

WTE Series CAN bus inclinometer

Product introduction

Woosens WTE series CAN bus inclinometer is a low power consumption and high-performance inclinometer module. And communicate using CAN bus protocol. They are engineered with MEMs devices for reliability and built to withstand rugged applications.



Woosens WTE series CAN bus inclinometer with two interface modes: CAN bus user-defined protocol and CANopen standard protocol, and incorporates gyroscope compensations to enhance overall resolution, repeatability, and response in medium and heavy dynamic applications. The product has undergone strict production calibration, factory inspection, to ensure excellent product consistency and reliability.

Features

- High accuracy, high stability
- Power supply: 9~35V
- Gyroscope Dynamic Compensation
- IP67 Protection
- CAN bus interface
- Operating temperature: -40~+85°C

Application

Construction machinery Material handling equipment Agricultural equipment
Forklifts Cranes Fire truck Pump truck Scissor lifts Combines

With many potential applications, the WET series CAN bus inclinometer modules provide flexible and convenient command Settings, and many parameters are user-programmable.

Product specification

Electrical Specification

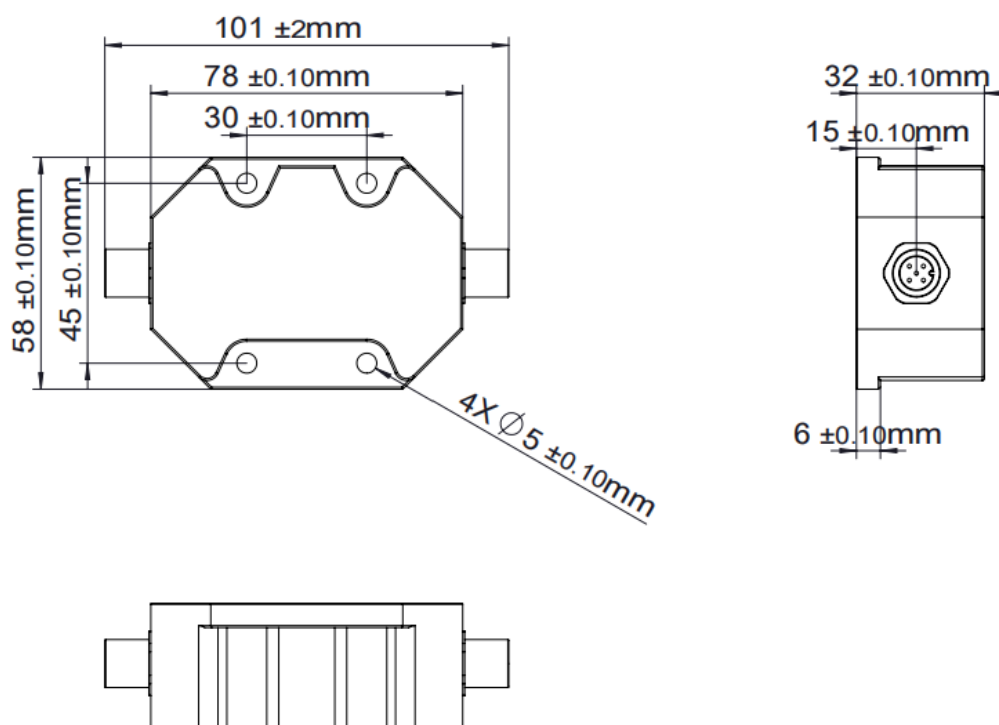
Parameter	Condition	Minimum	Typical	Maximum	Unit
Power supply	Wide voltage	9	12	35	V
Operating current		20		120	mA
Operating temperature		-40		+85	°C
Store temperature		-40		+100	°C

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Parameter	Condition	Specification
Measuring axis		X-Y(360°Measuring range is uniaxial only))
Measuring range		$\pm 15^\circ/\pm 30^\circ/\pm 90^\circ/0-360^\circ$
Output resolution		0.01°
Relative accuracy	$\pm 15^\circ$	$\pm 0.10^\circ$
	$\pm 30^\circ$	$\pm 0.10^\circ$
	$\pm 90^\circ$	$\pm 0.30^\circ$
	0-360°	$\pm 0.30^\circ$
Frequency response		10Hz
Temperature drift		0.008°/°C
Repeatability		0.05°
CAN bus speed		250kbps
Communication ID		0x05

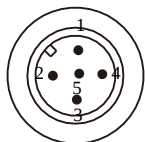
Note: The relative accuracy is measured at room temperature 25°C.

Mechanical Characteristic



Interface Definition

Interface	PIN1	PIN2	PIN3	PIN4	PIN5
CAN module	NC	VIN	GND	CAN-H	CAN-L



Ordering information

measuring range	Measuring axis	Part number
$\pm 15^\circ$	Single-Axis/Dual-Axis	WTE117-L15ZM/WTE127-L15ZM
$\pm 30^\circ$	Single-Axis/Dual-Axis	WTE117-L30ZM/WTE127-L30ZM
$\pm 90^\circ$	Single-Axis/Dual-Axis	WTE117-L90ZM/WTE127-L90ZM
0-360°	Single-Axis	WTE117-L36ZM

Communication Protocol

For the WTE Series module communication protocol, please refer to <The CAN open Inclinator Module Communication Protocol Manual V2.0>

Note: All Specifications are subjected to change without notice.