

Product Description

The MCU and ER family of systems from BTE Technologies are designed to capture and record human performance data. Both systems are designed with an assortment of sensors to measure the strength and range of motion from a test subject. The MCU is more specifically focused on the muscles and joints of the cervical spine. The ER is more general in purpose and measures pushing, pulling, and lifting forces. The Evaluator and Cires are sub-products in the ER line. They include only a portion of the tools and sensors of the ER product.

All of these products use a common wireless data acquisition system. The RF communications are effected by an off the shelf low power radio transceiver from Radiotronics Inc. For North American applications, the transceiver operates in the 902-928 MHz band. A corresponding 868-870 MHz module is used for Europe.

The data acquisition system has a polling architecture. A central data hub requests data from the collection modules in the vicinity. The collection modules encode data from the various sensors and transmit the data back to the hub. Each sensor is individually addressable. Typically only one sensor will be read at a time to minimize packet size and RF traffic.