

TELEPORT



TELEPORT is build in a 19-inch case and has all needed external components for the telemetric measurements with one multi-channel telemetry transmitter.

The power oscillator generates a low-frequency sinusoidal output voltage for the energy coil. Amplitude and frequency are controlled automatically. The rf-receiver has an input range from about 50 MHz to 220 MHz and input facility for active and passive antennas. The signal generator (marker) creates a

rectangular mark signal with a frequency of 1 kHz to synchronise time segments with other systems like gait-analysis systems.

The microprocessor system (data link) controls the inductive power supply to a constant value, checks and synchronises the received puls-interval-modulated (PIM) data, creates a time base and transmits all data by an USB cable to a personal computer. Special software shows all data in real-time on the screen. The PIM data and if needed also the mark signal were transformed to the microphone input level of the digital video (DV) camcorder. The signals were than recorded on the audio tracks synchronous to the patient's activity.

TELEPORT is mainly used for load measurements with our instrumented hip endoprotheses, instrumented vertebral body replacements, instrumented shoulder- and knee endoprotheses.

