

Technical Specifications

Part Number PK1170, PK1171
Use Cases High Channel LTM, Intracranial

Analog Specifications - AC Channels

Referential Channels 256
Differential Channels Up to 8 per 128 Breakout (112 Ref.)
Common Mode Rejection Ratio ≥ 110 dB @ 60 Hz
Common Mode Input Impedance > 1 G Ω
Differential Input Range 20 mVpp
Input Noise (peak to peak) < 1.8 μ V (256 Hz), ≤ 40 nV/rtHz wideband
Input Signal Range (peak to peak) 20 mV, ± 0.66 VDC
Input Bias Current < 1 nA
Channel Crosstalk < -67 dB

Analog Specifications – DC Channels

DC Channels (patient side) 4 non-isolated
DC Channels (computer side) 12 isolated
DC Input Range ± 5 V

User Interface

Base Unit

Additional Connections Photoc Stimulator, Digital Trigger, EMU40EX Breakout
Event Switch Connection 1
Display Touchscreen LCD

Breakout Box

Additional Connections
Event Switch, Nonin Xpod® Pulse Oximeter SpO₂, Cortical Stimulator

Digital Specifications

Sampling Frequency 256 Hz, 512 Hz, 1024 Hz, 2048 Hz, 4096 Hz, 8192 Hz, 16384 Hz
Bandwidth 0.01 Hz to $\sim 1/3$ sample rate selected or 4 KHz max
Digital Trigger 8 bit TTL
Pulse Oximetry SpO₂, Plethysmography, Pulse Rate
Sampling Resolution 24 bits
Sampling Quantization 305 nV
Storage Resolution 16 bits

Modes of Operation

Power 70 VA
Input 100 - 230 V, 50/60 Hz
Impedance Check < 2.5 , < 5 , < 10 , < 25 , < 50 k Ω
Channel Test Signal Software Controllable (0.25, 0.5 and 1 Hz; 10-2000 μ Vpp)



PC Interface

Network Gigabit Ethernet, DHCP
Direct USB 2.0 Hi-Speed, Ethernet

Amplifier Mechanical

Base Unit to Breakout Box Cable Maximum Length 10 m (32 ft)
Base Unit Size 29.0 x 26.5 x 5.0 cm / 11.4 x 10.4 x 2.0 in
Breakout Size (each) 13.8 x 13.2 x 5.4 cm / 5.4 x 5.2 x 2.1 in
Breakout Weight (each) 650 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 -20°C to 60°C
Transport and Storage Humidity Range 5%-95%
Transport and Storage Atmospheric Pressure Range 500 hPa-1060 hPa

Regulatory Compliance

CAN / CSA-C22.2 No. 60601-1: 08(R2013) +C2:2011
ANSI / AAMI E560601-1:2005/(R)2012 +C1:2009/(R)2012 and A2:2010/(R)2012
IEC 60601-1:2005 + C1:2006 and C2:2007, 3rd Edition
IEC 60601-1-6:2010, Edition 3.0, IEC 62366:2007, Edition 1.0
IEC 60601-2-26:2012, Edition 3
EN ISO 80601-2-61:2011, Edition 1
IEC 60601-1-2:2007, Edition 3.0
CISPR11, Edition 5.0 (with A1:2010)