

DPALMS-LD / DPALMS-L

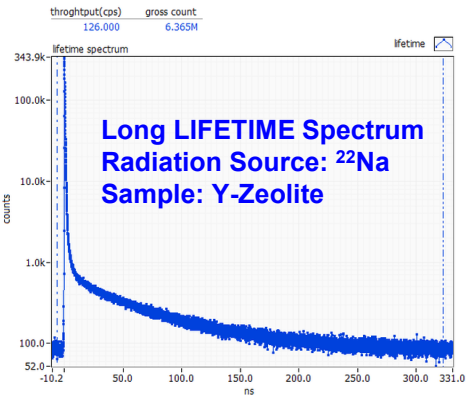
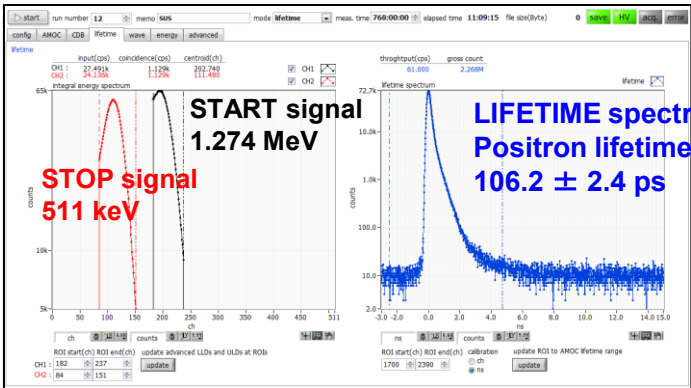
The measurement and power supply equipment required for **Positron annihilation measurement**, which can analyze nanoscale spatial structures at the molecular level, is now integrated into one. In the lifetime measurement, high-speed pulse signals from two BaF₂ scintillators are captured by a 3Gsp/s to calculate the lifetime time.

Setup Example: DPALMS-LD

Note: DPALMS-L does not include detectors. Neither includes a PC.



Lifetime Measurement Screen



Radiation Source: ²²Na
Sample: Standard material stainless steel

ADC	2CH 3Gsp/s 8bit
Time resolution	FWHM < 180 ps
Measurement range	< 80 ns (min. time per ch. 10.2 ps), < 1100 ns (max. time per ch. 166 ps)
LIFETIME	106.2 ± 2.4 ps Positron lifetime Standard material stainless steel 1.62 ± 0.05 ns Ortho-positronium lifetime Standard Material Quartz Glass
H.V. power supply	2 CH, max. - 4000 V (max. 1 mA) per CH (for photomultiplier tube)
Communication I/F	Ethernet (TCP/IP)
Accessories	Application for data acquisition and control, switching hub, signal cables (2), high-voltage power cables (2) and LAN cables (3)
Required items	BaF ₂ detectors (2), Radiation source ²² Na, Application for lifetime analysis and Computer
Outer dimension	Height 320 x Width 170 x Depth 400 (mm)
Weight	About 7400 g

*Images is for illustration purpose.
*Please note that contents may change without prior notice.

