



PROCESS CALIBRATORS



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HT8051



HT8100

CALIBRATION MEASUREMENTS

TRMS

- 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
- AC+DC voltage
- AC/DC current
- AC+DC current
- Resistance and buzzer continuity
- Frequency
- Diode test

ADDITIONAL CHARACTERISTICS

- Measurement category
- Measuring counts
- Backlight
- Autorange
- Auto power off
- Data HOLD function
- MIN/MAX function
- AVG function
- Relative measurement
- Internal memory

- Power supply
- Size (LxWxH) (mm)
- Weight (batteries included)
- Safety

Order code

	HT8051	HT8100
TRMS	•	•
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	•
AC+DC voltage	-	•
AC/DC current	• MAX 24mADC	• 1A
AC+DC current	-	•
Resistance and buzzer continuity	-	•
Frequency	-	•
Diode test	-	•
ADDITIONAL CHARACTERISTICS		
Measurement category	CAT IV 600V	CAT IV 600V
Measuring counts	-	50.000
Backlight	•	•
Autorange	-	•
Auto power off	•	•
Data HOLD function	-	•
MIN/MAX function	-	•
AVG function	-	•
Relative measurement	-	•
Internal memory	-	•
Power supply	1x7.4/8.4V 600mAh Li-ION	4x1.5V AA
Size (LxWxH) (mm)	195x92x55	207x95x52
Weight (batteries included)	400g	630g
Safety	IEC/EN61010-1	IEC/EN61010-1
Order code	HV080510	HV008100



ORDER CODE **HV080510**

HT8051

PROFESSIONAL PROCESS CALIBRATOR

HT8051 is a professional **process calibrator** capable of **generating** and **measuring** DC voltage and current signals up to 10V and 24mA respectively, with a very simple setting of values thanks to the innovative adjuster. In measuring and generating current, it is also possible to define a **display, also in percentage format**, corresponding to the set values (0% = 4mA, 100% = 20mA). The generation of voltage and current signals is also possible by using up to **3 selectable ramps**. This model also allows **measuring the current absorbed** by external transducers directly supplied by them and **simulating the presence of a transducer** with adjustable current in its whole measuring range. The device has been designed in compliance with **safety standard IEC/EN61010-1** with double protective insulation, and each function can be selected through the appropriate buttons found on the front panel. HT8051 is the ideal solution for typical industrial automation applications and for laboratory activities.



ORDER CODE **HV008100**

HT8100

PROFESSIONAL PROCESS CALIBRATOR/MULTIMETER

Model HT8100 is a professional device which groups measurements such as **TRMS multimeter** and function of **process calibrator** capable of **generating current signals** DC 0-20mA and 4-20mA. As a digital multimeter, the device mainly carries out **AC/DC voltage** and **AC/DC current measurements**. In its function as a current generator (values can be displayed also in a percentage format) options 0-20mA and 4-20mA are available, with manual and automatic settings of **thresholds on the output signal**. This model also allows measuring the **current absorbed by external transducers directly powering them** and **simulating the presence of a transducer with adjustable current** in its whole measuring range. HT8100 is capable of saving the results of measurements in its **internal memory** and has been designed in compliance with **safety standard IEC/EN61010-1** in CAT III 1000V and **CAT IV 600V** with double protective insulation. Each function can be selected through the appropriate buttons found on the front panel. This device is the ideal solution for typical industrial automation applications.

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
External battery charger:	230VAC/50Hz - 12VDC
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

Included accessories

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

Functions

- DC/AC TRMS voltage and current
- AC+DC measurements
- Automatic recognition of AC/DC signals
- Resistance, continuity test, diode test
- Frequency
- DC current generation up to 20mA DC
- Percentage display (0-20mA, 4-20mA)
- Measurement of output current of transducers (Loop)
- Simulation of an external transducer
- Input protective fuses
- Memory for measured data saving
- MAX/MIN/AVG, Data HOLD
- Relative measurement
- Automatic/Manual Range
- Auto Backlight, Auto Power OFF

Main features

Display:	LCD, 5 digits, 50000 dots
Power supply:	4x1.5V alkaline batteries type AA LR6
Battery life:	120 hours
Auto Power OFF:	after 20 minutes' idling
Safety:	IEC/EN61010-1
Measurement category:	CAT III 1000V, CAT IV 600V
Insulation:	double insulation
Pollution level:	2
Max height:	2000m
Size (LxWxH):	207x95x52mm
Weight (batteries included):	630g

Included accessories

YAAMK0000HTO	Pair of 4mm test leads
YAAMK0001HTO	Pair of alligator clips
	Belt with magnetic terminal
	Protective case, battery and user manual

Technical Specifications

- DC voltage**
 - Measuring range: 0.001mV ÷ 1000V
 - Resolution: 0.001mV ÷ 1.V
 - Basic accuracy: ±(0.05%reading + 5 digits)
 - Protection: 1000V DC/ACrms
- AC TRMS voltage**
 - Measuring range: 0,001mV ÷ 1000V
 - Resolution: 0.001mV ÷ 1.V
 - Basic accuracy: ±(0.5%reading + 20 digits)
 - Protection: 1000V DC/ACrms
- DC current (measured)**
 - Measuring range: 0.001mA ÷ 1A
 - Resolution: 0,001mA
 - Basic accuracy: ±(0.05%reading + 5 digits)
 - Protection: Fuse F440mA/1000V
- DC current (generated)**
 - Measuring range: 0.000mA ÷ 20,000mA
 - Resolution: 0.001mA
 - Basic accuracy: ±0.002mA
 - Protection: Fuse F440mA/1000V
- AC TRMS current (measured)**
 - Measuring range: 0,001mA ÷ 1A
 - Resolution: 0,001mA
 - Basic accuracy: ±(1%reading + 20 digits)
 - Protection: Fuse F440mA/1000V
- Resistance and Continuity test**
 - Measuring range: 0.1Ω ÷ 50MΩ
 - Resolution: 0.01Ω ÷ 1kΩ
 - Basic accuracy: ±(0.2%reading + 10 digits)
 - Continuity test: <30Ω
 - Protection: 1000V DC/ACrms
- Frequency**
 - Measuring range: 5Hz ÷ 100kHz
 - Resolution: 0.01Hz ÷ 10Hz
 - Basic accuracy: ±(3 digits)
 - Protection: 1000V DC/ACrms