

mega news

3/2011

Mega's new premises under construction



Successful Medica 2011



New NeurOne Tesla



Hi-res EEG system with MRI compatibility

eMotion HRV 3D

Heart rate variability and 3-axis accelerometry with one device



eMotion HRV 3D

Mega Electronics Ltd introduces the most reliable and convenient way to measure heart rate variability (R-R intervals) and acceleration **eMotion HRV 3D** is an ideal solution to be used in obesity research, epidemiology, stress monitoring, sport medicine and in top sports.



HRV 3D sensor with interface

Features:

- Heart rate variability and 3-axis accelerometer in one device
- Sampling and recording with high frequency
- Ideal for ambulatory measurements

Accelerometer (x, y, z):

Type: 3-axis accelerometer (x, y, z)

Measurement range: +/- 8g

Initial sampling frequency: 250 Hz

Recorded sampling frequency: 10 Hz

Resolution: 8 bits

Advantages of simultaneous HRV and acceleration measurement:

- Physical activity can be monitored more accurately
- Ambulatory activities can be detected from the data
- In HRV measurements acceleration data can be used to complement activity diary
- More accurate algorithms for energy expenditure can be used
- Changes in posture can be detected from data

New NeurOne Tesla – Hi-res EEG system with MRI compatibility

Mega Electronics has launched new NeurOne Tesla system.

NeurOne Tesla brings unique features of NeurOne EEG/ERP to the researchers of fMRI.

These features include:

- 40 - 160 channels
 - up to 152 channels of EEG
 - 8 - 32 bipolar channels
- DC/AC mode; settable channel by channel
- High dynamic range (+/-430 mV or +/-86 mV)
- High sampling rate (max. 80 kHz)
- 24 bit resolution
- Battery powered
- Fiber optic connection from Tesla Amplifier to MRI control room
- Real Time analog out (any 16 channels of 160)
- Windows 7 compatible software
- MATLAB/EEGLAB support
- Supported directly by BESA/Vision Analyzer



NeurOne Tesla amplifier



eMotion Educational

Mega is introducing a new eMotion Educational system. It offers an affordable system, which can measure wirelessly many biosignals (EMG, EEG, EOG, ECG, HRV, 3D ACC). System is ideal for universities and other educational institutes and can give students hands-on experience in biosignal measurements and offers a great tool for thesis work.

It also includes software development kit so students with programming skills can create their own wireless measurement systems. eMotion educational will come in 3 different packages and will be available from the beginning of 2012.



Handheld force sensor for ME6000



Handheld force sensor is latest addition to long list of optional sensors for ME6000. Handheld force sensor is ideal for quick assessments of force production capability during manual muscle testing.

The patient is instructed to hold limb in position and resist gradually increasing force applied by the examiner. The force required to move the limb is referred as the "breaking force". Electromyographic activity of agonist and antagonist muscles can be measured simultaneously with force measurements.



Beijing Sport University strengthens its product portfolio with NeurOne system and other Mega products

Mega Electronics' Chinese distributor "Beijing PuKang Sport & Medical Co, Ltd." has made a good work with Chinese markets. Due to this hard work Beijing Sports University (BSU) has made a remarkable order of Mega products.

BSU has bought NeurOne 160 channels complete system and the use of it will begin in January 2012.



Mega Electronics will also provide WBA 16 channels complete system, eMotion EMG system and eMotion LAB software to BSU.



Mega Electronics is proud of Beijing Sport University's high interest towards our products. This shows, yet again, that Mega technology is highly appreciated in science institutes.

Heart Rate Variability sensors to be used in Russian ice hockey leagues

Mega Electronics and Treck America Ltd have signed a major export agreement regarding Mega Electronics' eMOTION HRV sensors. The export agreement covers also a software solution and reporting system from Firstbeat Technologies Ltd.

The 16-gram device is attached to the chest with two electrodes. The sensor measures the activity of the autonomic nervous system through a heart rate variability analysis. The measured data can be used in analyzing, for example, stress reactions, recovery, depth of sleep and the impact of training.



There have already been two batches which contained altogether 300 sensors for the Russian Superleague (KHL), local leagues and the Junior League.

Mega Electronics will produce and deliver the heart rate variability sensors, while Firstbeat will provide software solutions for analyzing the data. In the future, the sensor-software-package will be provided for other sports clubs, sports and coaching activities in Russia and other CIS countries.

The co-operation with Treck America Ltd has started very intensively, and they have already ordered also ME6000, WBA system and eMotion EMG. Mega Electronics is extremely happy about this.

SUCCESSFUL MEDICA 2011

Medica 2011 is now over and Mega had a good and intensive fair. We met many of our distributors and had fertile discussions with them. Mega met also great interest from other visitors.

This year Mega had German speaking staff member at the stand, Mr. Dietmar Benz, and this brought more German people to see our products, which was very good.

Mega also had a completely new stand layout and design, which reflected company's brand in a fresh and modern way.

This year there were approximately 4,500 exhibitors and 134,500 visitors at Medica totally, so it could be said that fair was as popular as last year.





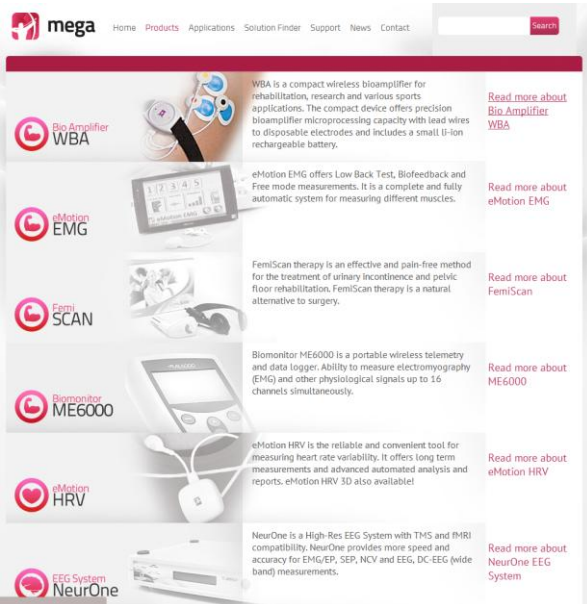
NEW MEGA WEBPAGE LAYOUT

Mega has upgraded its webpage layout. New layout follows the Mega's new brand. The design is modern and fresh, yet professional.

In the new web pages there is a Support area for material/software downloads. Passwords for protected downloads can be received from Mega staff.

Our distributors have been noticed well in the new web pages, as there are the new distributor list and map to help customers to find their nearest distributor.

You can get to know new Mega webpage in www.megaemg.com



MEGA'S NEW PREMISES

The construction of Mega's new premises has begun. Building should be ready in May 2012.

This new building is designed just for Mega's purposes. It will include modern work places for all departments and will also offer good facilities for meetings.

New building is located in the new business area called Pieni Neulamäki in Kuopio.



New Mega office



Pieni Neulamäki business area



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*Merry Christmas and
Happy New Year 2012*

