

OT Bioelettronica

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quattrocento multichannel



The Quattrocento is a 400 channel desktop bioelectrical amplifier.

It can detect surface electromyographic, intramuscular electromyographic and electroencephalographic signals at the same time.

The signals acquired by the instrument are amplified, filtered, digitally converted and then transferred to a PC, via an USB2/Ethernet interface. OT biolab, a freeware software designed by OT Bioelettronica, allows to display the signals online, to acquire and process them. Moreover, the data collected by OT biolab is available on a TCP socket and can be accessed online by different software or different computers running any kind of operative systems.

Our technology



Technical specifications

Quattrocento has a double power

supply: internal battery or external 12 VDC. When used in battery mode, in combination with a battery powered laptop, it becomes a completely floating acquisition system ensuring the highest rejection to common mode interferences.

Auxiliary

Inputs

 The Quattrocento is an instrument designed for clinical research and it is a modular system. It is available in version ranging from 96 to 400 channels.

- Quattrocento allows to acquire 16 signals on auxiliary inputs. The signals can be generated by others amplifiers (e.g. force, torque, angle, position or trigger signals) which do not require an optical insulation.
- The Quattrocento is completely safe for the patient. The safety is achieved by means of medical grade electrical insulation of all the circuitry connected to the patient.

Technical data



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Class	I BF
Power Supply	Internal 2S-2P lithium-ion cells or external 12V _{DC} – 30W
Battery life	3 ÷ 40 hours depending on version and number of channels
Channels	96 ÷ 400 (included 16 auxiliary inputs)
Gain	150 V/V
Selectable high pass filters	0.3, 10, 100, 200 Hz
Selectable low pass filters	130, 500, 900, 4400 Hz
Sampling frequencies	512, 2048, 5120, 10240 Hz
Resolution	16 bits
Input range	$0 \div 30 \text{ mV}_{PP}$
Noise	$< 2 \mu V_{RMS}$
Input impedance	> 10 ¹² Ω

