<a href="#">CT433</a>	
Current Sensors (0 - >1000A)	<a href="#">CT220</a>	High Linearity, High-Resolution TMR Contactless Current Sensor in Miniature Form Factor
	<a href="#">CT455</a>	1 MHz Bandwidth Contactless Current Sensor with programmable gain and offset
	<a href="#">CT456</a>	
Switches and Latches	<a href="#">CT8111</a>	Integrated Unipolar TMR Switch
	<a href="#">CT8112</a>	
	<a href="#">CT8122</a>	Integrated Bipolar TMR Switch/Latch
	<a href="#">CT8131</a>	Integrated Omnipolar TMR Switch
	<a href="#">CT8132</a>	
Position Sensor	<a href="#">CT8150</a>	Ominipolar TMR Analog Sensor with Dual Analog and Digital Output Operation Capability
	<a href="#">CT8152</a>	
	<a href="#">CT100</a>	1D TMR Linear Sensor with Analog Differential Outputs
	<a href="#">CT310</a>	2D TMR Angle Sensor with Sine/Cosine Outputs

