

# SmartGen

MAKING CONTROL SMARTER

## HTE05 HAND THROTTLE MODULE USER MANUAL



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**Table 1 – Software Version**

Date	Version	Note
2023-03-14	1.0	Original release.

**Table 2 – Symbol Illustration**

Symbol	Instruction
 NOTE	Highlights an essential element of a procedure to ensure correctness.
 CAUTION	Indicates a procedure or practice, which, if not strictly observed, could result in damage or destruction of equipment.
 WARNING	Indicates a procedure or practice, which could result in injury to personnel or loss of life if not followed correctly.

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## 1 OVERVIEW

**HTE05 Hand Throttle Module** applies Hall non-contact sensor with high-precision to adjust engine speed. The dual redundant outputs can simulate the potentiometer to output the signal, the voltage range can be customized programming and suitable for different engines. It can be widely used in various of machinery equipment of engineering for its compact structure, ergonomic design and easy operation.

## 2 SPECIFICATION

**Table 3 – Performance Parameters**

Items	Contents
Working Voltage	DC5V
Voltage Range	AOS1: 0.75V-3.84V ( $\pm 0.1$ )V
	AOS2: 0.375V-1.92V ( $\pm 0.1$ )V
Sensor Type	Hall Sensor
Operation Angle	108° $\pm 2^\circ$
Weight	79.5g
Vibration	5Hz~8Hz: $\pm 17$ mm; 8Hz~500Hz: a $\pm 4$ g; IEC 60068-2-6
Shock	50g, 11ms, half-sine, three consecutive shocks are applied in each of the three mutually perpendicular directions, i.e. a total of 18 times. IEC 60068-2-27
Bump Test	25g, 16ms, half-sine IEC 60255-21-2
Case Dimension	50mm x 59mm x 50mm (wire length is excluded)      Wire Length: 230mm
Working Temp.	(-40~+85)°C
Working Humidity	(20~95)%RH
Storage Temp.	(-40~+85)°C
Protection Level	Knob Shell: IP42;    Product: IP65

3 WIRINGS

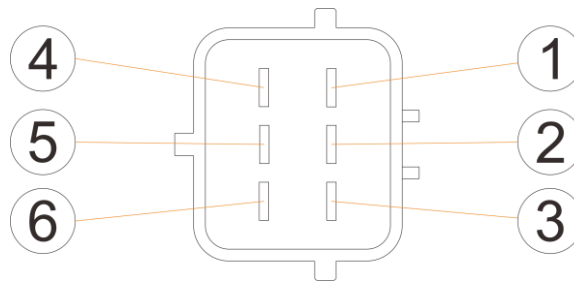


Fig.1- Terminal Number

Table 4 - Terminal Illustration

Pin	Description	Color
①	1# 5V Power Supply	Red
②	1# Signal Output (AOS1)	Green
③	1# GND	Black
④	2# 5V Power Supply	White
⑤	2# Signal Output (AOS2)	Orange
⑥	2# GND	Purple

Note: The brand of terminal used in the module: TE, Model: 174264-2, the matching head terminal model: 174262-2.

4 OUTPUT CURVE

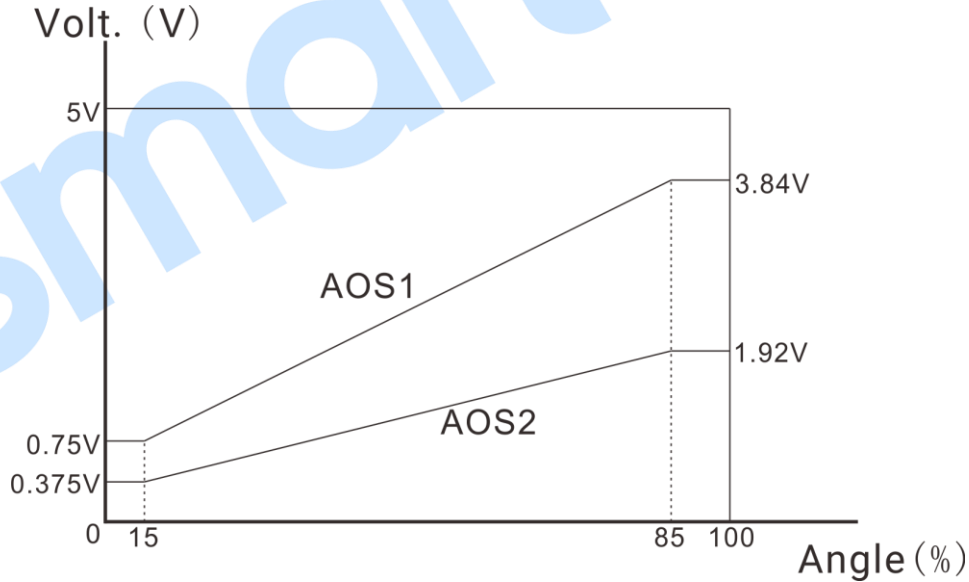


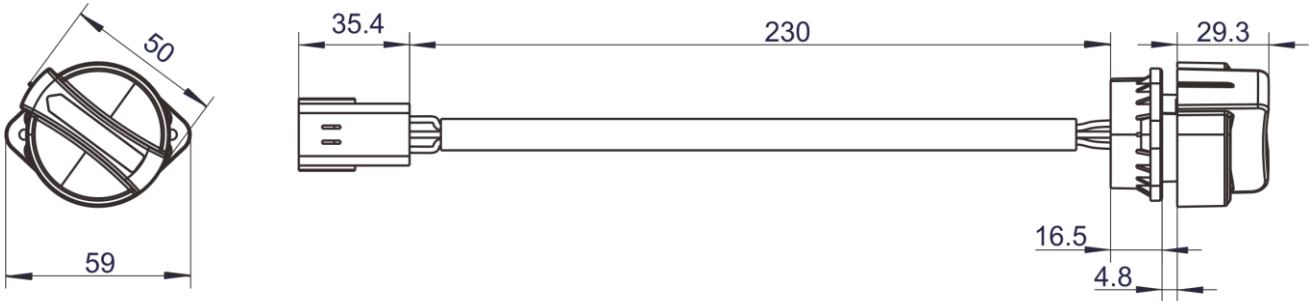
Fig.2 - The Output Curve

Note: the output curve is customized if required, please contact the manufacturer.

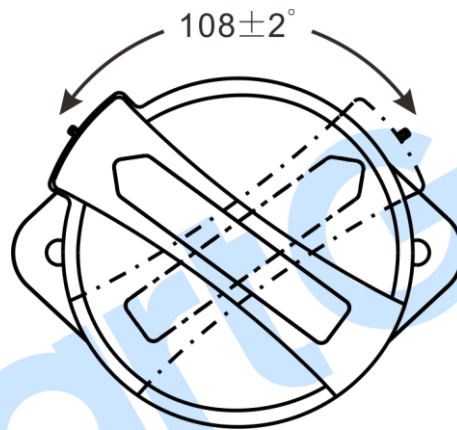
## 5 INSTALLATION

### 5.1 CASE DIMENSIONS

Unit: mm

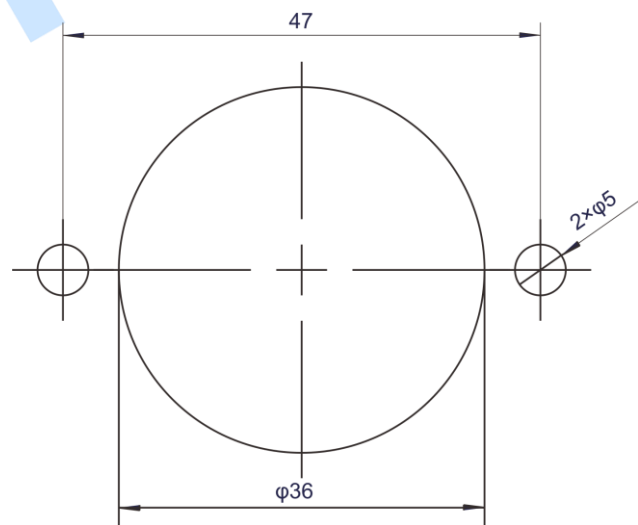


**Fig.3 - Case Dimensions**



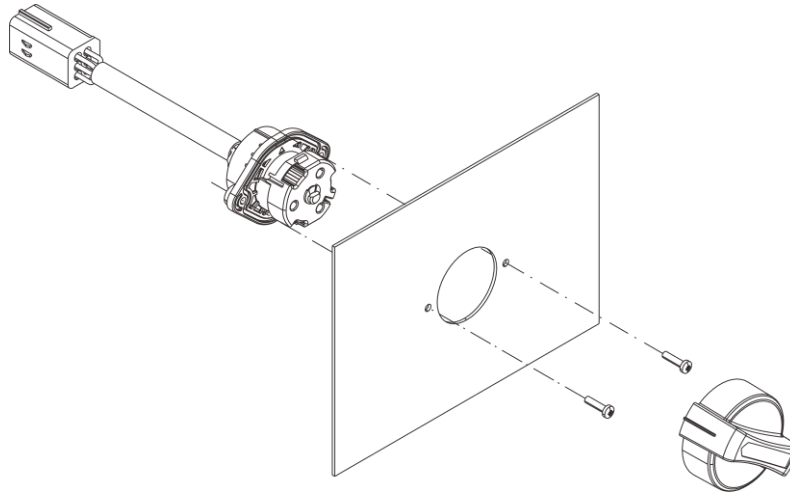
**Fig.4 - Knob Angle**

### 5.2 PANEL CUTOUT



**Fig.5 - Panel Cutout**

**5.3 KNOB INSTALLATION**



**Fig.6 – Knob Installation**

Note: the cross recessed pan head screw: M3x12.

**6 FAULT FINDING**

**Table 5 – Fault Finding**

Fault Symptom	Possible Solutions
The controlled device no response	Check if the terminal definition matches the engine; Check the voltage of 5V power supply.
Speed can't reach at expectation	Check the knob rotation angle; Check the installation direction; Check if the module output voltage matches the engine requirement.

**7 OPTIONAL ACCESSORY ILLUSTRATION**

The matched terminals of this product are optional, users can make clarification at ordering, see Table 6;

**Table 6 – Optional Accessory Description**

Category	Model	Brand
Sealing Plug	172746-1	TE
Female Rubber Shell	174262-2	TE
Female Fixator	174263-7	TE
Female Terminal	171630-1	TE