

- Isolated 1500V (3-way)
- Plug-in for 11-pin relay socket
- Microcomputer based
- Programmable input and output
- Pt-100, Pt-1000, PTC, thermocouple J, K, T, R, S, B
- 0-20 or 4-20 mA input
- 0-100mV or 0-10VDC input
- Linear resistance 0-1k $\Omega$
- Linearity better than 0,05%
- Configuration without external power
- Programmable damping
- Programmable peak value
- Accuracy error better than 0.1%
- Fully programmable
- Output linear with temperature
- Sensor supply
- Voltage and current output

**DESCRIPTION**

The BASI Isolated Intelligent transmitter with universal input model BUSC7801 is an economical and excellent choice for accurate signal conversion. BUSC7801 also features easy stocking and configuration. The transmitter is programmable with BASI "TraCon" software including Thermocouples J, K, T, R, S, B and RTD Pt-100, Pt-1000, PTC, resistive 0-1 k $\Omega$ , mV, V and mA DC inputs. One scaleable 0(4) -20mA or 0-10 VDC outputs, direct or reverse and digital filter. Designed to fit in a standard 11-pole relay socket, mounting is very easy and maintenance a snap. The transmitter can be configured without external power.

**SPECIFICATIONS GENERAL**

- Construction** : Plug-in to standard 11-pole relay socket  
**Wiring** : Screw terminals on base socket  
**Housing material** : "Noryl" grey  
**Isolation** : Input to output to supply (3-way) 1500V

**INPUT**

- Thermocouple K** : -20-1300 $^{\circ}$ C  
**J** : -20-1000.0 $^{\circ}$ C  
**T** : -40.0-400.0 $^{\circ}$ C  
**R** : -0-1700 $^{\circ}$ C  
**S** : -0-1700.0 $^{\circ}$ C  
**B** : 100 -1800  $^{\circ}$ C
- RTD Pt-100** : -200.0 – 850.0 $^{\circ}$ C JIS or DIN  
**RTD Pt1000** : -100.0 – 600.0 $^{\circ}$ C JIS or DIN  
**PTC 1k/2k vid 25 $^{\circ}$ C** : -50 – 150  $^{\circ}$ C
- Current** : 0-20, 4-20mA programmable  
**Voltage** : 0-100mV, 0-10 VDC programmable  
**Linear resistance** : 0-1k $\Omega$   
**Custom linear** : Specify  
**Range** : Min 50 $^{\circ}$ C (Pt-100, Pt-1000 and PTC)  
Min 100 $^{\circ}$ C (Thermocouple)

**OUTPUT**

- Current** : 0/4-20 or 20-0/4 mA programmable  
**Load** : 0 - 600 $\Omega$  at 20mA  
**Voltage** : 0-10V or 10 to 0 programmable  
**Load** : Min 2k $\Omega$  at 10V  
**Manual output** : 0 – 100% programmable  
**Sensor supply** : 18 to 28VDC max 30mA  
Special signals on request

**INSTALLATION**

- Supply** : 230, 110, 24VAC or 24VDC  
**Ambient temp** : -20 to 85 $^{\circ}$ C  
**Humidity** : 85%  
**Configuration** : With "TraCon" software  
**Protection class** : IP20  
**Dimension** : 35 x 78 x 91mm  
**Weight** : 180g




**PROGRAMMABILITY**

The BUSC7801 can be quickly reconfigured in the field to meet changing needs. The unit is fully programmable for input, 6 thermocouple types RTD, JIS or DIN, resistive 0-1 k $\Omega$ , 0 to +100mV, 0 to +10VDC, 0/4-20mA, Input scaling Peak hold, digital filter, output scaling. The transmitter is easy to program with BASI's software "TraCon". The transmitter can be configured without external power.

**PERFORMANCE (% of span)**

- Linearity error** : <  $\pm 0.05\%$  FS  
**Accuracy error** : <  $\pm 0.15\%$  FS  
**Resolution** : 4uA (12-bit)  
**Temp drift** : 0.01% from span for 1 $^{\circ}$ C  
**Power consumption** : 1,5VA  
**Peak holding time** : Programmable  
**Offset** : Within range  
**Damping** : Programmable  
**Communication** : RS232 (requires special cable type K2 or K12U)  
**Sensor failure** : 0 mA or > 20.2 mA, programmable  
**Dielectric strength** : 2000VAC @ 1 minute  
**Isolation** : Input to output to supply (3way) 1500VDC/AC peak

**ORDER INFORMATION**

<b>BUSC7801</b>			
<b>SUPPLY</b>	<b>SPECIAL INPUT</b>	<b>PROG.CABLE</b>	
Z Specify	X None	1 K2	
A 230VAC	Z Specify	2 K12U (USB)	
B 115VAC			
Q 12-24VAC/DC			
R 24VAC			

# If you select special input please specify range and type