



SINOCERA

Global Sensor
Technology

Miniature Impedance Convertor (TEDS functions)

Model: YE5857B

FEATURES

- Low noise, two-wire system, single-ended signal input.
- Power supply: constant-current source (4-20mA), three fixed gains are optional.
- Compatible with the function of IEEE P1451.4 TEDS (sensors electric datasheet).
- Small size, light weight and good tightness.
- Suitable for such occasions as long distance, multiple-spot and intelligent test.



Technical Specifications:

Input Characteristics	Type: Piezoelectric sensor charge output, one side connected to ground; power resistance:100k Ω ;power capacitance:20nF; input socket:L5					
Output Characteristics	Type: voltage output, one side connected to ground; output impedance: <50 Ω ; load capacitance: <100 nF; output socket: BNC; DC output zero point:+12.5-+15V (-40 $^{\circ}$ Cto+100 $^{\circ}$ C) Linearity output range (related to signal frequency) YE5857B-0.1:10Vp-p; YE5857B-1: 10Vp-p; YE5857B-10: 8Vp-p; The max output voltage:20Vp-p(power supply \geq 22V) The data of TEDS: the sensitivity, model, serial number, manufacturer, the latest calibration date and position of the sensor					
Gain precision	\pm 2.5% (at 1 nF Source Capacitance, reference frequency:160Hz)					
Frequency response range	Model	Gain (mV/pC)	Source Capacitance (nf)	Lower frequency limit (-3dB)	Lower frequency limit (\pm 5%)	Upper frequency limit (\pm 5%)
	YE5857B-0.1	0.1	20	0.4	1.2	40
	YE5857B-1	1	20	0.4	1.2	40
	YE5857B-10	10	5	2	6	14
Noise	<1mVrms					
Gain Temp / Stability	< \pm 1%(reference frequency 160Hz, -40 $^{\circ}$ C to +100 $^{\circ}$ C) preheating time: four minutes					
Temperature	Operating: -40 $^{\circ}$ C to +100 $^{\circ}$ C ; Storage: -65 $^{\circ}$ C to+125 $^{\circ}$ C					
Humidity	95%R.H.					
Power Supply	Constant-current source:4-20 mA ; Voltage:18V to 36V(This voltage influences the output amplitude)					
Load Capacitance	<10nF					
DC Output Zero Point	+12.5 to +15V (-40 $^{\circ}$ C to +100 $^{\circ}$ C)					
Dimensions	Φ 6.8mm \times 24mm					
Weight	<5g					
Case Material	Stainless steel					
Accessories	Two-meter STYV-2 double-ended L5 low noise cable: two pcs					