

Product specifications

1. Product model: I SU160-2818TRAJ-T1 [View Details](#)

1.1 Structure type: waterproof and airtight products;

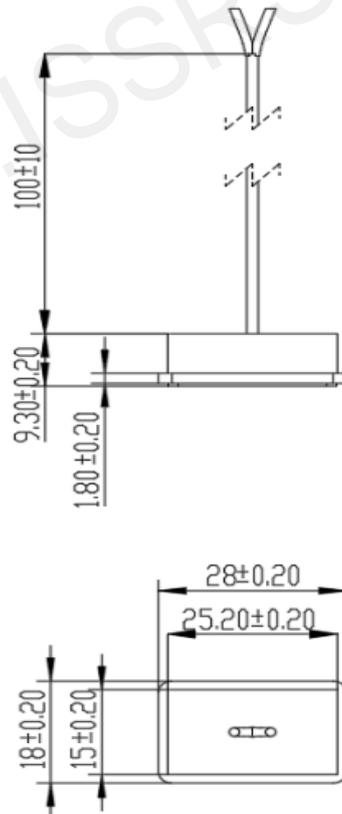
1.2 Usage type: transceiver integrated;

1.3 Scope of application: coil correction, ultrasonic ranging, etc.;

1.4 Product advantages: This product has the advantages of frequency bandwidth, high sensitivity, good signal-to-noise ratio, simple structure, reliable operation and light weight.



2. Dimensions



Unit: mm

3. Performance parameters

3.1 Technical parameter standards:

No.	Inspection items	Test conditions	Test Standards	Test equipment
1	Center Frequency (KHZ)	Room temperature 25 ± 3 (°C)	155 ± 10	Frequency scanner
2	Capacitance (PF)	1KHZ; Room temperature 25 ± 3 (°C)	$1200 \pm 20\%$	Capacitance meter
3	Aftershock (US)	The room temperature is 25 ± 3 (°C), the index value of the oscilloscope is set to: 500mv/100us, and the reading is shown in Fig.1	≤ 700	Motherboard number: KM/K067155001 Fig. 2 Oscilloscope models: Tektronix TBS 1042, TBS 1102B
4	Echo Sensitivity (v)	The room temperature is 25 ± 3 (°C), the index value of the oscilloscope is set to 500mV/100us, the distance between the end face of the sensor and the plexiglass plate is 100mm, and the reading is shown in Fig.1	≥ 1.5 (Comparison Sample Test)	

5	Maximum Input Voltage (Vp-p)	Pulse width 0.8ms with 500ms interval	150	Oscilloscope
6	Operating Temperature (° C)	-40 ~ +70(°C)	Qualified	High and low temperature chambers
7	Storage Temperature (° C)	-40 ~ +70(°C)	Qualified	High and low temperature chambers

3.2 Environmental characteristics

No.	Test items	Test conditions	Test Standards	frequency
1	Temperature characteristics	The product needs to be tested in a short circuit state; The ambient temperature is stable at $-40 \pm 3(^{\circ}\text{C})$ for 30 minutes, and the temperature is stable for 30 minutes at $25 \pm 3(^{\circ}\text{C})$ (normal temperature), and 30	At the center frequency, the sensitivity changes by no more than 30% compared to the initial value in these three temperature ranges	Once a year

		minutes at $+70 \pm 3(^{\circ}\text{C})$. The tests are completed within 2 minutes of taking out the test chamber		
2	Damp-heat test	The product needs to be tested in a short circuit state; Temperature: $60 \pm 2^{\circ}\text{C}$; Humidity: RH 90~95%; Duration: 100 hours; After removal, it was restored at normal atmospheric pressure for 2 hours	At the center frequency, the sensitivity changes by no more than 30% compared to the initial value	Once a year
3	High temperature test	The product needs to be tested in a short circuit state; Leave at a high temperature of $+70^{\circ}\text{C}$ for 120 hours; After removal, it was restored at normal atmospheric pressure for 2 hours	At the center frequency, the sensitivity changes by no more than 30% compared to the initial value	Once a year
4	Low temperature test	The product needs to be tested in a short circuit state; Leave at a low temperature of -40°C	At the center frequency, the sensitivity changes by no more than 30%	Once a year

		for 120 hours; After removal, it was restored at normal atmospheric pressure for 2 hours	compared to the initial value	
5	Drop test	Height: 1m height free fall to the concrete floor, times: 10 times	At the center frequency, the sensitivity changes by no more than 30% compared to the initial value	Once a year

Note: Each test is a separate test, and the test product is not less than 5PCS. Normal temperature conditions $T=25 \pm 3^{\circ}\text{C}$, $H=45\sim 65\%\text{R.H.}$

3.3 Waveform diagram

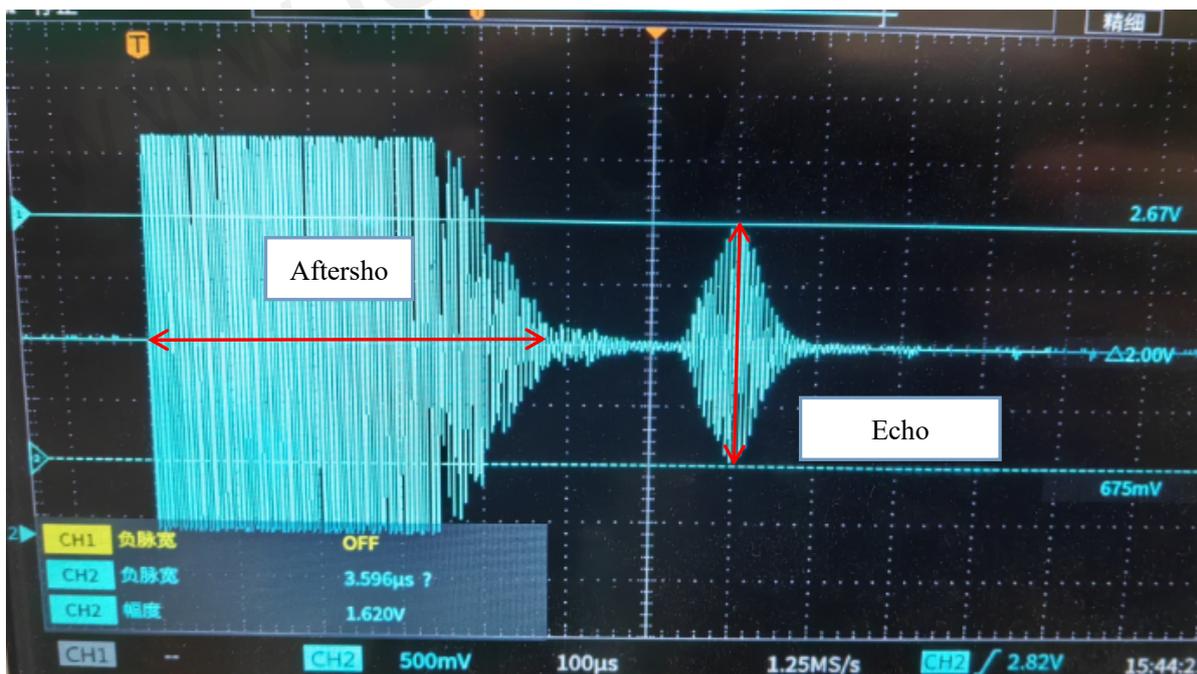
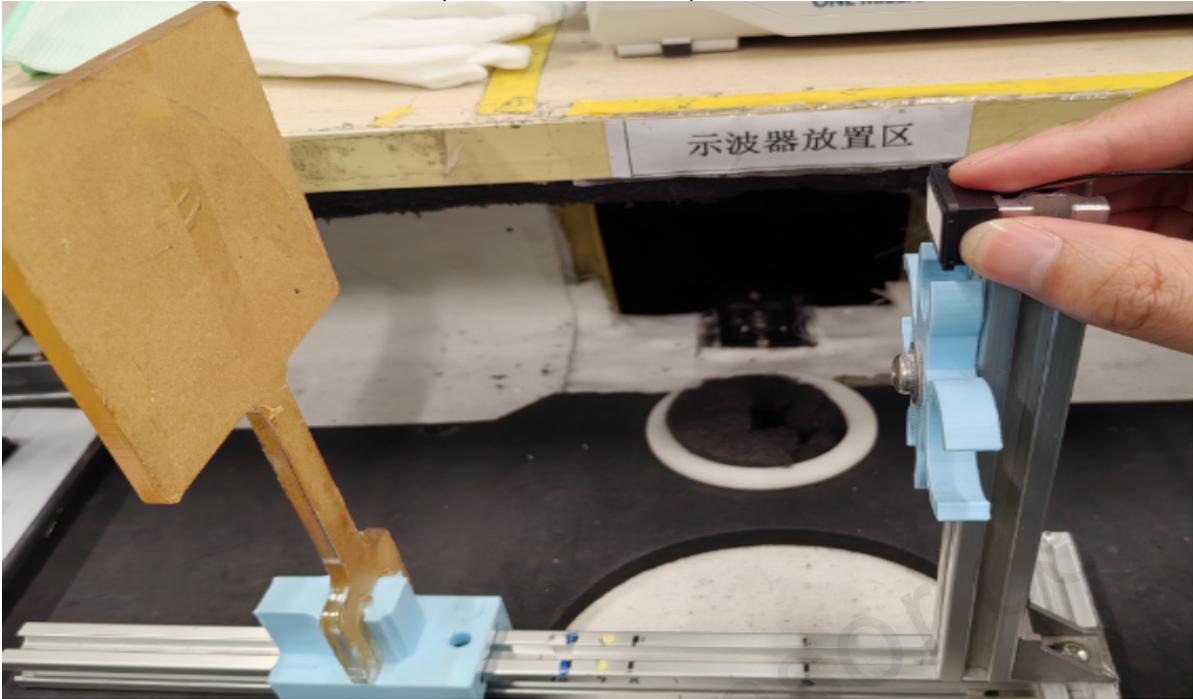


Fig.1

Schematic
diagram of the



Finished product

Fig.2

4. Order specifications

ISU	160	- 2818	TR	A	J	- T1

Company Code Center Frequency Body Size Transceiver Integrated Shape of Enclosure Cable Serial

Number