



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 intelligentized test



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: $< 50\Omega$; load capacitance: $< 100\text{ nF}$; output socket: BNC;DC output zero point:+12.5-+15V(-40 $^{\circ}\text{C}$ to +100 $^{\circ}\text{C}$) 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 $\geq 22\text{V}$) 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)	The lower frequency limit (-3dB)	The lower frequency limit ($\pm 5\%$)	The 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	$< 1\text{mVrms}$					
Gain Temp. Stability	$< \pm 1\%$ (reference frequency 160Hz, -40 $^{\circ}\text{C}$ to +100 $^{\circ}\text{C}$) preheating time: four minutes					
Temperature	Operating: -40 $^{\circ}\text{C}$ to +100 $^{\circ}\text{C}$; Storage: -65 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$					
Humidity	95%R.H.					
Vibration	20gpk (55Hz-2000Hz)					
Power Supply	Constant-current source:4-20 mA ; Voltage:18V to 36V(This voltage influences the output amplitude)					
Load Capacitance	$< 10\text{nF}$					
DC Output Zero Point	+12.5 to +15V (-40 $^{\circ}\text{C}$ to +100 $^{\circ}\text{C}$)					
Dimensions	$\Phi 14\text{mm} \times 81\text{mm}$					
Weight	$< 50\text{g}$					
Case Material	Stainless steel					
Accessories	Two-meter STYV-2 double-ended L5 low noise cable: One Two-meter STYV-2 double-ended BNC 50 Ω output cable: One					