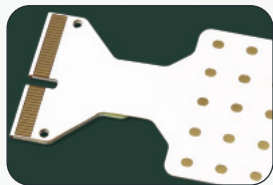


# muovi+lite

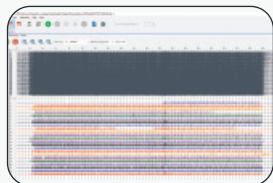
dynamic  
high density  
EMG



HDsEMG matrices



MUs firing rate



## OT Bioelettronica

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design by dart-sas.it



# muovi+lite

dynamic high density EMG





# muovi+ lite

## dynamic high density EMG



### General description

The Muovi+Lite is a device composed by one wireless probe (Muovi+) and a charging device (Muovi+SC).

The Muovi+ probe is 64 channel wireless bioelectrical amplifier, it is a wearable device designed for dynamic applications. The Muovi+ probe is able to detect surface electromyographic signals (HDsEMG) and electroencephalographic signals (EEG) for brain computer interface (BCI).

Easy High Density EMG Detection



Furthermore, the Muovi+ probe includes an inertial sensor and provide the quaternion to obtain their rotation and orientation.

The recording electrodes are directly connected to the Muovi+ probe, no cables are required.

The acquired data can be viewed in real time with OT BioLab+ software or with Matlab, Python and any other software capable of reading data from TCP socket.

### Application

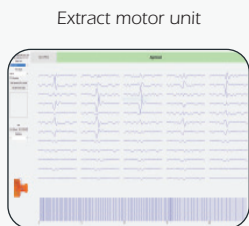
The Muovi+Lite allows to:

- identify anatomical muscle features;
- decode the neural drive to the muscles (HDsEMG).

### Features:

**Muovi+ probe allows to acquire different types of signals:**

- 64 HDsEMG signals or 64 EEG signals;
- quaternions obtained by the fusion of inertial sensor data.



The Muovi+ probe can be directly interfaced to a PC with WiFi.

### Technical data



Muovi+Lite	Class	I BF
	Total number of channels	64
	Functions	Acquisition of 64 EMG or EEG signals
	Bandwidth	10 – 500 Hz
Muovi+probe	Sampling frequency	500 or 2000 Hz
	Noise	< 4 $\mu V_{RMS}$
	Power supply	Battery LiPo 3,7 V
	Battery life times	Power on: 6 hours Continuous transmission: 2.30 hours
	IMU	Integrated inertial sensor
	Resolution	16 or 24 bit
	Data transfer to PC	WiFi
	Receiver	PC
	Weight	42g

