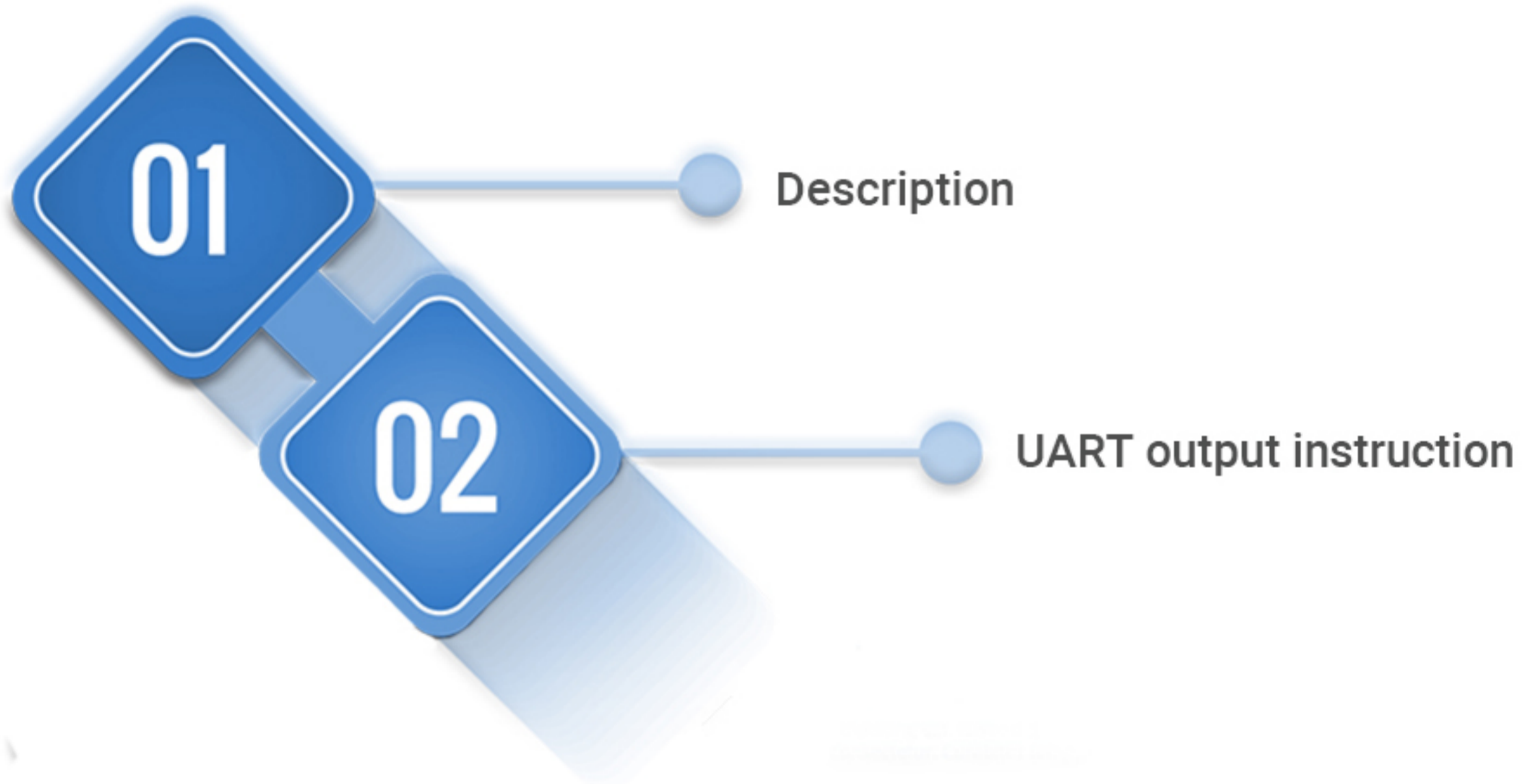


# H03 Module Output Interface

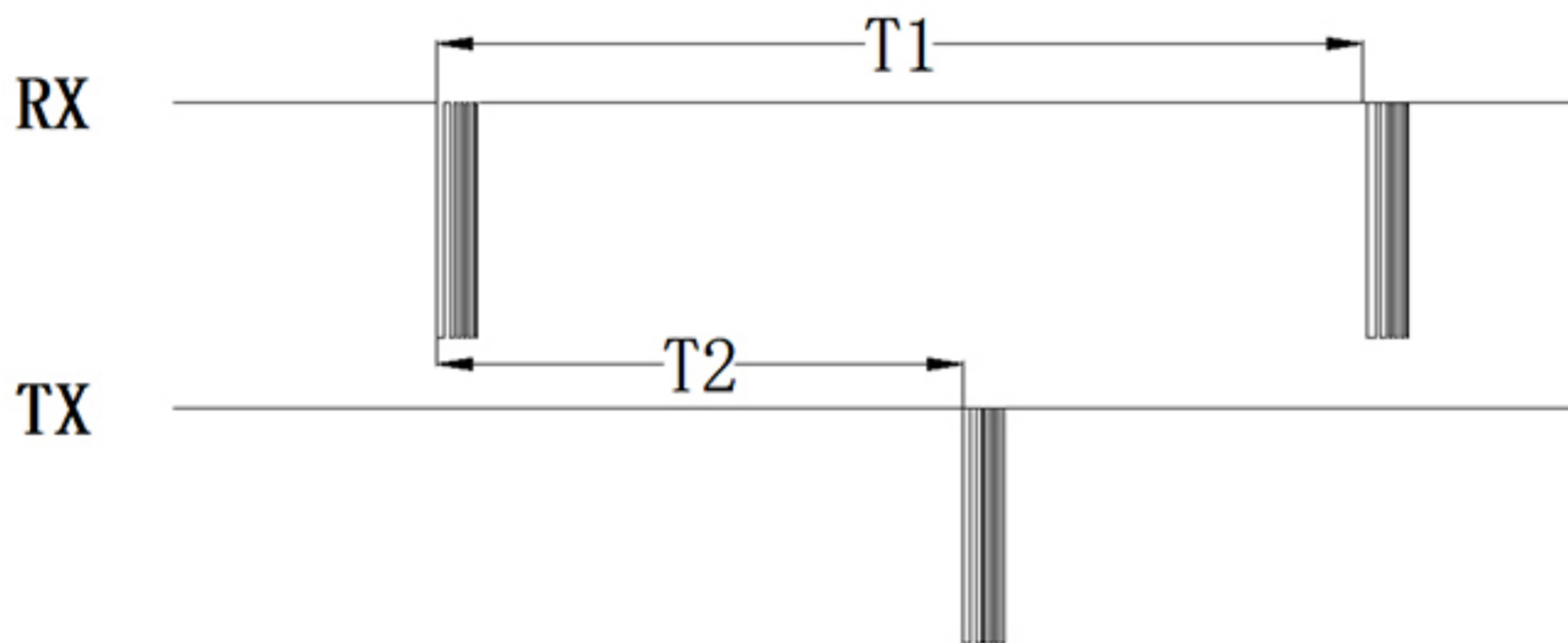


## 1. Description

### (1) Instruction

When the trigger input pin RX receives 0x55, the module will work five times (a duty cycle is about 50MS), the distance values measured by the module five times will be sorted from small to large and select the middle value. The pin TX outputs the distance value, the trigger period of the module must be greater than 300ms.

### (2) Timing Diagram



Remark: T1≥300ms; T2=240ms~270ms

## 2. UART communication instruction

### (1) Instruction

UART	Data bit	Stop bit	Parity check	Baud Rate
TTL level	8	1	N/A	9600bps

### (2) Code

Description	Read distance value	Read Temperature value
Code	0x55	0x50

### (3) Read distance value code 0x55

	Code	Data		Checksum
Master Request	0x55	N/A	N/A	N/A
Slave response	N/A	Data_H	Data_L	BCC

For example:

Master sends 0x55

The module return command is: Data\_H Data\_L BCC

$BCC = Data\_H \oplus Data\_L$

$= 0X07 \oplus 0XA1$

$= 0XA6$

Distance value =  $Data\_H * 256 + Data\_L = 0X07A1$ ;

Converted to decimal is equal to 1953

Indicates that the currently measured distance value is 1953 mm.

#### (4) Read temperature value code 0x50

	Code	Data		Checksum
Master Request	0x55	N/A	N/A	N/A
Slave response	N/A	Data_H	Data_L	BCC

when the temperature is positive, the highest bit of the high data Data\_H of the temperature is 0,

For example: 0x01 is the high data of temperature

0x23 is the low data of temperature

The hexadecimal system of the effective temperature value is 0x123, and the decimal system is 291.

Converted into a temperature value of 29.1°C, the unit is: Celsius

when the temperature is negative, the highest bit of the high data Data\_H of the temperature is 1;

For example: 0x80 is the high data of temperature;

0x64 is the low data of temperature;

The hexadecimal system of the effective temperature value is 0x64, and the decimal system is 100;

Converted into a temperature value of -10.0°C, the unit is: Celsius