Connectors in the Medical Industry

The types of connectors used in the medical industry vary greatly depending on the medical device and its manufacturer. Common connector types include magnetic pogo pins, wire-to-board headers, lock headers, I/O connectors, terminal blocks, and custom solutions.

➢ Magnetic Pogo Pins and Cable Assemblies

Adam Tech’s magnetic pogo pin cable assembly and connector sets are a core specialty product series ideal for medical applications. These systems combine spring loaded pins on either cable or connector with an interface backed by a magnet. This mating type provides medical devices with secure, high reliability connections that can break away with no damage to the application. Adam Tech’s pogo pin products include blind mating/easy connection, waterproof capabilities, user friendliness, and easy detachability.
Wire to Board and Lock Headers
Wire-to-Board Headers: Adam Tech’s DMH and DML series are ideal for sending signal and power throughout devices.
Lock Headers: Adam Tech’s LHA and LHS series are typically used as user interface button connections to control devices.
Adam Tech’s multiple matching sets of crimp wire housings and PCB mounted shrouded headers are available in straight, right angle, or SMT orientation. Offered in various popular industry standard styles, they provide a lightweight, fine pitched, polarized, and high reliability connection system.

I/O Connectors
Multiple I/O connectors are utilized in medical devices, including standard and micro USB connectors, SD card connectors, and D-subminiature connectors. These are all typically used with microcontrollers (MCU) or directly with computer interfaces. The connectors are also used for communication connections, including remote alarms. I/O connectors include Ethernet, RJ45 modular jacks, circular connectors, and BNC connectors.
➢ Terminal Blocks
Adam Tech’s Euro Blocks provide medical devices with the reliable electrical connectors that they require. The EB Series is comprised of a broad range of PCB mounted blocks in various sizes and profiles with pitches ranging from 3.50mm to 15.00mm. Included are top, side, and side angle wire entry types. Two piece 'pluggable' versions and 'lever actuated' styles are also available. Each euro block provides a unique wire guard design and is precision manufactured for smooth operation and ease of use.

➢ Custom Solutions (Connectors and Cable Assemblies)
Adam Tech offers custom solutions for their broad line of interconnect products, including custom magnetic pogo pins and cable assemblies. The full design customization capabilities include the ability to design different shapes, sizes, cable lengths, and other features to accommodate any application. Adam Tech stands ready to customize any interconnect product needed to support the medical industry.