

HT8051

PROFESSIONAL PROCESS CALIBRATOR

HT8051 is a professional digital process calibrator designed to generate and measure DC voltage and DC current up to 10V and 24mA respectively. Under the current generation mode you can manually select between 0-20mA and 4-20mA as well as automatic ramps on output signal. An innovative adjustment knob permits a “top-easy” settings of the output current/voltage with 0.001mA/V resolution. The instrument permits also to effect measurements of current absorbed by external transducers and simulate a transducer with current adjustable within the whole measurement range. HT8051 is designed in compliance with IEC/EN61010-1 safety standards, provided with double insulation protection with CAT I 30V. This model is ideal for the most common industrial appliances and typical laboratory activities.

FUNCTIONS

- Generation of output voltage signal with amplitude up to 10VDC
- Voltage measurement up to 10VDC
- Generation of output current signal with amplitude up to 24mADC
- Current measurement up to 24mAVDC
- Current measurement under percentage format (4-20mA)
- Adjustment selector with high sensitivity
- Up to 3 available automatic ramp selection
- Loop current of external transducers measurement
- Simulation of an external transducer
- Li-ION rechargeable battery powered
- Backlight
- Auto Power OFF

ACCESSORIES

Standard

- Couple of test leads
- Couple of alligator clips
- Protection rubber holster
- Li-ION rechargeable battery
- External adapter
- User manual
- Carrying case

TECHNICAL SPECIFICATIONS

DC voltage (generated and measured)

Range: 0.01mV ÷ 10V

Resolution: 0.01mV ÷ 0.001V

Accuracy: $\pm(0.02\%rdg + 4dgt)$

Protection: 30VDC

DC current (generated and measured)

Range: 0.001mA ÷ 24mA

Percentage: -25% ÷ 125%

Resolution: 0.001mA

Accuracy: $\pm(0.02\%rdg + 4dgt)$

Protection: 30mADC

DC voltage (generated and measured)

A (slow linear ramp): from 0% → 100% → 0% in 40s

M (fast linear ramp): from 0% → 100% → 0% in 15s

S (step ramp): from 0% → 100% → 0% in steps of 25% with ramps of 5s each

NEW



HT8051
HV080510



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1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as \pm [% reading + (number of dgt) * resolution] at 18°C \div 28°C, <75%RH

MEASURED DC VOLTAGE

Range	Resolution	Accuracy	Input impedance	Overload protection
0.01 \div 100.00mV	0.01mV	$\pm(0.02\%rdg + 4dgt)$	1M Ω	30VDC
0.001 \div 10.000V	0.001V			

GENERATED DC VOLTAGE

Range	Resolution	Accuracy	Overload protection
0.01 \div 100.00mV	0.01mV	$\pm(0.02\%rdg + 4dgt)$	30VDC
0.001 \div 10.000V	0.001V		

MEASURED DC CURRENT

Range	Resolution	Accuracy	Overload protection
0.001 \div 24.000mA	0.001mA	$\pm(0.02\%rdg+4dgt)$	max 50mA DC

GENERATED DC CURRENT (SOUR and SIMU features)

Range	Resolution	Accuracy	Percentage value	Overload protection
0.001 \div 24.000mA	0.001mA	$\pm(0.02\%rdg+4dgt)$	0% = 4mA	max 30mA DC
-25.00 \div 125.00%	0.01%		100% = 20mA 125% = 24mA	

SOUR mode: 1k Ω @ 20mA ; SIMU mode \rightarrow Loop voltage: 24V nominal, 28V maximum, 12V nominal

LOOP MODE

Range	Resolution	Overload protection
25VDC \pm 10%	Non specified	30VDC

2. GENERAL SPECIFICATIONS

Display:

Characteristics: 5 LCD, double display, sign and decimal point
 Overload indication: "-OL-" at display

Power supply:

Rechargeable battery: 1x7.4/8.4V 600mAh Li-ION
 Battery life: approx 8 hours (@ SOUR mode 12mA, 500 Ω)
 approx 15 hours (@ MEAS mode)
 Alkaline battery: 1x9V type NEDA1604, 006P, IEC6F22

Mechanical characteristics:

Dimensions (L x W x H): 195 x 92 x 55mm
 Weight (included battery): 400g

Environmental conditions of use:

Reference temperature: 18°C \div 28°C
 Working temperature/humidity: -10 \div 40°C / <75%RH
 Storage temperature/humidity: -20 \div 60°C / <75%RH

Standard guidelines:

Safety: IEC/EN61010-1, CAT I 30V
 Insulation: double insulation
 Pollution degree: 2
 Max height of use: 2000m

This product conforms to the prescriptions of the European Directive LVD 2006/96/EEC and EMC directive 2004/108/EEC

