







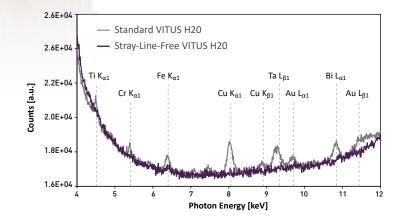
PPB DETECTION LIMITS

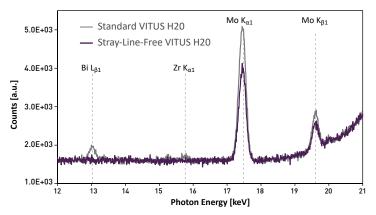


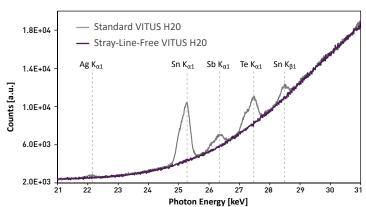
KETEK VITUS H20 SLF STRAY-LINE-FREE SDD

KETEK's new VITUS H20 Stray-Line-Free (SLF) SDD was developed to eliminate nearly all unwanted X-ray excitation from SDD module components. The result is an extremely clean spectrum enabling highly precise measurements of very low element concentrations.

- Elimination of nearly all unwanted X-ray fluorescence (stray lines) from internal SDD components
- Enables extremely low detection limits in the ppb regime
- Perfect for applications like:
 - ightarrow Rohs, Reach
 - \rightarrow Pharma
 - \rightarrow Semiconductor industry
- Superior radiation hardness for 24/7 operation
- ΔT from 95 K to 130 K depending on heat sink temperature
- Both Graphene window types (CH and CL) available
- Vacuum encapsulation allows He atmosphere operation
- Available for the entire KETEK electronics family







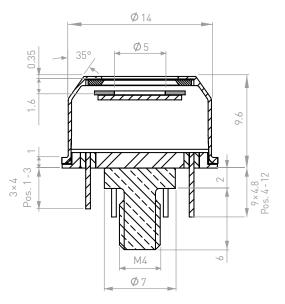






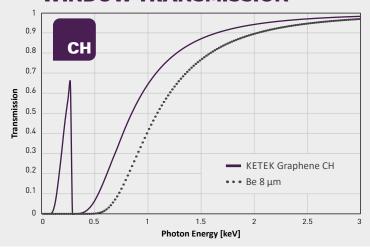


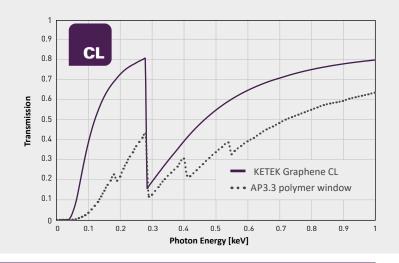




Specifications für H20 SLF	
First stage amplification	ASIC
Collimated Area	20 mm²
Energy resolution	\leq 129 eV @ Mn K $_{\alpha}$
Peak to background	> 15,000
Peak to tail	> 2,000
Optimal peaking time at max. cooling	1 μs
Absortion depth Si	450 μm
Peak shift stability up to 100 kcps	< 1 eV
Max. input count rate	4,000 kcps
Graphene Window Thickness	CH: 1 μm CL: 165 nm
Cooling performance @ +20 °C heat sink	ΔT > 95 K
On-chip collimator	multilayer

WINDOW TRANSMISSION





SDD ELECTRONICS

Product

Description

VIAMP-KC/-KL 3.0 **VITUS AMPLIFIER**



The VIAMP-KC/-KL 3.0 module combines a VITUS SDD (all sizes H7 to H150) and an ultra-low noise preamplifier of the latest generation 3.0 with improved biasing stability. The Aluminum housing functions as an efficient heat sink.

- VIAMP-KC 3.0 for H7 to H50
- VIAMP-KL 3.0 for H80 to H150
- Ramped reset type output signal
- Configurable via FFC interface
- Customized solutions available on request

VICO-DV 3.0 **COMPLETE DPP ELECTRONICS BOARD**



The complement of the VIAMP module is the VICO-DV 3.0, comprising KETEK's new high-performance digital pulse processor DPP3, a temperature controller and all voltage supplies for the SDD. Also an analog version without DPP3 is available.

- KETEK's new DPP3 with peaking times down to 25 ns
- Extremely small dimensions 60 × 32 × 11 mm³
- Ethernet, USB and SPI interfaces
- Comprehensive programming library (VICOLib), acquisition software (VICOScope) and update tool (VICOUpdate) available for Windows and Linux

AXAS 3.0 ANALYTICAL X-RAY **ACQUISITION SYSTEM**



The AXAS 3.0 is KETEK's new all-in-one system for VITUS SDDs in an ultracompact housing equipped with the latest generation 3.0 preamplifier technology. It is available with all VITUS SDDs from H7 to H50 and different lengths of the vacuum tight finger.

- Very small & complete XRF system: 81 × 61 × 36 mm³
- KETEK's new high-performance digital pulse processor DPP3 with peaking times down to 25 ns
- Ethernet and USB Type-C interface
- Mapping Mode for scanning applications
- Acquisition software (VICOScope) and update tool (VICOUpdate) available for Windows and Linux