New Portable EMG/EP System

Product Name: Portable EMG/EP System

Model No.: NTS-2000 Cha

Channels: 2/4

1. Features and Advantages:

(1) The amplifier and current stimulation are integrated into the main unit of EMG/EP system and makes the whole system compact and light-weight. Handy design for easy to carry;



Connected Amplifier to PC by USB Cable

- (2) Digital isolation shield away interference from power line and environment, make it easy to collect data;
- (3) The interfaces of NEW EMGEP System are few and simple, it is easy for operation and installation. And it has flexible configuration for choice, for example, customer can choose to buy A&V Stimulator for EP examination;
- (4) It has USB interface to connect computer, EMG/EP program can work with Win 7 System and work with computer in different display size and resolution.

2. Specification for EMGEP System:

Amplifier:

Channels: 2/4; Sensitivity: 0.05μ V/div -20 mV/div, Amplitude-frequency characteristic: 1Hz-5kHz, Noise: $<0.4\mu$ V (VP-P RMS) Impedance: $>1000M\Omega$ CMRR: >110dBGain Amplifier: 50 times ~ 50 million times Max higher filters frequency: 50Hz Min Lower filters frequency: 0.1Hz A/D conversion rate: 24Bit Sample Rate: 200 KHz Stimulus frequency: 0.1 - 50 Hz Analysis time: 1 - 1000ms Splice time: 1-5000 times

Current Stimulator (Included in the Amplifier)

Current intensity output range: $0 \sim 100$ mA, error $<\pm 10\%$ Stimulus modes: single-current stimulator, dual-current stimulator Stimulus frequency: 0.1 Hz ~ 100 Hz, error $<\pm 10\%$ Stimulus width: $50-1000\mu$ s Pulse duration error: 0.05ms, 0.1ms, 0.5ms, 1ms, Error $<\pm 10\%$ Pulse mode: single pulse, double pulse, three pulses.

A/V Stimulator (optional)

(1) Sound (Configured with headphone)Stimulus intensity: 30-120 dBStimulus frequency: 0.1-20HStimulation method: rare wave, dense wave, alternative wave

(2) Pictures (Configured with Pattern reversal stimulator)

a) Pattern mode: checkerboard, vertical grid, bar grid

- b) Image Size: 64*32, 32*24, 16*12, 8*6, 4*4.
- c) Vision: full vision, half-field (left), 1 / 4 view (I, II, III, IV quadrant)
- d) Stimulation frequency: 1 ~ 20 times / sec
- e) Free to edit, set the pattern or color pattern.

(3) Flash (Configured with goggles)

Stimulus frequency: 0.1 ~ 20Hz adjustable

3. Examination Protocols:

Electromyography (EMG):

Motor Unit Potential (MUP) Interference phase (IP) Scanning EMG (QEMG)

Evoked potential (EP):

Somatosensory Evoked Potential (SEP): USEP; LESEP; TSEP; SCEP Acoustic evoked potential (AEP) BAEP, MAEP, LAEP, EoochG, 40HZ Visual evoked potential (VEP) PRVEP, FVEP, ERG, EOG

Nerve Conductive Studies (NCV)

Motor NCV (MCV) Sensory NCV (SCV) Short segment conduction (SSCT) Repetitive nerve stimulation (RNS) F-wave; H-reflex; Blink Reflex (BR) Sympathetic Skin Response (SSR)

4. Software:

 \star Can show the Nerve / Muscle color map in the software;

 \star Can edit the nerve points/ muscle points freely in the software;

 \star Have nerve detection guide including the direction of the record point and the normal waveform;

 \star Have the function of waveform caching and can save more waveforms to one stimulation point;

 \star Scan speed and the sensitivity can be adjusted with all waveforms Synchronously;

 \star Can collect the signals of 4 channels Synchronously.

5. Optional parts

Computer (Laptop)

Main requirements:

- a) CPU with PII or above, memory is 128MB above and hard disk space is 1G or more;
- b) USB 2.0 interface;
- c) 17" LCD display supporting 1280 × 1024 resolution in 16-bit color display mode, with Windows XP as operating system;
- d) Has 3C safety certification mark;
- e) Microsoft Office 2003 installed;
- f) East Asia language installed.

Dimension& Weight: 510*445*207(mm); 6.05kg

Printer

HP L1908w monitor HP LaserJet 1018 printer Min system requirements: Win 2000(XP, Server 2003 32/64 bit) Intel 2, celeron 128MB RAM 425MB HD Microsoft internet explorer 5.01 SP2 CD-ROM USB Dimension& Weight: 349*195*344(mm); 6.15kg;

Louder Speaker

Input Sensitivity: 500mV Frequency: 140Hz-20 kHz Voltage: 200V/50Hz Weight: 0.95Kg

Video Monitor (For VEP Test)

17" LCD displayDimension& Weight: 1 carton;438*162*422 (mm);4.7kg;Notes: Computer, printer, louder speaker, trolley and portable suitcase are not of standard configuration, please buy them locally, or inquire details from manufacturer.

6. Quality system

ISO13485: 2003; CE (93/42/EMG)