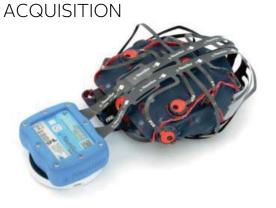
# Recording EEG during TMS and tDCS

g.Nautilus allows you to record EEG with passive and active electrodes while tDCS is applied. TMS recordings can be done with g.Nautilus and a post-processing artifact removal algorithm integrated in g.BSanalyze that robustly eliminates the discharge artifact within a few milliseconds.



# g-NAUTILUSPRO WIRELESS BIOSIGNAL



g.Nautilus PRO is a CE-certified and FDA cleared wireless biosignal acquisition system and medical device for clinical use. It's available as a flex-print solution with 8/16/32 prefixed dry or wet electrode positions for faster montage and to avoid errors. The dry electrode version is based on the worldwide proven g.SAHARA technology and the gel-based electrode version comes with g.LADYbird electrodes.

- g.Nautilus PRO 8/16/32, g.LADYbird prefixed channels with g.LADYbird active electrodes
- g.Nautilus PRO 8/16/32, g.SAHARA, prefixed channels with g.SAHARA active dry electrode technology

### **PRODUCT HIGHLIGHTS**

- g.SAHARA dry EEG electrodes
- g.LADYbird gel-based EEG electrodes
- 8/16/32 channels wireless EEG with 3-axis accelerometer
- 24-bit accuracy at 500 Hz sampling rate
- A new benchmark in usability
- The only wireless system with active electrode technology
- Internal impedance check with active electrodes
- Waterproof device with contactless charging
- 10 hours continuous recording and 2-3 hours charging
- 2.4 GHz digital transmission, range: 10 meters indoor
- Full integration into g.tec's software environment
- CE certified and FDA cleared medical device



#### **TECHNICAL SPECIFICATIONS**

Weight	< 110 g without electrode grid
Size	78 (L) × 60 (W) × 26 (H) mm
Color	8 ch RED, 16 ch PURPLE, 32 ch BLUE, CSP16mB BLACK
Sensitivity	±2.25 V, ±1.125 V, ±750 mV, ±562.5 mV, ±375 mV, ±187.5 mV (software selectable)
Interface	Wireless 2.4 GHz ISM band
Digital inputs	8 digital trigger inputs at Base Station
Supply	Built-in lithium-ion battery, runtime > 10 h with 32 channels, inductive charging according to the QI standard of the Wireless Power Consortium
Amplifier type	Real DC coupled
32 × ADC	24 Bit (1.024 MHz internal sampling per channel)
Noise level	$<$ 0.6 $\mu V$ RMS between 1 and 30 Hz (at highest input sensitivity)
Input channels	32 mono-polar / 16 bi-polar channels with GND and REF (software selectable)
Input impedance	DC > 100 MOhm
Applied part	BF
Safety class	II
Certification and Standards	CE certified and FDA cleared medical device IEC60601-1 3rd, IEC60601-1-2, IEC62304, IEC60601-2-26, ISO 14971 10993-1, 62366, 2010-2012 IEEE Recommended Practice for Neurofeedback Systems

## **User Experience**



#### Music and the mind

The LIVELab at McMaster Institute for Music and the Mind (MIMM) is engaged in neuroscientific research that aims to understand the positive role of music training, movement and performance. Researchers study music in a live setting using g.Nautilus to learn how performers interact, how audiences move during a performance and the social and emotional impact of these experiences.

# Measuring emotional response in Dolby Laboratories

Dolby Laboratories is widely known for producing great sound in cinemas, and has been around since 1965. Inside San Francisco, more than a hundred labs are working on enhancements of the technology. One of these projects is using g.Nautilus to study people while they are watching videos. These scientists try to better understand what makes you engaged, what makes your skin blush, increases your heart-rate or gives you goose bumps.

## Authorized Distributor: Ultra Technology Engineering

1115, Block A4, Pusat Dagang Setia Jaya, 9 Jalan PJS 8/9, Bandar Sunway 46150 Selangor, Malaysia Tel: +603-8066 6726 Email: enquiry@ute-my.com Web: www.ute-my.com