ULTRASOUND REAL-TIME MEASUREMENT OF ARTERIA CAROTIS WALL THICKNESS

Problem – Challenge
Cardiovascular disease is the main cause of death in the developed world and therefore reliable prediction of its risk while the disease is in its early stages and the patient is still asymptomatic, is important for efficient prevention. Sonography of carotid arteries is an important method to determine the carotid stiffness and the prediction of cardiovascular events. Fukuda Denshi has been developing highly innovative and user-friendly ultrasonic devices and its on-going development process provides systems and methods to get precise and reproducible results with the minimum of effort scanning.

Solution
As part of a new small size and light weight portable ultrasound system UF-760AG, Fukuda Denshi has introduced into the market the first of its kind real-time automatic IMT (intima-media thickness) measurement package named EzIMT. This software has been programmed and tested in a cohort at the Institute of Exercise and Health Sciences of the University of Basel by the group of Prof. Arno Schmidt-Trucksäss. Its easy usage and the possibility to access EzIMT either directly during routine examination or later as part of the off-line patient data analysis makes EzIMT an ideal tool for the prediction and diagnosis of cardiovascular risks related to carotid arteries.