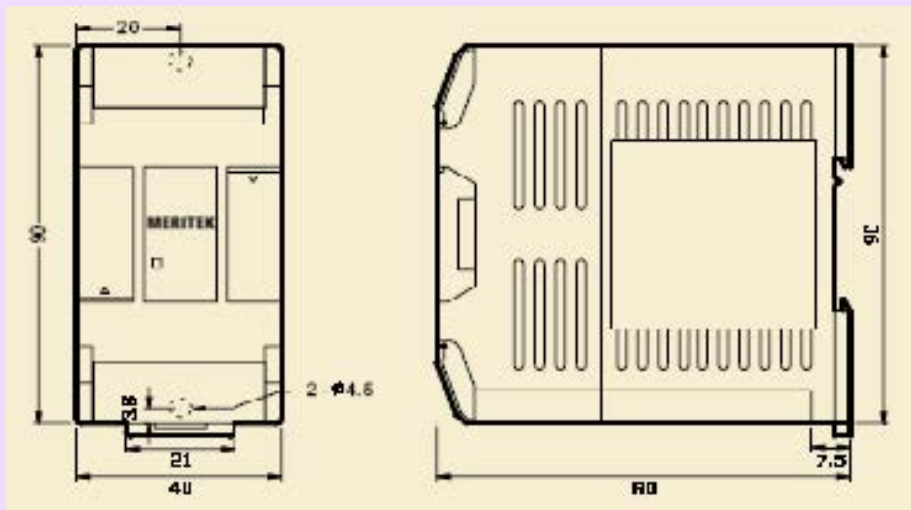




### Introduction

MBs-4PT is one of the analog input modules of MERITEK MBs series PLC. It provides 4 channels potential meter input or unipolar single ended voltage input with 12 or 14 bit effective resolution. The reading value is represented by a 14 bit value no matter the effective resolution is set to 12 or 14 bit. In order to filter out the field noise imposed on the signal, it also provides the average of sample input function.

### Dimensions



### Specifications

**Total Channels** - 4 CH

**Resolution**- 14 or 12 bit

**I/O Points Occupied** - 4 RI(Input Register) and 1 dummy RO(Register Output)

**Conversion Time**- Updated each scan

**Accuracy**-  $\pm 1\%$

**Impedance of Applicable Potential Meter**-  
1 K $\sim$  10K $\Omega$

**Input Range of Voltage Signal** – 0  $\sim$  10V

**Driving Voltage Output** – 10V

**Software Filter**- Moving average

**Average Samples**- 1 $\sim$ 8 configurable

**Isolation**- Transformer(Power) and photo-coupler(Signal)

**Indicator(s)** - 5V PWR LED

**Supply Power**- 24V-15%/+20%, 2VA

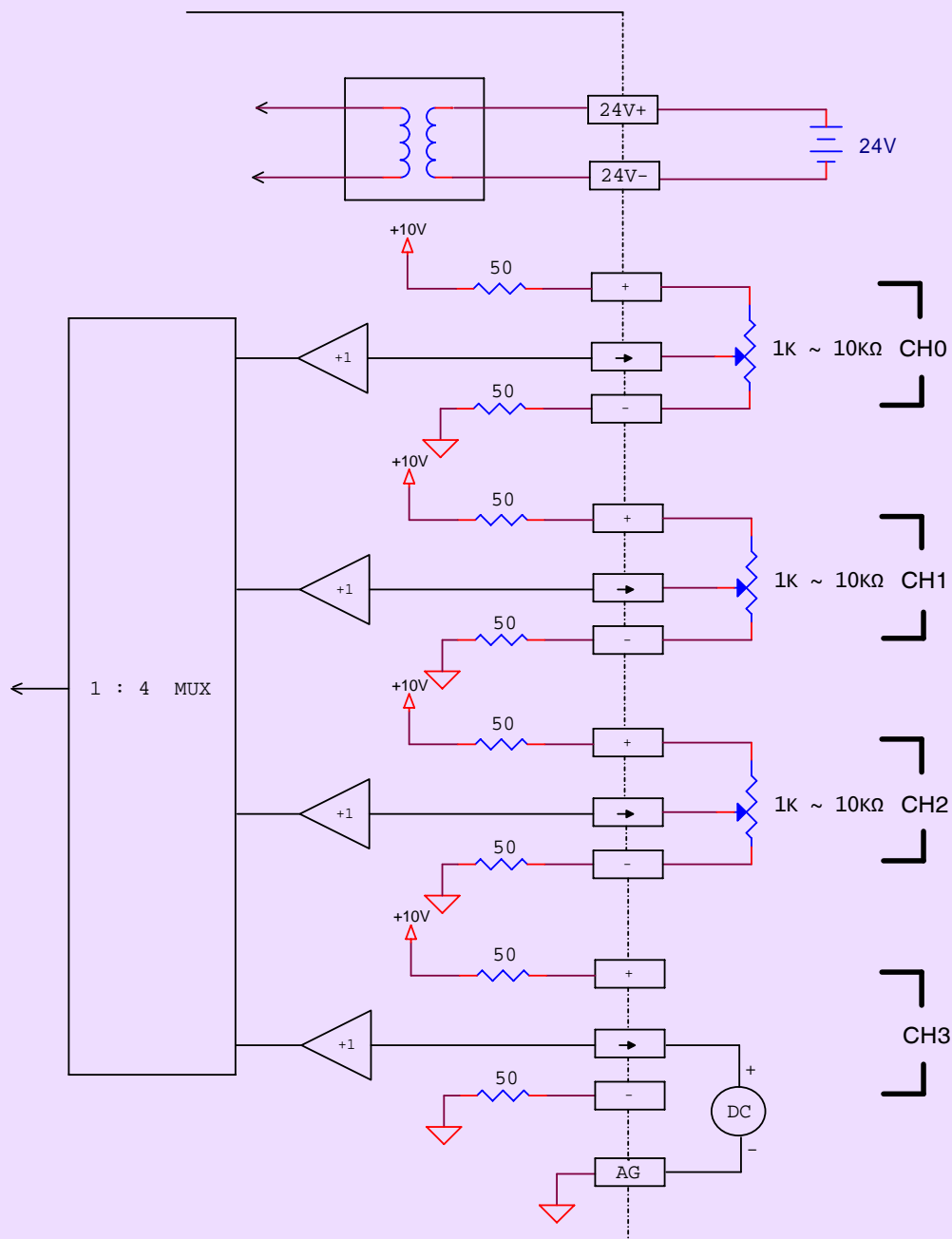
**Internal Power Consumption**- 5V, 100mA

**Operating Temperature**- 0  $\sim$  60  $^{\circ}\text{C}$

**Storage Temperature**- -20  $\sim$  80  $^{\circ}\text{C}$

**Dimensions**- 40(W)x90(H)x80(D) mm

### Wiring Diagram



In the above sample wiring, the wiring of CH0~CH2 are for potential meter, while the CH3 is for 0 ~ 10V single ended voltage type signal. The internal serial resistors at upper or lower leg for each channel are for wire broke detection purpose. The too big or too low input value indicates the wire broke situation.