

XLTEK Trex Amplifier



The XLTEK Trex amplifier can be used as an ambulatory, clinical EEG or home sleep headbox. Its small size and weight make it very easy for every patient population, including pediatrics. Featuring 24 AC channels, 4 differential channels and 4 DC channels, the flexibility is endless. Connecting to the PC via a high speed USB cable, data uploads from the headbox in less than 6 minutes for 24 hours. The amplifier runs on 2 AA batteries so it remains small and lightweight.

PK1053 – 48 Hour Trex

PK1055 – 96 Hour Trex

Each package contains a headbox, patient event button, 4 AA batteries, USB cable and pouch.

Trex Headbox Specifications

Parameters	XLTEK Trex
Data Transmission	USB 2.0 over a physical connection
Analog Specifications EEG Channels	
<i>EEG Channels</i>	24
<i>Reference Channels</i>	Dedicated reference
<i>Differential Input Impedance</i>	> 20 MOhms
<i>Common Mode Input Impedance</i>	> 10 MOhms
<i>Common Mode Rejection ratio</i>	> 60 dB @ 60Hz
<i>Input Noise</i>	< 8uV pk-to-pk @ full bandwidth
<i>EEG Channel Hardware Gain</i>	125
<i>Maximum Differential AC input before clipping</i>	20mV pk-to-pk
<i>Maximum Operational DC input voltage electrode offset</i>	±10V
<i>Anti-aliasing filter Bandwidth</i>	120 Hz
<i>Input Bias Current</i>	< 10pA
<i>Channel Crosstalk</i>	< -60dB
Analog Specifications – Differential Channels	
<i>Differential Channels</i>	4 non- patient-isolated
<i>Differential Input Range</i>	±10mV
Analog Specifications - DC Channels	
<i>DC Channels</i>	4 non- patient-isolated 1 patient event switch input
<i>DC Input Range</i>	±5 V
Digital Specifications	
<i>Sampling Frequency</i>	200, 256, 512 Hz
<i>Sampling Resolution - EEG channels</i>	16 bits
<i>Sampling Quantization – EEG channels</i>	0.31uV
<i>Sampling Resolution - DC channels</i>	16 bits
<i>Sampling Quantization - DC channels</i>	153uV
<i>Storage Resolution – EEG Channels</i>	16 bits
<i>Storage Quantization - EEG channels</i>	0.31uV
<i>Storage Resolution – DC Channels</i>	16 bits
<i>Storage Quantization - DC channels</i>	153uV
Modes of Operation	
<i>Impedance Check</i>	< 2.5, < 5, < 10, < 25 KOhms
<i>Channel Test Signal</i>	10Hz, 100uV pk-to-pk
Headbox Mechanical	
<i>Interface Cable</i>	Standard USB 2.0 cable (micro-USB connector) up to standard length for USB 2.0 – 5m.
<i>Size</i>	~ 100 (h) x 158 (w) x 23 (d) mm
<i>Weight</i>	~ 300 g
General	

Parameters	XLTEK Trex
<i>Storage Capacity</i>	1 or 2 GBytes internal Compact Flash card
<i>Power Consumption</i>	170mW
<i>Battery</i>	2 x AA
<i>Battery Life</i>	~ 36 hrs