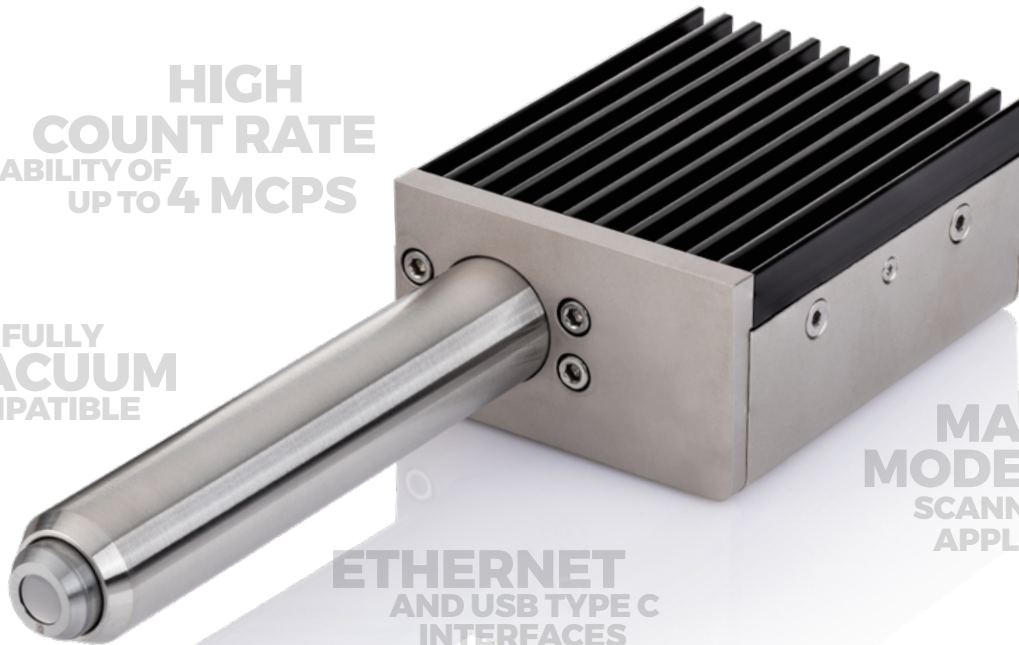


NEW

HIGH COUNT RATE
CAPABILITY OF UP TO **4 MCPS**

FULLY VACUUM COMPATIBLE



MAPPING MODE FOR SCANNING APPLICATIONS

ETHERNET AND USB TYPE C INTERFACES

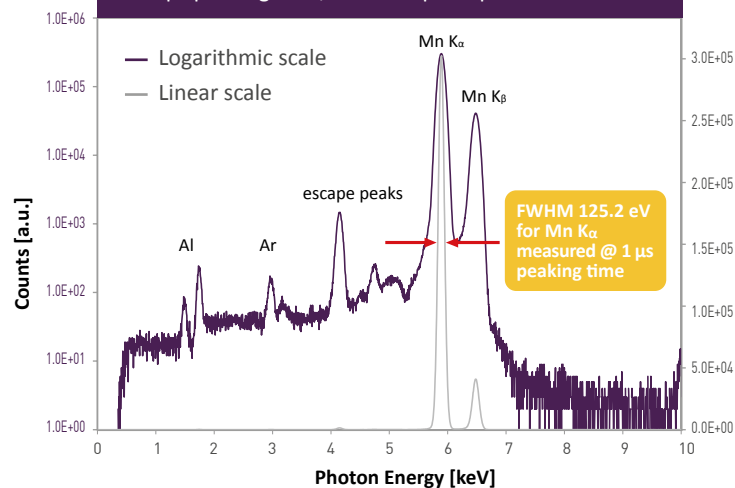
A/D
AXAS 3.0

KETEK AXAS 3.0 ANALOG / DIGITAL ANALYTICAL X-RAY ACQUISITION SYSTEM

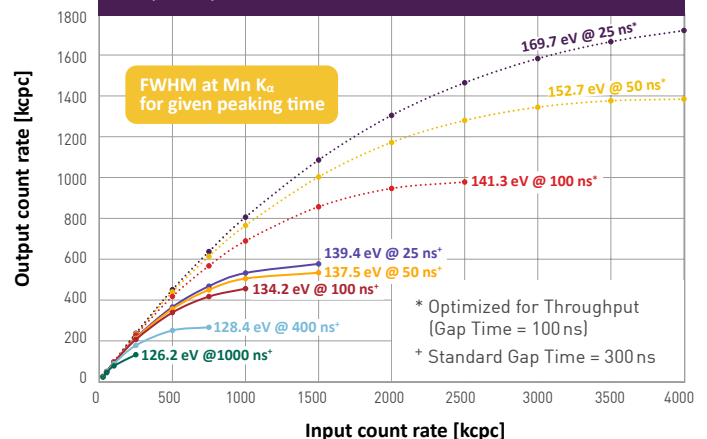
The new AXAS 3.0 is a complete spectroscopic system for VITUS SDDs in a very compact housing. It includes all power supplies, the latest generation preamplifier, a high precision temperature controller and KETEK's proprietary digital pulse processor DPP3. The AXAS 3.0 is available with all sizes of VITUS SDDs from H7 to H50 and different lengths of the vacuum tight finger.

- KETEK's new high-performance digital pulse processor DPP3 with peaking time down to 25 ns
- Latest Generation 3.0 Preamp technology
- Ethernet and USB 2.0 Type C interface
- Guaranteed: FWHM < 133 eV @ 1 μs peaking time for Mn K_α-line
- Both Graphene window types available:
 - CH (1 μm Graphene): high energies, light tight
 - CL (165 nm Graphene): low energy transmission
- Extremely small form factor: 81 × 61 × 36 mm³ (AXAS body only)
- Single supply voltage: + 12 VDC / 250 mA typ
- DLLs for Windows and libraries for LINUX, ARM based machines supported
- Four M3 screws for easy mounting in customer system
- Finger configuration compatible with current AXAS 2.0

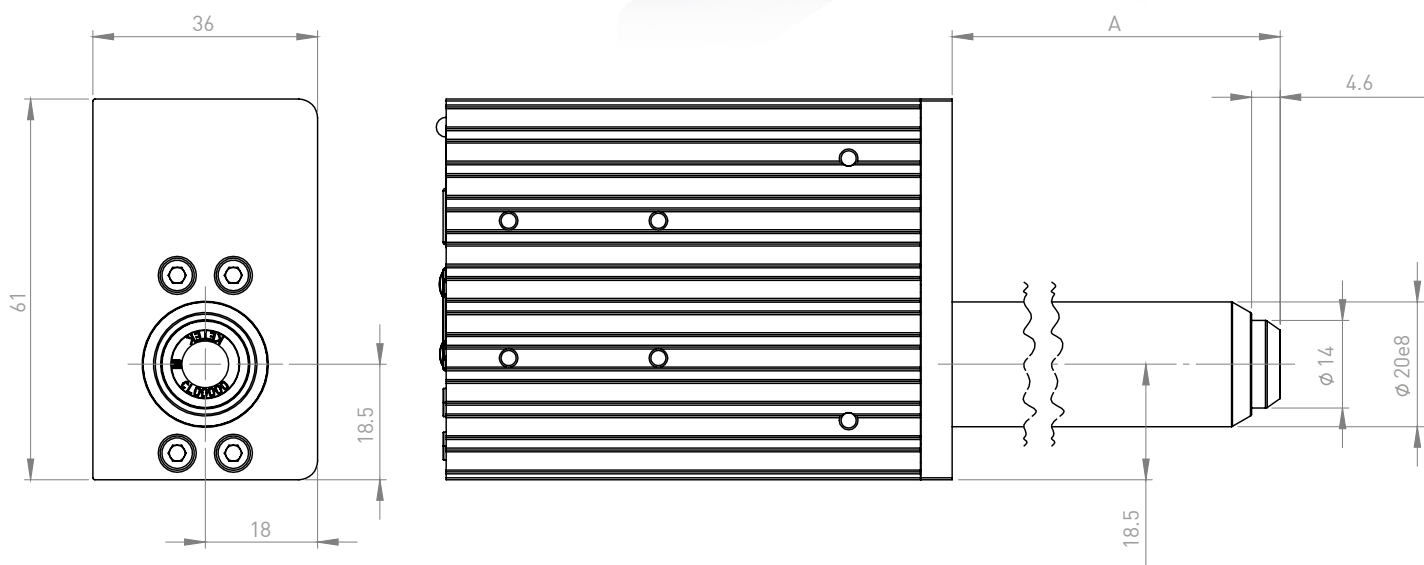
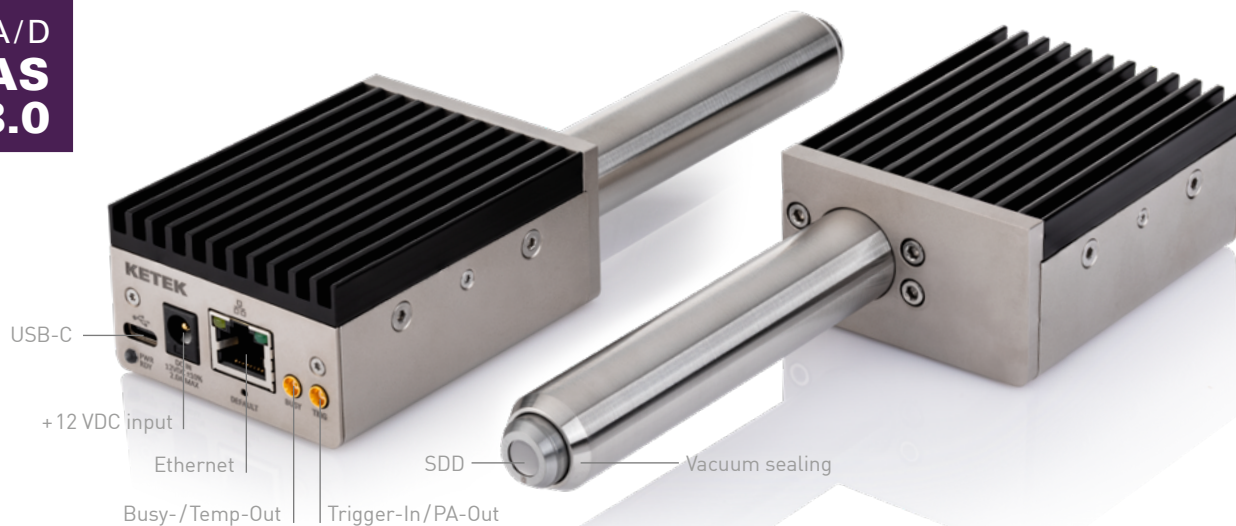
Spectrum measured with AXAS-D 3.0 and VITUS H20 @ 1 μs peaking time, -35°C chip temperature



OCR vs. ICR for different peaking times @ -35°C chip temperature with AXAS-D 3.0 and VITUS H20



A/D AXAS 3.0



TECHNICAL DATA

AXAS-A and -D 3.0 technical data

SDD temperature monitor	Thermistor and digital temperature read-out
Power supply	+12 VDC (unipolar)
Signal output	Low noise preamplifier (Generation 3.0)
Signal form	Ramped reset type (+/- 1.0 V); 5 mV/keV
Interfaces	<p>AXAS-D: USB 2.0 Type C, DC input, Ethernet, Busy-Out, Trigger-In</p> <p>AXAS-A: USB 2.0 Type C, DC input, chip temperature monitor, preamplifier output</p>
Vacuum tightness	He leakage rate <math>< 10^{-9}</math> mbar-l/s
Operating temperature range	0 to +50°C

AXAS-D 3.0 technical data

DPP3 software	Acquisition software (VICOScope), update tool (VICOUupdate) and comprehensive programming library (VICOLib) available for Windows and Linux
Channel depth	24 bit / 3 byte
Number of channels	max. 8192
ADC	16 bit
Peaking time	down to 25 ns
Clock frequency	80 MHz

AXAS-A and -D 3.0 options

VITUS SDD	H7, H7LE, H20, H20LE, H30, H30LE, H50, H50LE and K50
Finger length A [mm]	50, 100 and 200 (others on request)