

# YUTTAH



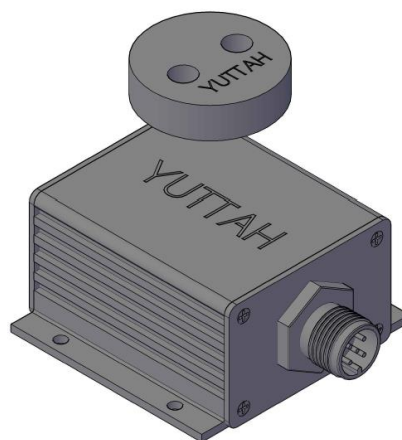
## Angle Sensor ANG4

[www.yuttah.com](http://www.yuttah.com)

The sensor ANG4 is a precise angle sensor, using hall effect technology. The ANG4 provides angle measurement for all ranges up to 360 ° and available with Analog and Digital output options.

## Technology

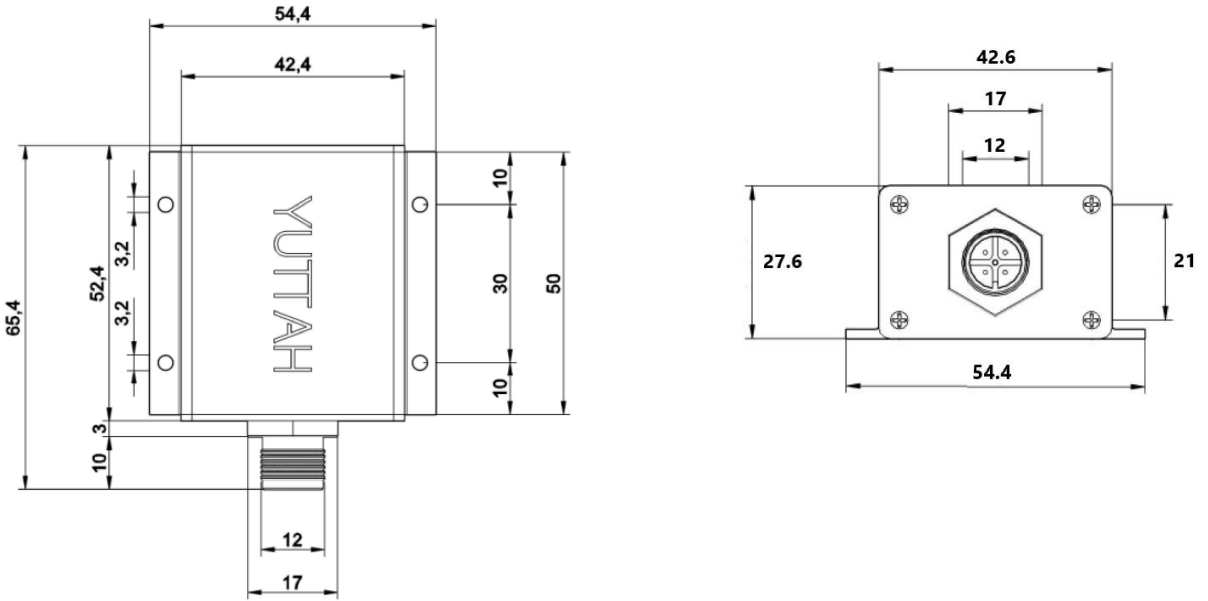
- High-precision angle sensor
- Hall effect technology
- Non-contact working principle
- With an external position magnet
- Available with all measurement ranges up to 360 °
- Available with Analog and Digital outputs
- Easy mounting and direct application



## Specifications

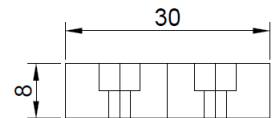
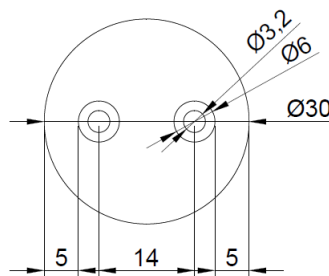
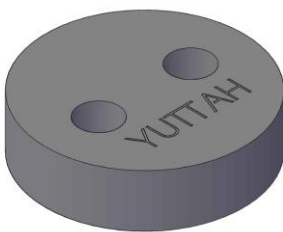
<b>Measurement ranges</b>	0 – 360 °
<b>Output options</b>	<ul style="list-style-type: none"><li>• Analog Outputs: 4 – 20 mA, 0 – 10 V, 0 – 5 V</li><li>• Digital Outputs: SSI, CANopen, RS422</li><li>• Other interfaces: on request</li></ul>
<b>Resolution</b>	0.1°
<b>Linearity</b>	±0.5°
<b>Supply Voltage</b>	Flexible 8 – 36 VDC or 5 VDC (+/- 5%)
<b>Excitation Current</b>	max. 30 mA
<b>Protection Class</b>	IP67 / IP69
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Housing</b>	Anodized Aluminum
<b>Mounting</b>	M3 bolts
<b>Weight</b>	approx. 220 g
<b>Shock</b>	DIN EN 60068-2-27:2010, 100 g/11 ms, 100 shocks
<b>Vibration</b>	DIN EN 60068-2-6:2008, 20 g 10 Hz-2 kHz, 10 cycles
<b>EMC</b>	DIN EN 61326-1:2013

Drawings



Dimensions in mm

Position Magnet AMAG1



- Customer customized magnets available on request
- Dimensions in mm

## Order Codes / Analog Output

ANG4 - 2 - 3 - 4 - 5

1 Model

ANG4

2 Supply Voltage

SV1: Flexible 8 – 36 VDC  
SV2: 5 VDC (+/- 5%)

3 Output

A1: 4 – 20 mA  
A2: 0 – 10 V  
A3: 0 – 5 V

4 Measurement range

0-360 °

5 Rotation direction

10: clockwise  
20: counter clockwise

Example: ANG4 - SV1 - A1 - 90 - 10

## Order Codes / CANopen Output

ANG4 - 2 - 3 - 4

1 Model ANG4

2 Supply Voltage SV1: Flexible 8 – 36 VDC  
SV2: 5 VDC (+/- 5%)

3 Output CANopen

4 Rotation direction 10: clockwise  
20: counter clockwise

Example: ANG4 - SV1 - CANopen - 10

## Order Codes / SSI Output

ANG4 - 2 - 3 - 4

1	<b>Model</b>	ANG4
2	<b>Supply Voltage</b>	SV1: Flexible 8 – 36 VDC SV2: 5 VDC (+/- 5%)
3	<b>Output</b>	SSI (Serial Synchronous Interface)
4	<b>Resolution</b>	128, 256, 512, 1024, 2048, 4096, 8192

Example: ANG4 - SV1 - SSI - 1024

## Order Codes / Incremental RS422 Output

ANG4 - 2 - 3 - 4

1

Model

ANG4

2

Supply Voltage

SV1: Flexible 8 – 36 VDC  
SV2: 5 VDC (+/- 5%)

3

Output

RS422

4

Resolution

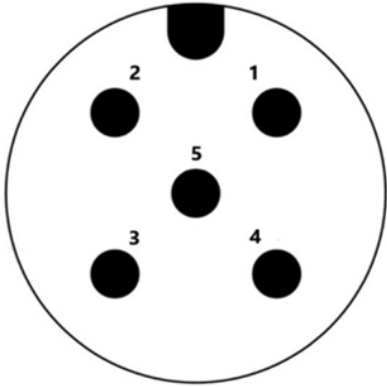
128, 256, 512, 1024, 2048, 4096,  
8192

Example: ANG4 - SV1 - RS422 - 1024

## PINOUT

### Analog Output

M12 male connector, 5 pin



Connector pin no.

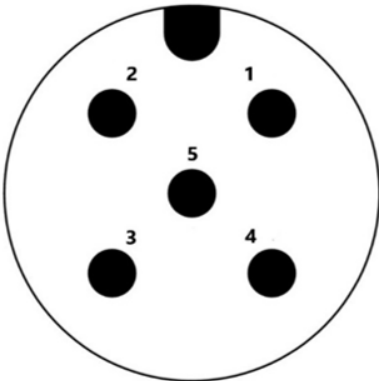
- 1
- 2
- 3
- 4
- 5

Output signals

- Excitation GND
- Output GND
- +V (excitation voltage)
- Analog output
- Do not connect

### CANopen Output

M12 male connector, 5 pin



Connector pin no.

- 1
- 2
- 3
- 4
- 5

Output signals

- GND
- Do not connect
- +V (excitation voltage)
- CAN-H
- CAN-L



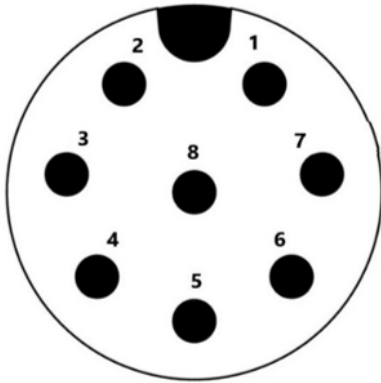
## PINOUT

### SSI Output

M12 male connector, 8 pin

Connector pin no.

Output signals



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

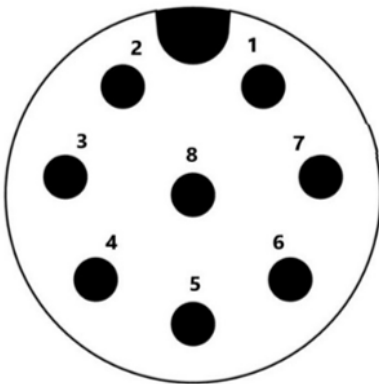
- GND
- Do not connect
- +V (excitation voltage)
- Data-
- Data
- Clock
- Clock-
- Do not connect

### Incremental RS422 Output

M12 male connector, 8 pin

Connector pin no.

Output signals



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

- GND
- +V (excitation voltage)
- A
- A-
- B
- B-
- Z
- Z-

## Advantages

- High precision
- High robustness
- High resistance against shocks and vibrations
- High protection class
- Non-contact technology
- Wear-free and maintenance-free
- Long lifetime
- Easy mounting and direct application
- Design flexibility

## Applications

- Industrial Applications
- Industrial Vehicles
- Communal Vehicles
- Material Handling
- Forest and Agriculture Machines
- Heavy duty applications
- Power and Energy
- Medical
- Other Applications

# YUTTAH

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YUTTAH is a leading manufacturer of sensors, located in the United Arab Emirates. Our main product lines are: Position Sensors, Angle Sensors, Inclination Sensors, Acceleration Sensors, Vibration Sensors, Temperature Sensors, Pressure Sensors and Weight Sensors.

It is our main goal to help our customers to fulfil their needs. Our quality products are designed flexible to meet the application requirements of our customers. Our mission is to help our customers in the engineering phase to reach the wished results by providing customer customized sensor solutions. Our team is highly excited to help you in the stages of your development as well as providing a lifetime support. The combination of our know-how, quality products, flexible customized solutions, extensive lifetime support, and our experienced team is the right solution for you.

