Fida 1: Main Technical Specifications and Characteristics (version Jan 2022)

Detection technology	Fluorescence (multiple wavelengths available, incl. label-free)
Data presentation	Result tables, result plots, and real-time monitoring of signal
Working principle	Capillary based, in-solution characterization of biomolecules and binding events, based on *first principle* measurement of absolute size in nanometers. Auxiliary readout of spikograms for i.a. fragmentation count and liquid liquid phase separation and readout of BRIC (binding related intensity chance) Novel ligand binding technology for direct detection of molecules and molecular interactions in native conditions.
Applications	Tolerant to sample matrices such as plasma/serum and cell lysates, high and low ionic strength, presence of detergents etc. Works for a wide range of molecular weights (100 -/+10^6 Da) of proteins and other bio-molecules in various sample environments
Binding Kinetics	Assessment of fast and slow interacting systems
Dissociation constant (KD):	100 µM to 10 pM
Detection limit (indicator)	Typically 0.1 nM (depending on application)
Molecular weight detection	Down to 100 Da in various sample environments
Quantification capabilities	pM - mM
Assay control	In-built (based on size estimates of complex and monitoring of complex precipitation)
Sample capacity per run	Maximum 2 x 96 samples
Through-put	Up to 24 data points in less than 30 min. – Up to 8 binding curves with 8 data points in triplicates each in 4 hours unattended operations
Pressure range	1 - 3500 mBar
Analysis and sample temperature range	4 - 55°
Software	Proprietary Fidabio software suite, incl. integrated assay design and simulation, instrument control, data analysis and reporting. It is also possible to export raw data and images.
Safety and EMC standards	Complies with and applies to Europe and North America (US and Can) standards Instrument is to be used for research purpose only