

# MS410 ECG Simulator compact – handy – digital



**MÜLLER & SEBASTIANI  
ELEKTRONIK GMBH**

**M&S®**



- Six beat series, with 37 normal and pathological beat types
- "Artificial" beat types, in accordance with IEC 60601-2-51/Appendix II
- Automatic mixprogram
- Connection with banana plugs or electrode clips (pushbutton contacts)
- Selection and notification on the display
- Battery-powered

## Beat series and beat types

- Sinusoidal rhythm with eight signals, from 30 BPM to 180 BPM
- Supraventriculars, e.g. premature beat, AV-Block, first and second degree
- Ventriculars, e.g. unifocal and multifocal premature beats, bigeminy
- Pacemaker: artificial rhythm, ventricular demand, malfunction
- S-T with elevation and depression
- Distortion/Mix, e.g. baseline variation, electrode malfunction
- All beat series from IEC 60601-2-51 (calibration and analytical ECGs from CTS ECG testing with various interference and fault voltage), to check the precision of electrocardiograph measurements



## SPECIFICATION

<b>LCD display</b>	132x64 dots on 50x30 mm
<b>Digital resolution</b>	16 bits, 38 mV/digit
<b>Precision of output signals at 25°C</b>	±(1.0% + 8 µV) from the respective value of the standard ECGs in IEC 60601-2-51/Appendix II
<b>Temporal resolution</b>	Sampling rate 1 ms, 0.2%
<b>Dimensions (LxWxH)</b>	approx. 120 x 70 x 47 mm
<b>Weight (including rechargeable batteries or batteries)</b>	approx. 200 grams
<b>Surroundings</b>	Temperature: +10°C - +40°C Air humidity: 5% - 90% noncondensing
<b>Power supply</b>	2 x Mignon (AA) NiMH-, NiCd- rechargeable batteries (1.2 V) or 1.5-V batteries

## Accessories

Pushbutton contacts for electrode clips with extractor

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