

Technical Specifications

Part Number PK1072
Use Case LTM (Wireless)

Analog Specifications - AC Channels

Referential Channels 40
Differential Input Impedance > 100 MΩ
Common Mode Input Impedance > 50 MΩ
Common Mode Rejection Ratio 116 dB @ 60 Hz
Input Noise (peak to peak) 3.9 μV @ 0.1-70 Hz bandwidth
Input Noise (RMS) 0.65 μV @ 0.1-70 Hz bandwidth
EEG Channel Hardware Gain 250
Maximum Differential AC Input Before Clipping (Referential) ± 10 mV pk-to-pk
Maximum Operational DC Input Voltage Electrode Offset ± 1000 mV
Input Bias Current < 20 pA
Channel Crosstalk -87 dB
Bandwidth 0.1Hz-400Hz

Analog Specifications – DC Channels

DC Channels 4 non-isolated
DC Input Range ± 5 V

User Interface

Push Buttons 4 (Impedance Check and Threshold, Up and Down)
Event Switch Connection 1 on Base unit and 1 on Breakout
LED Indication 3 on Base unit and 4 on Breakout
Additional Connections Photoc Stimulator, Masimo SET[®] Pulse Oximeter
Display Color LCD on Base unit

Digital Specifications

Sampling Frequency 256 Hz, 512, 1024 Hz
Sampling Resolution EEG Channels 16 bits
Sampling Quantization EEG Channels 300 nV
Sampling Resolution DC Channels 16 bits
Sampling Quantization DC Channels 150 μV

Modes of Operation

Breakout Box Storage Capacity 4 GB Internal Compact Flash Card
Breakout Box Power Consumption 1 W @ 12 V
Breakout Box Battery Rechargeable 2 x AAA Ni-Mh battery
Breakout Box Battery Life 4 to 4.5 hrs with external battery pack
Impedance Check < 2.5, < 5, < 10, < 25 kΩ
Channel Test Signal Software Controllable
Sine 5–20 Hz, 50–200 μV pk-to-pk
Square 0.25–1 Hz, 50–200 μV pk-to-pk



Wireless Specifications

Operating Frequency 2.400 – 2.4835 GHz
RF Output Power 6 mW (+8dBm), 64 mW (+18dBm)
Maximal distance range between transmitter / receiver
(according to EMC environmental conditions) Up to 30 meters

PC Interface

Network TCP/IP, UDP, DHCP
Direct USB 2.0 Hi-Speed

Amplifier Mechanical

Base Unit to Breakout Box Cable Maximum Length 30 ft / 9 m
Approximate Size
Base Unit 9.1 x 8.86 x 1.57 in / 23.0 x 22.5 x 4.0 cm
Breakout 3.94 x 6.22 x 0.91 in / 10.0 x 15.8 x 2.3 cm
Breakout Weight 0.73 lb / 333 g

Environmental Conditions for Use

Operating Environmental Limits
Temperature 10°C to 40°C
Relative Humidity 30%-75%
Atmospheric Pressure 700 hPa-1060 hPa
Transport and Storage Temperature Range -40°C to 70°C
Transport and Storage Humidity Range 10%-100%, including condensation
Transport and Storage Atmospheric Pressure Range 500 hPa-1060 hPa

Regulatory Compliance

CAN/CSA C22.2 No 601.1-M90, UL 60601-1, IEC 60601-1, IEC 60601-2-26,
EN 60601-1-2, EN 55011, FCC 47 CRF Part 15