Technical specifications

MALDI-TOF/TOF autoflex speed incorporates a number of key features which enhance its capabilities and value including:

- Enhanced Speed with a 2 kHz (kiloHertz) proprietary smartbeam-II solid-state laser (modified Nd:YAG laser) 355 nm and electronics for high throughput applications including MALDI Imaging, and high-throughput microbiology ID

- Laser focus diameters down to 10 µm for high spatial resolution imaging without pixel overlap.

- TOF-analyzer for linear and reflectron mode, MS/MS capability TOF-analyzer for both positive and negative ion mode

- **Reflectron resolution ≥ 26000 FWHM (Somatostatin 28; m/z 3147.47 Da), mass accuracy < 10ppm (external calibration**)

- **Linear resolution ≥1,100 for Cytochrome C (m/z 12,361) and ≥ 600 for Protein A (m/z 44,613) . linear mass accuracy for Cytochrome C <100 ppm (external calibration**)

- **Mass accuracy (protein mixture): with external calibration: better than 100 ppm with internal calibration: better than 90 ppm**

- **MS sensitivity: 500 fmol BSA (m/z 66,000). S/N ≥ 100**

- **Expanded mass range capabilities to handle intact proteins and molecules such as large protein and polymers**.

- **LIFT™ – the latest TOF/TOF technology to enable the use of various MS/MS techniques, including LID and high-energy CID**

- Minimized maintenance with IR laser-based self-cleaning MALDI Perpetual™ Ion Source, which improves system up-time and utility.

- **Optimized Software packages for numerous applications e.g. Protein-, Peptide-, Polymer-Analyses, and MALDI Imaging, clinical research methods and the MALDI Biotyper workflow**.