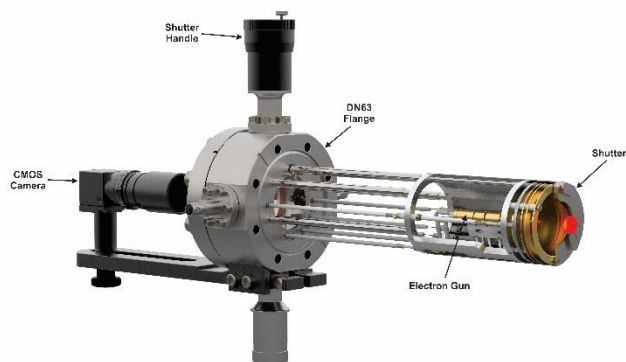


LEED 450 Configuration Guide and Specifications



LEED configuration

Base configuration		
Model	Order Code	
BDL450	AO00002	Back-Display LEED spectrometer with 3 Grid-high resolution (0.2%) retarding field analyzer based on gold plated hemispherical grids with 83 deg. capture angle. Integral miniature electron gun with 10 mm O.D. lenses made of gold-plated copper alloy, optical quality glass-luminescent display and Mu-metal shield mounted on the double-sided CF4.5" (DN63CF). Viewport and mounting kit included. Wide beam current range: from pA to uA. Working distance of 10 mm from the sample. Flange to sample distance: to be specified.
LMX-EXT		External linear retraction
LPS75-D	AO00024	Digital power supply (0-750 V) with USB interface and PC control software for Windows 10/11. True primary beam current and total emission measurements. Ten memory settings, including standby and outgassing mode with timer, constant beam current mode controlled by filament current or Wehnelt voltage. All cables included.
Options		
ISH-45	AO00018	Integral shutter for BDL450
ISH-45-FL		Foldable Integral Shutter for BDL450
LaB ₆	AO00013	LaB ₆ single crystal filament instead of a tungsten wire filament
Electronics Upgrade		
LPS300-D-UP		Upgrade from LPS075-D(LEED) to LPS300-D(LEED-AES)
LOA10-AES	AO00025	Model LOA10-AES, Digital AES controller with lock-in amplifier, AES high voltage ramp board 0-2.0 kV with precision sinewave oscillator (0.5-20 V pk-pk) and AES software. USB communication to PC. High Auger signal sensitivity based on integrated band-pass filter and pre-amplifier (0.05% of monolayer for Ag peak 351-356 eV). All cables included.

LEED and AES configuration

Base configuration		
Model	Order Code	
BDL450	AO00002	Back-Display LEED spectrometer with 3 Grid-high resolution (0.2%) retarding field analyzer based on gold plated hemispherical grids with 83 deg. capture angle. Integral miniature electron gun with 10 mm O.D. lenses made of gold-plated copper alloy, optical quality glass-luminescent display and Mu-metal shield mounted on the double-sided CF4.5" (DN63CF). Viewport and mounting kit included. Wide beam current range: from pA to uA. Working distance of 10 mm from the sample. Flange to sample distance: to be specified.
LMX-EXT		External linear retraction
LPS300-D	AO00024	Digital LEED-Auger power supply (0-3.2 kV) with USB interface and PC control software for Windows 10/11. True primary beam current and total emission measurements. Automatic start-up and shut down, 10 memory settings including outgassing with timer, automatic switch from LEED to AES, constant beam current mode. All cables included.
LOA10-AES	AO00025	Model LOA10-AES, Digital AES controller with lock-in amplifier, AES high voltage ramp board 0-2.0 kV with precision sinewave oscillator (0.5-20 V pk-pk) and AES software. USB communication to PC. High Auger signal sensitivity based on integrated band-pass filter and pre-amplifier (0.05% of monolayer for Ag peak 351-356 eV). All cables included.
Options		
ISH-45	AO00018	Integral shutter for BDL450
ISH-45-FL		Foldable Integral Shutter for BDL450
LaB ₆	AO00013	LaB ₆ single crystal filament instead of a tungsten wire filament