

# MORNSUN

## Passive Single channel Analog signal Isolation barrier (lin & lout) T1100B



### APPLICATIONS

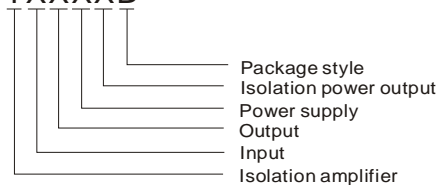
Analog signal isolation barrier, is a signal conditioner with electrical insulation between input and output, it can receive a variety of analog signal input from the field instrument, and transmit a standard output signal or user-specified special signal to the control room or DCS. The product is isolated among power supply, input and output. It is widely used in the industrial measurement systems, medical electronic equipment, electrical equipment etc. We adopt high efficiency magnetism and electricity isolated technology to achieve signal isolation, with characteristics of high output accuracy, good linearity and low temperature drift.

### FEATURES

- Two-port isolation (Between input and output)
- High accuracy (0.1% F.S.)
- High linearity (0.1% F.S.)
- Isolation voltage(3000VDC/60S)
- High frequency response(15KHz)
- Low temperature drift(35PPM/°C)
- Industry class(Operation temp.: -25°C to +71°C)
- High reliability(MTBF>500,000 hours)

### MODEL SELECTION

TXXXXB



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### PRODUCT PROGRAM

Part Number	Power Supply	Input	Output	Isolation Power Output	Channels
T1100B	NONE	4~20mA	4~20mA	NONE	1

### ELECTRICAL CHARACTERISTICS

Power Supply Data	Power Supply	NONE
	Power Dissipation	NONE
	Power Protection	NONE
Input Data	Input Signal	4~20mA
	Overload	≤50mA
	Voltage Drop	<3V(20mA)
Output Data	Output Signal	4~20mA
	Load	≤300Ω(At Output =20mA)
	Load Regulation	<0.05% meas.val./100Ω

### TRANSMISSION CHARACTERISTICS

Offset	0.1%F.S.
Gain Error	0.1%F.S.
Temperature Drift	0.0035%F.S./°C (-25°C to +71°C)

### ISOLATION CHARACTERISTICS

Galvanic Isolation	Two-port isolation (Between input and output)
Isolation Voltage	3KVDC (Tested for 1minute and 1mA max, humidity < 70%)
Insulation Resistance	1000MΩ, 500VDC(Among signal input ,signal output, power supply and isolation power output)

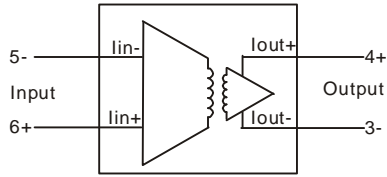
### OTHER CHARACTERISTICS

Ambient temperature	Operation temperature:-25°C to +71°C
	Transport and Storage temperature:-40°C to +85°C
Package	35mm DIN-rail package
Safety Class	IP20(IEC60529 / EN60529)
EMC compliance	GB/T 18268(IEC61326-1)
Weight	About 60g
Application environment	No dusts, gases of fiercely vibration, impulsion or gases that may erode to the components surrounded

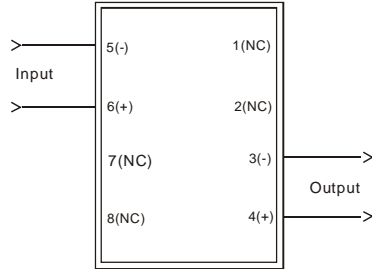
#### Note:

- 1 .All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.
2. Only typical models listed, specifications of custom product may be different. Please contact our service people directly for certain conditions.

## SINGLE CHANNEL SCHEMATIC DIAGRAM



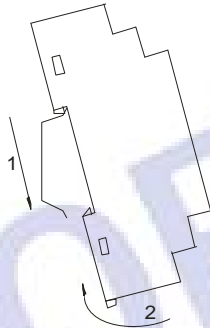
## APPLICATION CIRCUIT DIAGRAM



## INSTALLATION

DIN35mm standard rail installation

- Upside of the instrument card in the rail;
- Push underside of the instrument into the rail.



## CONNECTION

- Cross section area of wiring:  $0.5\text{mm}^2\text{-}2.5\text{mm}^2$ ;
- Multi-strand wire, the length of bare wire is about 8mm, fixed by the M4 bolt.

## APPLICATION NOTE

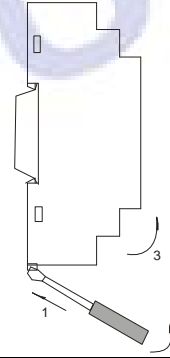
- Please read the user manual carefully before using. If any questions please contact our technical support department.
- Please do not use this product in hazardous area.

## AFTER SERVICE

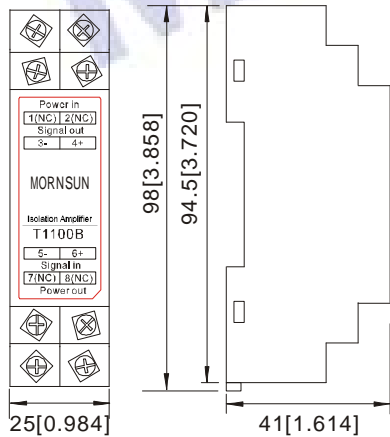
- Products are carefully inspected and controlled before going out from our factory. If they operated abnormally or there were anything wrong in the inner parts, please contact with our agents near you or technical support in our company as soon as possible.
- 3 years warranty since the delivery date. During the period of quality guarantee, our company will repair or change free of charge if product has any quality problem in the process of normally using.

## DISASSEMBLY

- Use a screwdriver (Width of edges  $\leq 6\text{mm}$ ), cut in the metal card lock from the underside;
- Boost up the screwdriver and prize the metal card lock downwards;
- Pull the instrument out of the rail.

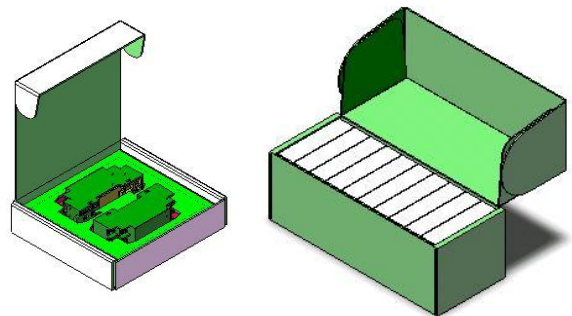


## PACKAGING SIZE AND TERMINAL DESCRIPTION



3-	Output-
4+	Output+
5-	Input-
6+	Input+
Others	NC

## PACKAGING DIAGRAM



Inside box: L\*W\*H=165\*155\*40mm    Packaging Quantity: 2pcs  
 Outside box: L\*W\*H=425\*175\*160mm    Packaging Quantity: 20pcs

Note:  
 Unit: mm[inch]  
 General tolerances:  $\pm 0.5\text{mm}$  [ $\pm 0.020\text{inch}$ ]