Industry-leading value amplifier with research-grade technology.

An AC-coupled, digital amplifier system with a high input range and 22-bit resolution providing amplification and digitization of electroencephalographic physiologic signals. The amplifier provides 38 channels (32 isolated high-frequency referential channels, 6 bipolar channels) and event button input. The unit has a POE 100BASE-TX network connection for both power and communication.
Technical specifications

**INPUTS**
- 32, AC-coupled, fully isolated, referential (monopolar)
- 6 user-defined, AC-coupled, fully isolated, bipolar inputs

**INPUT IMPEDANCE**
- >100 MΩ 1-32
- >20 MΩ 33-40

**BIAS CURRENT**
- Typically 1 nA

**INPUT NOISE**
- 1.6µVpp (typical referential ch)

**INPUT RANGE**
- 600mVpp

**CMRR**
- > 100dB

**CROSSTALK**
- < 60dB to adjacent channels FSR

**HIGH PASS FILTER**
- 0.15 Hz

**LOW PASS FILTER**
- (3dB):
  - 71 Hz at 256 s/s
  - 143 Hz at 512 s/s
  - 284 Hz at 1024 s/s
  - 568 Hz at 2048 s/s

**NOTCH FILTER**
- Software-based display filtering of 50Hz, 60Hz, or off

**ISOLATION SPECIFICATIONS**
- Complies with IEC 60601-1 CF patient inputs

**ANALOGUE TO DIGITAL CONVERTER**
- 22 bit resolution

**SAMPLE AND DATA RATES CHANNELS 1 TO 40**
- Data sampled at 16384 samples per second and decimated to data rates shown below. Actual data rate sent is determined by controlling PC software application.
- Output data rate: 2048, 1024, 512, or 256 samples per second

**COMMUNICATION INTERFACE**
- 802.3/802.3u twisted pair Ethernet with auto MDIX, RJ45 connector

**EVENT BUTTON CHANNEL x 1**

**SAFETY STANDARDS**
- Complies with IEC601-1, IEC60601-1-26, EN60601-1-2, UL60601-1 specifications for medical electrical and electromagnetic equipments & systems
- CE 0120 Mark

**DIMENSIONS**

<table>
<thead>
<tr>
<th>System Component</th>
<th>Size L x W x H</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplifier</td>
<td>240mm x 144mm x 50mm</td>
<td>800 grams</td>
</tr>
<tr>
<td></td>
<td>9.45in x 5.66in x 1.97in</td>
<td>28.2 ounces</td>
</tr>
</tbody>
</table>

**ENVIRONMENTAL REQUIREMENTS**
- Temperature: Ambient operating temperature range: 0°C - 40°C (32°F - 104°F)
- Storage temperature range: -10°C - 50°C (-14°F - 122°F)
- Humidity: 20% - 90% relative humidity (non-condensing)
- Altitude: Less than 3,000 m

**ELECTRICAL SPECIFICATIONS**
- Power Supply: All power provided by the network connection using Power Over Ethernet (either mid-span injector or POE switch, per IEEE 802.3af standard)
- Operating voltage: 48 volts
- Power consumption: <10 watts

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AS580 Version 1
Introducing the new

®
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LT

Industry-leading value amplifier with research-grade technology. A powerful EEG amplifier aimed at clinical EEG studies.

KEY FEATURES:
• Industry leading value amplifier
• Optimised for clinical EEG studies
• Research grade amplifier technologies

*GRAEL LT SYSTEM INCLUDES:
• Grael LT main unit with power supply & support arm
• Profusion EEG 4 software (Digital Video driver as option)
• Photic Strobe without stand
• Event button
• System Trolley + Isolation Transformer

*System does not include PC or Cameras.

For more information or to place an order please contact your local Distributor.