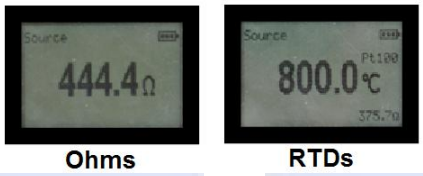
RTD Simulator
(DigiSim 38515)

The RTD Simulator (DigiSim 38515) is a micro-controller based portable, battery-operated, precision instrument designed for sourcing as well as measuring Ω & RTD signals. A graphical (128x64) LCD with backlight gives excellent user interface. It is designed to calibrate instruments taking either RTDs or Ω 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.



Ohms RTDs

Features

- Simulates & measures Ohms & RTDs
- High precision, accuracy, reliability & longevity
- Graphical(128x64) LCD with backlight for excellent UI
- Simultaneous display of temperature & Ohms
- 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 multiple RTDs (2-wire/3-wire)
- Calibrates temperature indicators with RTD input
- Works as ohms source
- Calibrates temperature controllers and transmitters

Code	Function, Range & Resolution		
	Resistance	RTDs[1]	
D	0-500 Ω	Pt46 Pt100 Pt200 Cu53 Ni100	-200 to 850°C -200 to 850°C -200 to 400°C -50 to 180°C -60 to 180°C
	0.1 Ω	0.1 °C	
G	User specified requirements[2]		

[1] RTDs conform to IEC751/DIN43760 standard .

[2] Contact us with your specific requirements.

GIPITRONIX Pvt. Ltd.
Vadodara (Gujarat) – 390010 (INDIA)

+91-265-2642854
+91-997-4002836

www.gipitronix.com
contact@gipitronix.com

Technical Specifications $22 \le T_A \le 32°C$; $V_S = V_{LOBAT}$; 1yr of calibration validity unless otherwise noted

Display Specifications	Display	Graphical (128x64) LCD with backlight	
	Function	Ω	RTDs
	Resolution	0.1 Ω	0.1 °C
	Accuracy	± 0.02% rdg ± 0.01% FS ± 2 dgt	± 0.05% rdg ± 0.05% FS ± 1 dgt
	Self-check	444.4 ± 2 digits	Not Applicable
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 level using status bars and “LoBAT”	
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 $22 \le T_A \le 32°C$	
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
	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

[3]

Ordering Information

Model No.	Code
38515	X (As specified in the table)
Example	Specify 38515D to order the RTD Simulator using graphical (128x64) LCD with backlight for ranges of 500Ω and multiple RTDs.

[1] Valid for 2 years against mfg defects. [2] Traceable to NABL, India. [3] Some accessories in the picture are optional.

GIPITRONIX Pvt. Ltd.
Vadodara (Gujarat) – 390010 (INDIA)
+91-265-2642854
+91-997-4002836
www.gipitronix.com
contact@gipitronix.com