



HT8051 HT8000 HT8100

COMPARISON TABLE FUNCTIONS

CALIBRATION MEASUREMENTS

TRMS	HT8051	HT8000	HT8100
DC 4-20mA current measurement	•	•	•
DC 0-10V voltage measurement	•	•	•
DC 4-20mA current generation	•	•	•
DC 0-10V voltage generation	•	•	-
Measurement of output current of transducers	•	•	•
Simulation of an external transducer	•	•	•
Loop supply with minimum voltage 24V	•	•	•
Generation of selectable ramp	•	•	•
Load of 250Ω for testing HART transducers	-	-	•

MULTIMETER MEASUREMENTS

AC/DC voltage	• MAX 10VDC	• MAX 10VDC	•
AC+DC voltage	-	-	•
AC/DC current	• MAX 24mADC	• MAX 24mADC	• 1A
AC+DC current	-	-	•
Resistance and buzzer continuity	-	-	•
Frequency	-	-	•
Diode test	-	-	•

ADDITIONAL CHARACTERISTICS

Protection category	CAT IV 600V	CAT IV 600V	CAT IV 600V
Measuring spots	-	-	50000
Backlight	•	•	•
Autorange	-	-	•
Auto power off	•	•	•
Data HOLD function	-	-	•
MIN/MAX function	-	-	•
AVG function	-	-	•
Relative measurement	-	-	•
Memory for data saving	-	-	•
Activation	1x7.4/8.4V 600mAh Li-ION	1x9V 6F22	4x1.5V AA
Size (LxWxH) (mm)	195x92x55	195x92x55	207x95x52
Weight (batteries included):	400g	400g	630g
Safety	IEC/EN61010-1	IEC/EN61010-1	IEC/EN61010-1
Order Code	HV080510	HR000003	HV008100

ORDER CODE HV080510 | HR000003

HT8051 | HT8000

PROFESSIONAL PROCESS CALIBRATORS



HT8051 and HT8000 are professional process calibrators able to generate and measure DC current and voltage signals up to 10V and 24mA easy, by setting the values, thanks to the innovative setting dial. For current measurement and generation you can also set data to be displayed as a percentage corresponding to the values set (0% = 4mA, 100% = 20mA). Voltage and current signal generation is also possible using up to 3 selectable ramps. The model also measures the current consumption of external transducers directly powered by the instrument, and simulate the presence of a transducer with adjustable current throughout its reading range. The instruments are designed in accordance with safety standard IEC/EN61010-1 with double insulated motor and every function can be selected via the dedicated keys on the front panel. The instruments are the perfect solution for typical industrial automation applications and laboratory activities.

Functions

- Generation of voltage signal with amplitude up to 10VDC
- Measurement of voltage up to 10VDC
- Generation of current signal with amplitude up to 24mA DC
- Measurement of current up to 24mA DC
- Generation of voltage and current signals by means of 3 selectable ramps
- High-sensitivity adjustment selector
- Display of current as a percentage (4-20mA)
- Measurement of transducers output current (Loop)
- Simulation of an external transducer
- Shortcut function keys
- Powering with rechargeable Li-ION battery
- DC voltage (generated and measured)**
 - Reading range: 0.01mV ÷ 10V
 - Resolution: 0.01mV ÷ 0.001V
 - Standard accuracy: ± (0.02% reading + 4digits)
 - Protection: 30VDC
- DC voltage (generated and measured)**
 - Reading range: 0.001mA ÷ 24mA
 - Percentage: -25% ÷ 125%
 - Resolution: 0.001mA
 - Standard accuracy: ± (0.02% reading + 4digits)
 - Protection: 30mADC
- Output voltage and current ramps**
 - (slow linear ramp): Goes from 0% →100% → 0% in 40s
 - (quick linear ramp): Goes from 0% →100% → 0% in 15s
 - (step ramp): Goes 0% →100% → 0% through steps of 25% with ramps of 5s

Main features

Display:	5 LCD + secondary display,
Power supply:	1x7.4V rechargeable Li-ION battery (HT8051) 1x9V alkaline battery IEC 6F22 (HT8000)
External battery charger:	230VAC/50Hz – 12VDC (HT8051)
Autonomy:	about 8 hours in generation (@ 12mA, 500Ω)
Auto Power OFF:	after 20 minutes (adjustable) of non-use
Safety:	IEC/EN61010-1
Insulation:	double insulation
Level of pollution:	2
Measurement category:	CAT I 30V
Dimensions (LxWxH):	195x92x55mm
Weight (battery included):	400g

Supplied accessories

KIT0075	Couple of leads, two crocodile clip terminals
	Protective cover
	Rechargeable battery, External battery charger
	User manual and hard case for transport