DEVICE FOR DIAGNOSING FUNCTIONAL STATE OF PERIPHERAL VESSELS

FIELD: medicine.

SUBSTANCE: invention relates to medical equipment. Device for diagnosing functional state of peripheral vessels contains unit of primary optic radiation sources, system of primary and secondary radiation transportation to biological tissue and back, optic-electronic system of secondary optic radiation registration, device of collection and translation of data to unit of processing diagnostics results. Unit of radiation sources is made in form of IR laser emitter and laser emitter driver. System of radiation transportation is made in form of bundle of optical fibres with branched instrument and single working part of one transmitting and two receiving fibres. System of secondary radiation registration is made in form of two identical channels of Doppler signal registration. Registration channels contain photoreceiver, current-voltage converter, high-pass filter, low-pass filter, amplifier with adjustable coefficient of amplification, analogue-digital converter, as well as low-pass filter and digital-analogue converter. Four primary measuring temperature converters are located symmetrically around working part of bundle of optic fibres. Device of collection and translation of data is made in form of microcontroller. Unit of processing of diagnostics results is made in form of personal computer.

EFFECT: application of the invention will make it possible to increase self-descriptiveness of diagnostics.