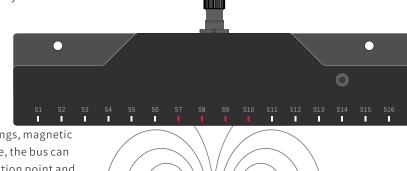
MGS series (Line following sensor)

High accuracy magnetic navigation sensor

Hinson series high-precision magnetic navigation sensor has a detection accuracy of 1mm, which is especially suitable for high-precision magnetic stripe navigation.

The relative position of the detected magnetic field is used for the auxiliary positioning and docking of the AGV to obtain higher navigation, positioning and parking accuracy. MGS series magnetic navigation sensors support fork

road selection instructions, sensitivity settings, magnetic field polarity selection, etc. At the same time, the bus can obtain the point quantity data of each detection point and provide information output, which is the best choice in magnetic navigation AGV.



(1) 1mm displacement output

When a magnetic field is detected, the relative position between the strongest point of the magnetic field and the sensor center (can be set) is output with 1mm.

Support fork choice

The upper computer sends a fork road selection command to the sensor, and the sensor automatically shields the magnetic strips in the non-selected direction, so that the AGV can smoothly bend without jitter.

||||| Sensitivity detection

The detection sensitivity of the sensor can be set through the configuration software to adapt to the detection requirements at different installation heights.

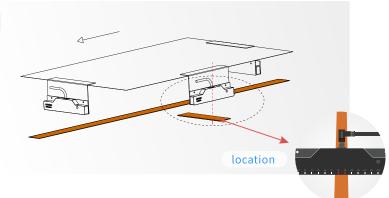
Magnetic field polarity setting

The sensor can sense only Spole or N pole or both N/S pole according to the navigation magnetic strip setting.

(III) AGV high accuracy auxiliary positioning docking

1mm high-accuracy detection data, more suitable for fine positioning and docking of AGV.





Product Model	CNS-MGS-080N	CNS-MGS-160N	
Features			
Detection height	0~50mm		
Detection range ²	±70mm ±75mm		
Detection accuracy ³	3mm	1mm	
Output switch points ¹	16 Switch Points		
Detection point distance	20mm	10mm	
Sensing polarity	N 、S 、NS (software Is Configurable)		
Detecting magnetic field strength	1.5~95 Gauss		
Sensor sensitivity	Level 0~9 (software Is Configurable)		
Number of magnetic stripes	3		
Magnetic field strength detection data	•	•	
Magnetic stripe position deviation data	•	•	
Route selection	Right, Left And Straight		
Interfaces			
RS232-HS	•	•	
RS485-HS	•	•	
RS485-MODBUS	•	•	

RS232-HS	•	•
RS485-HS	•	•
RS485-MODBUS	•	•
CAN-HS	•	•
CANOPEN	•	•

High accuracy magnetic

navigation sensor

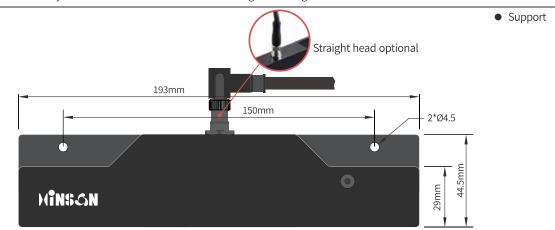
Mechanics/electronics

Voltage	DC 10~32V (24V±10%)
LED	1*LED
Cable length	1.5m / 3m /6m (Optional)
Protecting Class	IP65

Ambient data

Working environment	Indoor -10 \sim 50 $^{\circ}$ C < 80 $^{\circ}$ RH(No condensation, No frost)
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- *1.CNS-MGS-080N inside detection points is 8, The 16-bit switch signal is simulated by software, and the inside detection points of CNS-MGS-160N are 16;
- *2.Taking the detection center of the sensor as the zero point, the left and right detection ranges of CNS-MGS-080N are 70mm each, and the left and right detection ranges of CNS-MGS-160N are 75mm each;
- *3.Detection accuracy os related to the sensor's installation height and magtic medium's dimension.



magnetic navigation sensor

MLS series High accuracy magnetic navigation sensor

Track Guidance

Navigation Magnetic track guidance, grid positioning

→ Magnetic Nail Correction

Suitable for indoor and outdoor operation inertial navigation magnetic nail correction

P Direction Selection

Support straight, left fork, right fork navigation magnetic stripe selection

Multiple signal output

Support switch signal and magnetic nail position deviation signal output, support magnetic field strength signal output

Wider Detection Range

160-640mm detection range, more than 1 length (model) can be selected, More suitable for large and heavy-duty handling AGV

||||| Magnetic Sensitivity

The sensor can detect the magnetic field strength value of each point, and the sensor sensitivity level 0-9 can be configured by software

Magnetic pole induction (S pole/N pole)

The sensor can only sense S pole or N pole according to the navigation magnetic strip setting, N/S pole software can be configured

Magnetic field interference filtering

After detecting the magnetic field signal of the magnetic point, define the minimum value to control the magnetic field intensity threshold and sensitivity of the detected magnetic point, so as to filter the magnetic field interference 16.8 mm

More suitable for large and heavy-load handling AGV guidance and positioning and magnetic nail correction for inertial navigation.

Detection range length can be selected

160mm/320mm/480mm/640mm

Product Model	CNS-MLS-160N	CNS-MLS-320N	CNS-MLS-480N	CNS-MLS-640N
eatures				
Detection height	0~50mm			
Detection range ¹	±75mm	±155mm	±235mm	±315mm
Detection accuracy ²		1r	nm	
Output switch points	16	32	48	64
Detection point distance	10mm			
Sensing polarity	N 、S 、NS (software Is Configurable)			
Detecting magnetic field strength	1.5~165 Gauss			
Sensor sensitivity	Level 0~9 (software Is Configurable)			
Number of magnetic stripes	3			
Magnetic field strength detection data	•			
Magnetic stripe position deviation data	•		•	
Route selection	Right, Left And Straight			
nterfaces				
RS232-HS	•			
RS485-HS	•			
RS485-MODBUS				
CAN-HS				
CANOPEN				
Machanica/alactyonica				

Mechanics/electronics

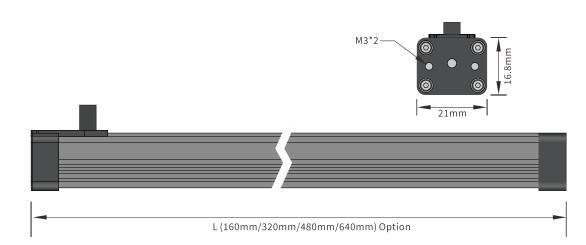
Voltage	DC 10~32V (24V±10%)	
LED	1*LED	
Cable length	1m (5m-Optional)	
Protecting Class	IP65	

Ambient data

Working environment	Indoor -10~50°C	<80% RH(No condensation, No frost)
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^{*1.}Taking the detection center of the sensor as the zero point, the detection range is right/left;

Support



^{*2.}Detection accuracy is related to the sensor's installation height and magtic medium's dimension.