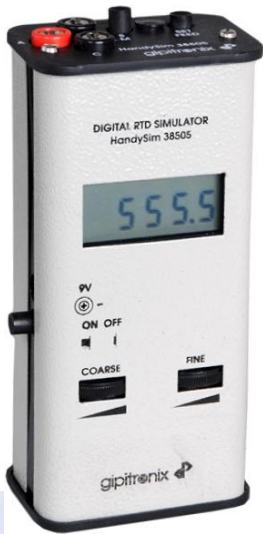


RTD Simulator (DigiSim 38505)



The RTD Simulator (DigiSim 38505) is a portable, battery-operated, precision instrument designed for sourcing as well as measuring RTD signals. A 4½ digit LCD provides excellent resolution with high contrast ratio. It is designed to calibrate instruments taking RTD as an input and retain its precision & repeatability over long periods in worst environmental conditions. An exceptionally stable resistance source provides continuously variable precision output signals with two ten-turn potentiometers.



Features

- 🔌 Simulates & measures one RTD
- 🔌 High precision, accuracy, reliability & longevity
- 🔌 4½ digit (8mm) LCD for high resolution
- 🔌 Automatic lead compensation for 3-wire RTDs
- 🔌 Eliminates the need of decade resistance boxes
- 🔌 Compact in size and built for toughest environments
- 🔌 Unique self-check facility ensures reliable operations
- 🔌 Powered by AC/DC adapter or 9V Ni-Mh battery

Applications

- 🔌 Simulates & measures one RTD (2-wire/3-wire)
- 🔌 Calibrates temperature indicators with RTD input
- 🔌 Works as ohms source
- 🔌 Calibrates temperature controllers and transmitters

Code	Function, Range & Resolution		
	RTDs ^[1]		Self-Check
P0	Pt46	-200 to 850°C	555.5 ± 2 digits
P1	Pt100	-200 to 850°C	555.5 ± 2 digits
P2	Pt200	-200 to 850°C	555.5 ± 2 digits
C	Cu53	-50 to 180°C	177.7 ± 1 digit
N	Ni100	-60 to 180°C	177.7 ± 1 digit
	0.1 °C		
G	User specified requirements ^[2]		


[1] RTDs conform to IEC751/DIN43760 standard .

[2] Contact us with your specific requirements.

Technical Specifications $22 \leq T_A \leq 32^\circ\text{C}$; $V_S = V_{\text{LOBAT}}$; 1yr of calibration validity unless otherwise noted

Display Specifications	Display	4½ digit (8mm) 7-segment LCD with high contrast ratio
	Function	RTDs
	Resolution	0.1 °C
	Accuracy	$\pm 0.05\% \text{ rdg} \pm 0.05\% \text{ FS} \pm 1 \text{ dgt}$
	Self-check	As specified in the table
Bridge Current		0.1 to 1 mA depending on range
Effect of leads		1°C for 10% of nominal resistance per lead for 3-wire RTDs.
Battery	Type	9V Ni-Mh battery with longer life for field use
	Life ^[1]	10 - 12 hours in continuous use
	Status	Displays battery status using "Low Battery"
Mains Operation		Power jack for AC/DC adapter/charger (230V _{AC} , 50Hz to 10.5V _{DC} , 100mA)
Input Protection		I/O terminals are protected up to 24 V _{DC}
Storage Temperature		0 to 70°C w/o batteries and accessories
Humidity		Less than 90% Rh (Non-condensing)
Operating Temperature		5 to 55°C
Zero Drift		< 1dgt per 10°C outside the range of $22 \leq T_A \leq 32^\circ\text{C}$
Span Drift		< 0.0015% of rdg per °C
Enclosure Dimension		75(W) x 150(H) x 55(D) mm
Enclosure Finish		Powder coated
Weight		600g w/o batteries

Standard Accessories

Accessories	Included	BS-5(4mm) probes, crocodile clips, screw driver, leather case, AC/DC adapter	 <p>[3]</p>
	Optional	9V Ni-Mh battery, external battery charger, wooden case	
Documentation	Included	Warranty certificate ^[1] , Calibration certificate ^[2] , User manual, RTD temperature tables	
	Optional	NABL Calibration certificate	

Ordering Information

Model No.	Code
38515	X (As specified in the table)
Example	Specify 38505P1 to order the RTD Simulator using 4½ digit LCD for Pt100 with a range of -200 to 850 °C.

[1] Valid for 2 years against mfg defects.

[2] Traceable to NABL, India.

[3] Some accessories in the picture are optional.