CentrePoint Data Hub

Real World Data, Delivered in Near Real Time

The CentrePoint Data Hub is a **home-based communication gateway** that securely transmits data captured by ActiGraph activity monitors and other connected health sensors to the CentrePoint cloud software platform via 3G cellular network.

Technical Details

The CentrePoint Data Hub (CDH) leverages several technologies to **facilitate the reliable transfer of both raw and summary data** collected by ActiGraph activity monitors and other connected health sensors.

Bluetooth®

Data transfer from peripheral devices to the CDH is supported by a dual-mode Bluetooth Smart Ready (v.4.0) (Classic and Low Energy) chipset capable of data rates approaching 25 Mbit/s. This is sufficient for capturing continuous-time epoch level (1 sample/minute/axis) activity data throughout the day without the need for user interaction.

Cellular

Data collected from in-home peripherals are transferred via cellular network into ActiGraph's secure CentrePoint study management system. The CentrePoint Data Hub leverages a global UMTS/HSPA/GSM 3G cellular radio capable of operating on a global scale with supported data-rates of 7.2 Mbit/s (down) and 5.76Mbit/s (up) in an extended operating range of -0 to +60 C. Fallback bands include GSM 850/1900 and 900/1800 MHz; GPRS Class 12 CS1-CS4 (up to 85.6 kbit/s); EDGE Class 12, MCS1-9 (up to 236.8 kb/s); CSD GSM (max 9.6 kb/s); and UMTS (max 64 kbit/s). Certifications and approvals include PTCRB, GCF, FCC, IC, R&TTE, RCM Anatel, and AT&T.

Microprocessor

The CentrePoint Data Hub core processor is a 32-Bit ARM® Cortex®-A8 RISC Microprocessor (IC Sitara™) supporting an embedded Linux OS.

USB 2.0

Raw activity data (up to 100 activity samples/second/axis) is transferred to the CDH through a USB 2.0 high-speed connection (480 Mbit/s), which is capable of handling the large data payloads generated by ActiGraph's activity monitors while simultaneously charging the device battery.

Ethernet

An optional 10/100 Base-TX ethernet connection is available for non-cellular applications.

Data Security

All protected health information (PHI) is encrypted and stored securely in the ActiGraph cloud database. Connections are made securely using PKCS #1 SHA-256 with RSA Encryption. No PII is transferred.

Regulatory Information

Cellular Chipset	Bluetooth® Chipset
FCC ID: XPY1CGM5NNN	FCC ID: QOQBT111
IC ID: 8595A-1CGM5NNN	IC ID: 5123A-BGTBT111

Please contact our Sales Team at sales@actigraphcorp.com to learn more about the CentrePoint Data Hub availability and pricing.