Life Time Spec Specifications

- **Tabletop Portable PALS System**
- **Fully digital. All integrated**
- **Based on the DRS4 chip from PSI**



- Positron Annihilation Lifetime Spectroscopy (PALS)
- Miniaturized PMTs
- 2-detector setup, 180°, 90°, 120°. Extension up to 4 detectors possible
- Scintillator material: BC422Q0.5
- Data acquisition: Digital (DRS4/FPGA) at 5.12 GS/s, 14-bit resolution, 2-4 channels parallel
- Time resolution (FWHM of resolution function): 150 ps
- Trigger/SCA/CFD: Integrated, digitally controlled by software MaDa+ on external PC
- HV supply for PMTs: Integrated, digitally controlled by MaDa+
- Data filtering/background reduction: Digital physical filters
- Data format: Parameterized pulsepairs. Filtering and binning possible after measurement
- Interface: USB
- Remote Access: Server/Client based, TCP/IP - ProtoBuf
- API: C/C++, Python, Java via ProtoBuf
- Weight and dimensions: 5kg, portable (wdh: 37 cm × 27 cm × 18cm)
- Power requirements: 110VAC/230VAC, <20W