



## OHMIGO-USB

OHMIGO® is a precision digital controllable resistor making it possible digitally control and Cloud-connect any existing analog equipment, using a two-wire thermistor or any other RTD for temperature sensing. Input can be serial ASCII data, a custom-made proprietary serial protocol or an analog voltage signal 0-10V and output generated is a resistance ranging from 68.5 ohm up to 9 000 000 ohms with superior accuracy, overall better than 1%.

During the first seconds of operation a LED indicates polarity of Rout and GND – Reverse wiring if RED. If TYPE is other than default NI1000LG, LED flashes two digits MORSE representing configured default TYPE and polarity.

### TECHNICAL DATA

Power supply	5 VDC via USB
Resistance output	68.5 ohm ... 9 000 000 ohm, Error < 1%
Analog IO	0 – 10.0 VDC
Enclosure	L58 x W25 x H13 mm IP43
Weight	50g



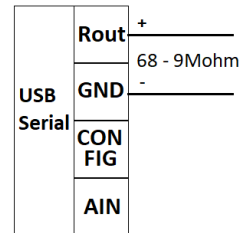
Wiring	Rout	Resistans output +
	GND	Resistans output GND
	CONFIG	Select AIN mode if connected to GND
	AIN	Analog input 0 – 10 V, -50.0 °C ... +50.0 °C
		Default output is TYPE=01 Ni1000LG

### MODE: USB SERIAL ASCII INTERFACE – 9600Bd

AT?<CR><LF> Print device info, serial number and firmware version

OHMIGO Precision RTD simulator Firmware: 1.05 Feb 07 2022 19:59:00 Serial.No:42-1302-2380-9146-1220

AT	Command start "AT" and use ", " to separate commands
R=xxxx.xx	Output resistance, range 67 ohm - 9.0 Mohm, use decimal "."
T=ttt.t	Output resistance for temperature ttt.t - Default TYPE=1
T=ttt.t,TYPE=NN	Set resistance for ttt.t with output TYPE=NN, new TYPE saved as default
POLARITY	Checks polarity of connection to Rout-GND - returns "OK" or "ERROR"
ACK	Ack data including polarity - returns "OK", "ERROR=SYNTAX" or "ERROR=POLARITY"
SLEEP	Enters sleep after output. WakeUp on SERIAL or RESET
ATR=1959.08,ACK,SLEEP<CR><LF>	EXAMPLE: 1959.08 ohm, ACK and then enter SLEEP



SUPPORTED TYPES	1 = NI1000LG	2 = NI1000DIN	3 = PT1000
	4 = TA-EGU	5 = STAEFA-T1	6 = T7043B
	7 = NTC10K	8 = NTC20K	9 = QAC31
	10 = NTC2200	11 = NTC1K	12 = VRC693
	13 = PT100	14 = NTC5220	15 = BALCO500
	16 = NI500	17 = NTC3K	18 = NTC22K
	19 = KTY11	20 = PTC5224	21 = PT1000DAN
	22 = KTY10-6	23 = PT500	24 = NTC12K
	25 = PTC1650	26 = NTC50K	27 = PT1000
	28 = NTC5K	29 = AF60	30 = CTC/NIBE
	31 = IVT10K		

CURRENT CONFIG TYPE 001 = Ni1000LG

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### MODE: ANALOG INPUT 0...10V

Change default TYPE Send ATT=0,TYPE=xx<CR><LF>  
OHMIGO will remember and use the latest TYPE as default.  
Jumper between CONFIG and GND selects AIN as input.

