

CorTec Brain Interchange
Technical Specifications

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|---------------|---------------------------------|---|
| Recording | Channels | 32 channels + 1 reference + 1 ground (ground switchable between dedicated ground electrode and any other electrode contact) |
| | Sampling Rate | 900-1000 Hz |
| | ADC Resolution | 16 bit |
| | Upper Cutoff Frequency | 450 Hz |
| | Lower Cutoff Frequency | 0.5 Hz |
| Stimulation | Channels | Each of the 32 channels (concurrent stimulation at 8 channels: 7 predetermined channels, 1 switchable to any of the 32 electrode contacts) |
| | Type | Current stimulation (against ground or other electrode) |
| | Current | Max. - 6 mA / +1.5 mA at 1.5 kΩ impedance |
| | Shape | Two-phase |
| | Pulse Width | Programmable (10 μs up to 2,500 μs in steps of 10 μs for negative phase amplitude: 1/4 of negative pulse duration: 4 times of negative pulse) |
| Encapsulation | Dimensions | 60 mm x 30 mm x 7 mm |
| | Coating | Medical grade silicone rubber |
| | | Designed for long-term use |
| External Unit | Dimensions | 80 mm x 50 mm x 18 mm, 50 g weight |
| | Power Supply | Rechargeable battery, up to 7 h battery life |
| | Material | PA2200 (Certified biocompatibility) |
| | Bidirectional Data Transmission | 1 Mbit/s (half-duplex) |
| | Options for Fixation | Magnetic or via proprietary piercing fixation system (patent pending) |
| Software | C++ Interface | |