

### STRAIN GAUGE AMPLIFIER WT-2



WT-2 strain gauge amplifier is used to cooperation with strain gauges, bridge and half bridge type. It feeds such sensors and converts their analog signals to digit signal in RS485 standard with MODBUS-RTU protocol. Peltron according to customer's demand supply also PWT-2 software to this

amplifier. This program is fit to number of sensor not more than 50. One WT-2 amplifier is able to maintain 10 sensors.

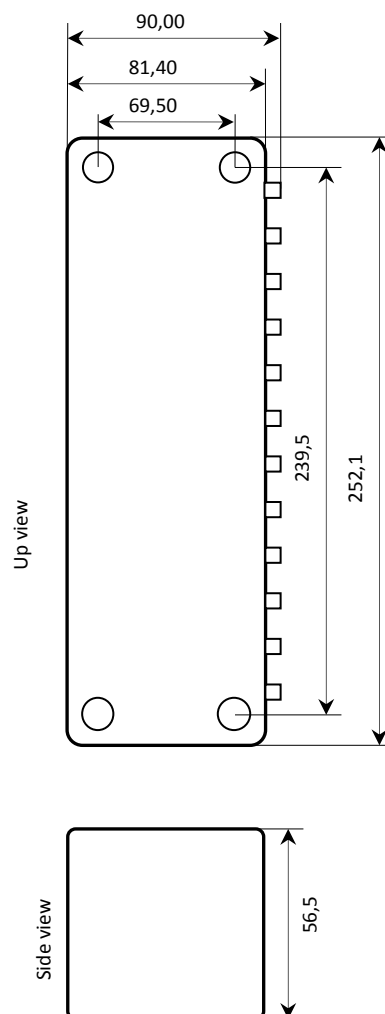
#### TECHNICAL DATA

1.	Power supply [VDC]	24 (18÷26) <50mA
2.	Number of canals	10
3.	Output signals	RS485, RS232
4.	Protocol	Modbus-RTU
5.	Transmission speed [bit/sec]	<ul style="list-style-type: none"> <li>● 9600</li> <li>● 19200</li> <li>● 38400</li> </ul>
6.	Bridge voltage [VDC]	5
7.	Bridge resistance [ $\Omega$ ]	>360
8.	One canal readout time [ms]	<ul style="list-style-type: none"> <li>● &lt;500</li> <li>● &lt;50 (less accuracy)</li> </ul>
9.	Dimensions [mm]	252,1x81,4x56,5
10.	Enclosure protection	IP62

#### CONNECTIONS

Outputs (2 pieces)*		
	Supply [+]	PIN2
	Supply [-]	PIN1
	RS485+[A]	PIN5
	RS485- [B]	PIN9
Inputs (10 szt.)		
	Bridge supply [-]	PIN1, PIN2
	Bridge supply [+]	PIN4, PIN5
	Bridge output	PIN7
	Bridge output	PIN8
Wall mounting		
Two holes are available after cover removing.		

\* Outputs are connected parallel, making possible connection of other amplifiers



**Peltron Towarzystwo Produkcyjno Handlowe Sp. z o.o.**

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XIV Wydział Krajowego Rejestru Sądowego, Numer KRS 000190284, NIP 113-00-18-140, Regon: 006210883



Notice: Register addresses from 0x0000 not form 0x0001

Watch time RTC ( option )

Readout - function 0x03, Read Holding Registers

ADDR	Canal	Typ	Description
0	Year, Month	word	Hi Year -2000; Lo- Month
1	Day, Hour	word	Hi – Day; Lo - Hour
2	Min, Sec	word	
3	Ms	word	

Data[n] – ADC processing result

Readout - function 0x03, Read Holding Registers

ADDR	Kanal	Typ	Description
4, 5	#0	single	Data[0]
6,7	#1	single	Data[1]
8,9	#2	single	Data[2]
10,11	#3	single	Data[3]
12,13	#4	single	Data[4]
14,15	#5	single	Data[5]
16,17	#6	single	Data[6]
18,19	#7	single	Data[7]
20,21	#8	single	Data[8]
22,23	#9	single	Data[9]

User data counted according to:

**U[n]= UserOffset[n]+ UserScale[n]\*Data[n]; n canal number (0..9)**

ADDR	Canal	Typ
24,25	#0	single
26,27	#1	single
28,29	#2	single
30,31	#3	single
23,33	#4	single
34,35	#5	single
36,37	#6	single
38,39	#7	single
40,41	#8	single
42,43	#9	single

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User parameters:

UserScale

Readout - function 0x03, Read Holding Registers

Write – function 0x10, Write Multiple Registers

ADDR	Canal	Type		
84,85	UserScale #0	single		
86,87	UserScale #1	single		
88,89	UserScale #2	single		
90,91	UserScale #3	single		
92,93	UserScale #4	single		
94,95	UserScale #5	single		
96,97	UserScale #6	single		
98,99	UserScale #7	single		
100,101	UserScale #8	single		

User parameters:

**UserOffset**

Readout - function 0x03, Read Holding Registers

Write – function 0x10, Write Multiple Registers

ADDR	Canals	Type		
104,105	UserScale #0	single		
106,107	UserScale #1	single		
108,109	UserScale #2	single		
110,111	UserScale #3	single		
112,113	UserScale #4	single		
114,115	UserScale #5	single		
116,117	UserScale #6	single		
118,119	UserScale #7	single		
120,121	UserScale #8	single		
122,123	UserScale #9	single		

Short registers: base address: 500, Readout - function 0x03, Read Holding Registers

ADDR	Description	Type		
500+0	FramEnabled	word	0xAA55 unlock writing	R/W
500+1	ModbusID	word	Module address via COM1	R/W
500+2	Baudrate	word	Baudrate COM1	R
500+3	ModbusID	word	Module address via COM2 (option)	R
500+4	Baudrate	word	Baudrate COM2	R

**Notice: current transmission parameters: 9600,8,2,N**

Available only port COM1

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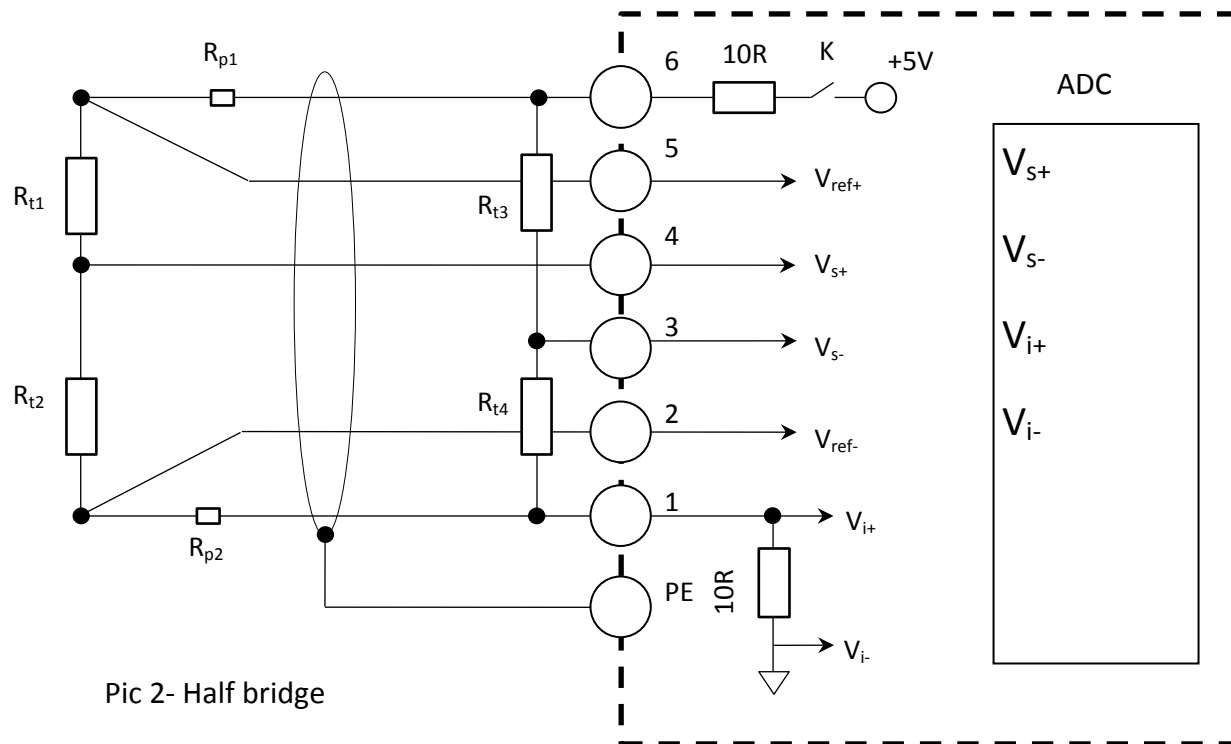
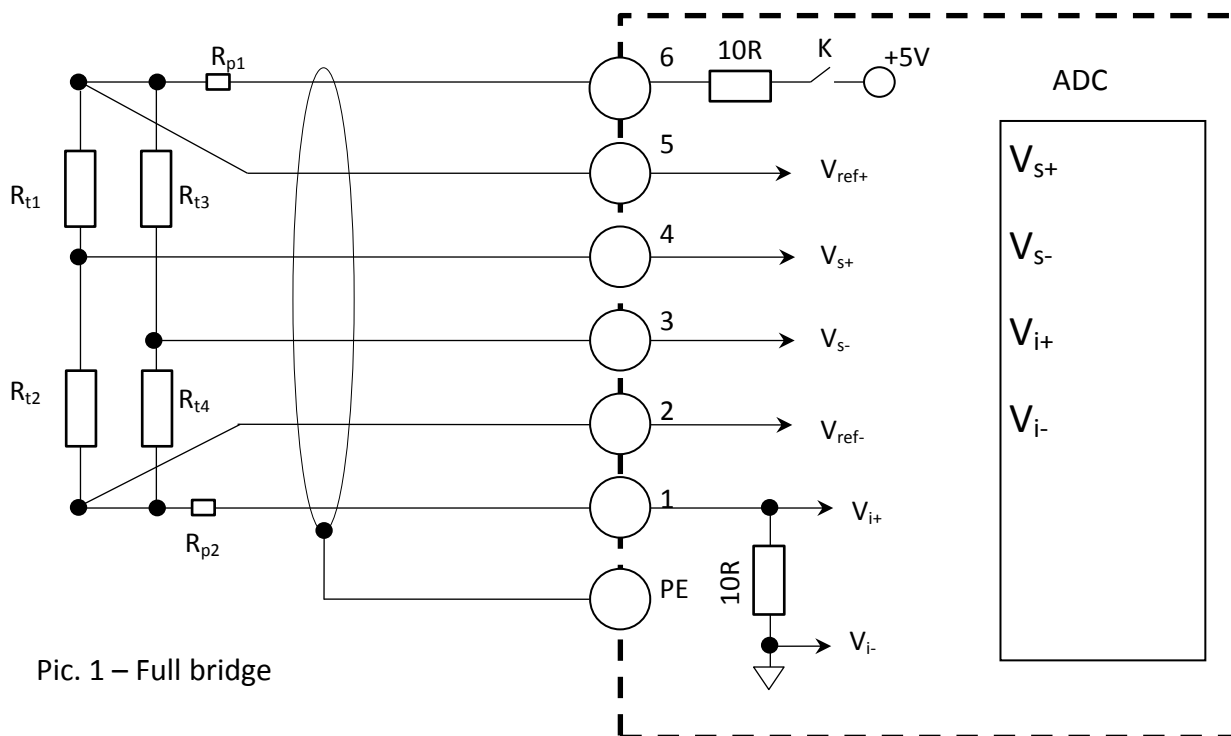
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## LAYOUT



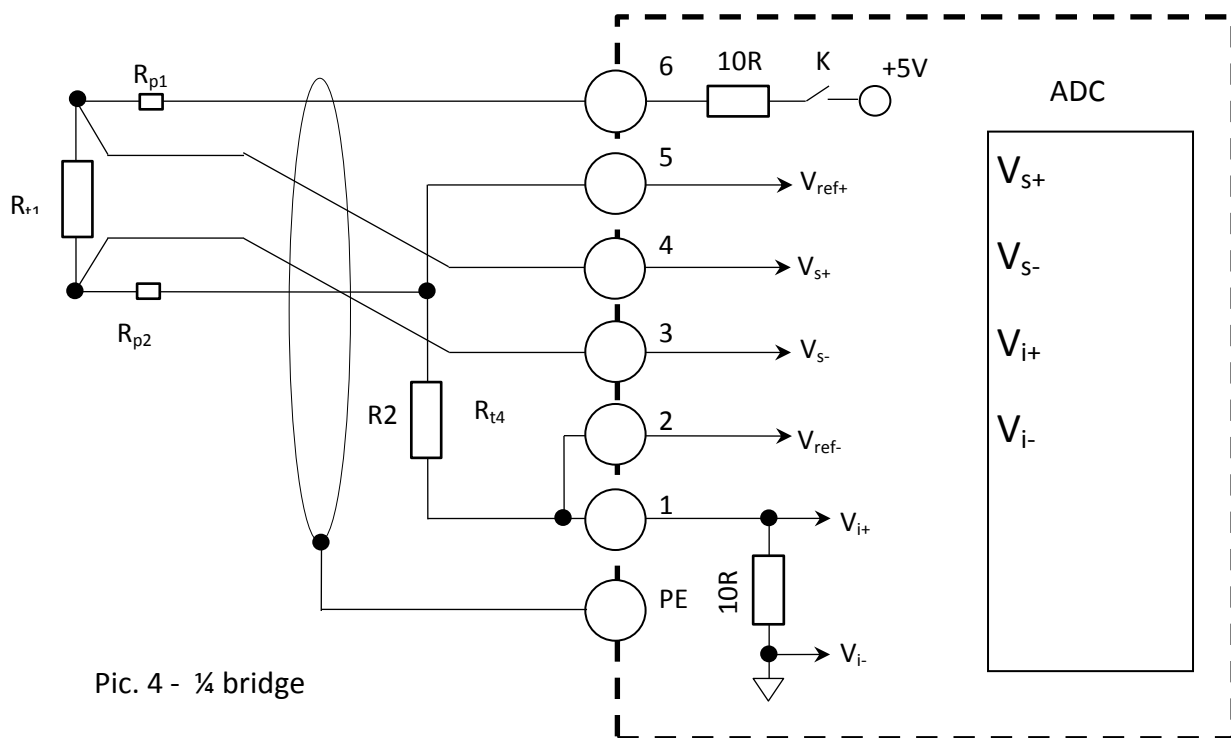
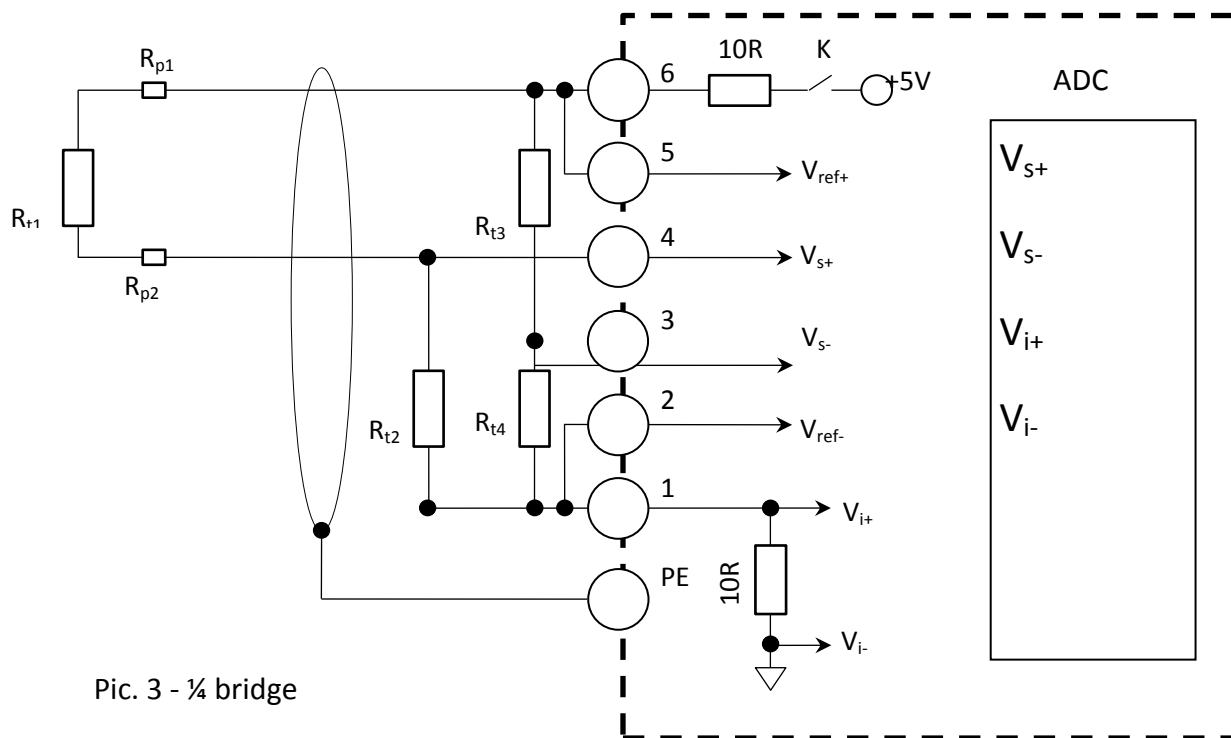
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