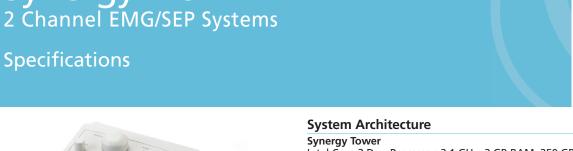
Synergy PIU 2 Channel EMG/SEP Systems







General Specifications

Consists of a Patient Interface Unit (PIU), external speaker, medical grade power supply, and a computer with Synergy System Software

Patient Interface Unit (PIU)

Size: 156 mm W x 55 mm D x 241 mm H (6.2" x 2.2" x 9.5")

Weight: Approximately 1 kg (2.2 lbs)

External Speaker

Size: 131 mm W x 66 mm D x 62 mm H (5.2" x 2.6" x 2.4")

Weight: 370 g (13 oz) Medical Grade Power Supply

Size: 129 mm x 77 mm x 42 mm (5.1" x 3.1" x 1.7")

Weight: 510 g (1 lb 2 oz)

Power Requirements

ISO-1050VA Mains Isolation Transformer

Input 100 V-120 V/200 V-240 V, 50-60 Hz, 1050 VA max

Medical Grade Power Supply

Input: 100-240 V~, 50-60 Hz, 1A max.

Output: 15 Vdc 6A

Note: Fuses are internal (there are no user-accessible fuses)

Display

Notebook

14" TFT-LCD with maximum 1280 x 800 (WXGA) resolution

19" TFT-LCD display 1440 x 900, maximum 1280 x 1024 (WXGA) resolution

Speaker Unit

Audio Input Approximately 500 mVpk-pk for full output Maximum Power to Internal Speaker Approximately 1.75 Wrms Speaker 50 mm (2") diameter

Synergy Language Support

Configurable to English (UK), English (US), French, German, Italian and Spanish

CareFusion Middleton WI

carefusion.com

Intel Core 2 Duo Processor, 3.1 GHz, 2 GB RAM, 250 GB hard drive minimum

Synergy Notebook

Intel Core 2 Duo Processor, 2.53 GHz, 2 GB RAM, 250 GB hard drive minimum

DVD +RW

Ethernet Network Card

Printer (optional) Laser

Keyboard language-dependent (English - UK and USA, French, German, Italian, Spanish)

Mouse USB

Microsoft Office Language-dependent (English - UK and USA, French, German, Italian, Spanish)

Network Ready

Synergy Software Language-dependent (English - UK and USA, French, German,

Italian, Spanish)

Operating System Software

Microsoft® Windows® XP Professional

Electrical Stimulators

Single electrical stimulator. Switchable constant voltage or constant current with a low or high range.

Repetition Rates 0.06 to 200 pps ±5% fine control

Stimulus Duration 0.02, 0.05, 0.1, 0.2, 0.5, 1.0 ms (0.02 ms \pm 10%, 0.05 to 1.0 ms \pm 5%)

Output Type Constant Current or Constant Voltage

Range High: 0 - 100 mA, or 0 - 300 V Low: 0 - 25 mA, 0 - 75 V

Delay + 0 to 9 screen divisions Stimulus Modes Single

Amplifiers and Filters

Optically isolated amplifiers with 2 channels

Input Impedance 1000 M Ω ±10%, < 30 pF

CMRR >110 dB

Noise < 0.7 μV r.m.s (0.1 - 10 kHz bandwidth, inputs short circuited)

Low Frequency (-6 dB/octave) 0.1, 1, 3, 10, 20, 30, 50, 100, 200, 250, 300, 500, 1000 and

2000 Hz (±10%) 1, 1.5, 2, 3, 5,10, 20K Hz

High Frequency (-12 dB/Octave) 100, 200, 250, 300, 500, 1000 Hz

1, 2, 3, 5,10K Hz (±10%)

Notch Filter 50 Hz or 60 Hz or OFF, attenuation of 25 dB minimum

Data Acquisition

A-D Conversion 16 Bit ADC

Sweep Duration 1 ms to 50 s per channel (independent control per channel)

LongTrace™ Facility Continuous acquisition of up to 200 x sweep duration (1000s)

Averager Mode Mean, Rectified

Artifact Rejection Configurable per channel

Display Sensitivity 0.01 µV to 100 mV/div

Other External Connectors

Stimulator A

Amplifier connection

Footswitch

Temperature probe input

Standard Software

Full patient database with user-configurable fields (ODBC compliant)

Protocol Wizard for user-defined test settings

On-line Report Generation software, Microsoft Office compatible

On-line Help

