# BE PLUS PRO STANDARD

## Technical Datasheet

**CHANNELS:**

- 56 inputs for unit
- From 26 to 34 Monopolar AC/DC channels (Bipolar channels can be switched as monopolar.)
- From 8 to 21 Bipolar AC/DC channels (Monopolar channels can be configured as Bipolar two by two.)
- 5 GND – 4 NE

**Other Channels**

- Dedicated input for Pulse Oximeter
- 3 Digital channels for SpO2 + HR + PLET (optional)
- 2 Digital channels for TTL Trigger IN and OUT
- 1 Digital channel for TTL FLASH out (only for LAN Version)
- 1 headcap connector.
- Every channel can be customized as dedicated input for any compatible transducer like EKG, Respiration, CPAP, EMG, etc.

**User Interfaces**

- **Graph color LCD Screen 160x128 reporting the status of the connection, of the battery, of the internal memory, the operational modality (stand-by, collection, calibration, or ohmmeter), patient montage display, trace visualization with zoom, graphical and numeric ohmmeter values.**
- 4 user customizable keys for power on/off, LCD display navigation and event marker.

**Extra Features**

- **Waterfall configuration up 4 units for 224 inputs. (56*4).**
- Online impedance checks activable from the amplifier and from the software.
- Impedance values stored in the recording file and reported as color scale and values on LCD Display, on the software and on input plugs.
- Led inputs impedance indicator.
- 16Gb SHDC of internal data storage upgradable up 64Gb.
- Data integrity management with “0 Data Loss” modality.
- Integrated or external patient marker button with remote alert.

**Channels Analog Performances**

- Typical Noise: <0,15µVrms || <0,42µVpp
- Typical CMRR: 160dB differential || 80dB common mode
- Typical Input Impedance: >160MΩ differential || >90MΩ common mode
- AC Input Ranges: Monopolar 8mVpp + 2400mVpp DC Offset
  Bipolar 8mVpp + 2400mVpp DC Offset
- DC Input Ranges: Monopolar 256mVpp / Bipolar 600mVpp
- Impedance Check: 1-100 KΩ
- Sum of channels gains: over 4000
- Crossover isolation: over 70dB
- Bias current: <<5nA

**Sampling Performances**

- Converter Bits and Technology: 24 ∑Δ
- Resolution: 8 nV/bit for AC channels || 250 nV/bit for DC channels
- **Software selectable sampling frequencies: from 128Hz to 32KHz**
- ∑Δ sampling frequencies: from 16KHz to 4MHz Output bandwidth: from DC to 8KHz
- Common or multiple sampling rates for each acquisition

**Power Supply**

- USB+ from a medical grade computer.
- External Medical Power Supply 15V AC/DC (IEC 601-1 Class I Type B).
- Internally powered from EB Neuro Li-Pom Rechargeable Battery Pack 7.4V, 3700mAh, > 8h in Wireless mode (optional).
- Battery recharged during wired connection or with external charger (optional); battery check on the LCD screen

**Computer Interfaces**

- USB 2.0+ on TCP/IP protocol
- Ethernet IEEE 802.3 (LAN)
- **Wireless IEEE 802.11/bg (Wi-Fi)**

Digitally signed by Gherman Irina
Date: 2022.09.14 09:58:24 EEST
Reason: MoldSign Signature
Location: Moldova

**Mechanical**

- Dimension 47 x 123 x 210mm
- Weight: 600 g (without battery)

**Environmental conditions for usage**

- Temperature: from +5°C to +40°C
- Relative humidity: from 30% to 75% RH
- Atmospheric pressure: from 700hPA to 1060hPA

**Environmental conditions for storage**

- Temperature: from -30°C to +60°C
- Relative humidity: from 5% to 95% RH excluding condensation
- Atmospheric pressure: from 500hPA to 1060hPA

**Classifications**

- 93/42/EEC Class IIb
- EN/IEC Class I-BF
- EN 60601-1, EN 60601-2, EN ISO 14971
- ISO 9001:2015, ISO 13485:2016
- CE Marked

**Main Optional**

- EMC free Photic Stimulator having super bright LED, 0 to 60Hz.
- Photic Stimulus duration: from 1 -20 ms
- Sensitivity adjustable/Programmable: From 5 nV / mm to 10 mV/mm
- Digital synchronized single or double cameras for video full HD recordings (1920*1080)
- Electrical, acoustic, visual, ERP, TMS and external stimulators.
- Remote patient proxy with extension cable

**Main Applications/Functionalities**

Video-Electroencephalography,Polysomnography, Long Term Monitoring, stopwatch, Ambulatory/Holter recording, Evoked Potentials, Intensive Care Unit Neurological Monitoring,Cognitive Evoked Potentials, Event Related Potentials, Brain Computer Interface, Cerebral Death Assessment, Research Applications