Trackit T4 32 Amplifier + Quick PCU

32 monopolar/3 bipolar touch proof inputs

(Also available with the Standard PCU, 24 monopolar/8 bipolar inputs and the Trackit T4 68 Amplifier with Extended PCU, 64 monolpolar / 4 bipolar inputs.)

Designed, tested and manufactured in Great Britain

SPECIFICATIONS

Lifelines' EEG Systems and Applications

- Telemetry EEG Amplifier for use with Lifelines' clinical, portable, LTM systems
- Compatible with Trackit and Trackit Plus software
- EEG Recordings may also be reviewed with Persyst Insight (version 13)

Amplifier Features

- Acquisition of EEG in referential mode
- DC recording option on all channels
- Electrode cap connector with 21 monopolar channels for use with standard electrode cap systems
- 10 additional monopolar channels
- 3 channels configurable to bipolar or monopolar
- 1 aux high-level input channel

- All inputs are BF isolated
- Front end calibration
- Continuous impedance check
- Simultaneous sampling on all channels (wired and wireless)
- High sampling rates: 250-2000 Hz
- Nonin interface gives HR, SaO2 and pulse-wave (plethysmogram)
- LCD display with backlight
- Multi-function button on front panel
- Data storage on optional micro-SD card
- Transmits data either wirelessly or wired
- Battery or USB power option

Amplifier Specifications

EEG inputs: EEG Inputs: 32 monopolar touch proof inputs/ 3 bipolar touch proof polygraphy inputs

ADC Resolution	24 bits
Sampling	250-2000 Hz simultaneous sampling all channels
Input impedance	>20 MΩ
Common mode rejection ratio	>100dB @ 50 and 60 Hz
Equivalent input noise	<1.5µVpp, <0.2uV rms
Gain	12 ±0.5%
Max Input Vdiff	750mVpp (including DC)
Quantization	0.17uV/bit @ Gain = 12 and Bits = 22
Bandwidth (-3dB)	DC to 524Hz @ 2000Hz sampling
Max common mode input voltage	0.4Vpp
Input bias current	< ±0.3 nA
Front-end Calibration	8mVpp ±5% at 0.98Hz
Impedance Check current	24nA ±20% at 7.8Hz
	Additional settings of DC+, DC-, 31.2Hz, fDR/4, 6nA, 6uA and 24uA also provided

Aux, high-level Input

ADC Resolution	24 bits
Sampling	250-2000 Hz simultaneous sampling all channels
Input impedance	>20 MΩ
Common mode rejection ratio	>100dB @ 50 and 60 Hz
Equivalent input noise	<1.5µVpp, <0.2uV rms
Gain	12 ±0.5% (AC), 4 ±0.5% (DC)
Max Input Vdiff	750mVpp AC setting (including DC), 2.25 Vpp DC setting
Bandwidth (-3dB)	DC to 65Hz @ 250 Hz sampling

(continues overleaf)

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Amplifier Specifications (continued)

Connections, ports and controls

- 39 Electrode inputs, BF Isolated, 21 inputs via Electrode cap connector, standard 25-pin D socket. 18 electrode inputs, touch proof 1.5mm.
- Aux DC input, 3.5mm Jack socket (channel 39)
- Nonin Xpod (Binder 710 series 3-pin socket) for SaO2
  – Nonin interface gives HR, SaO2 and pulse-wave (plethysmogram)
- Remote patient event marker input, TTL digital pulse (5V or 3.3V), 3.5mm Jack socket
- Host PC connector (USB), isolated from patient
- LCD display with backlight showing
  – Time of day, elapsed recording time, memory card capacity, wireless status
- Multi-function button on front panel for
  – Patient event marker
  – On/Off
- Internal auditory beeper to acknowledge user input
- Micro-SD card port
- LED for micro-SD card activity

External and Internal Batteries

- Internal rechargeable battery (15 min) enables the use of interchangeable, external, rechargeable power banks. This allows the device to run wireless for as long as desired. Each power bank will allow recording for up to 36 hours. **Important:** the amplifier and external power bank both fit into the patient wearable pouch.

Amplifier memory

- Micro-SD card (optional)

Operating environment

- Temperature: +5°C to +40°C
- Relative humidity 15% to 93% non-condensing
- Atmospheric pressure: 700mB to 1060mB

Dimensions and weight

- Dimensions: 17cm x 9cm x 3cm/6.7in x 3.5in x 1.2in
- Weight: 270g/0.60 lbs

Quality System

- ISO 13485 Quality System

Compliance with regulatory standards

Designed, tested, manufactured and certified to meet the following standards:

- **IEC 60601-1 and IEC 60601-2-26**
  Standard for medical electrical equipment, general requirements and particular requirements for EEG systems.
- **ANSI/AAMI ES 60601-1**
  US national differences
- **CAN/CSA 22.2 No 60601-1:14**
  Canadian national differences
- **IEC 60601-1-2**
  Standard for medical electrical equipment, EMCrequirements
- **IEC 60601-1-11**
  Standard for medical electrical equipment used in the home environment.
- European Community Class IIa Medical Device Directive (MDD) product to comply to EC Directive 93/42/EEC, as amended by Directive 2007/47/EC.
- FDA 510(k) clearance for marketing K172271
- RoHS Directive 2011/65/EU
- WEEE Directive 2002/96/EC

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