






## Hollow Cathode Lamps



- **High Intensity HCL 50mm (2")**
- **HCL 50mm (2")**
- **High Intensity HCL 37mm (1.5")**
- **HCL 37mm (1.5")**
- **Deuterium Lamp (Background Correction)**

### • Specifications

Category	Data
Glowing starting voltage:	300V
Radiation stability:	1% over 30 minutes
Size: 2" for Perkin-Elmer	Diameter: 50 mm, Length: 180 mm
Size: 1.5" lamps	Diameter: 38 mm, Length: 160 mm

<u>KY-1</u>	<u>KY-2</u>	<u>KY-MF</u>	<u>KY-AF</u>	<u>KY-PE</u>
				
Size (mm) :38×150	38×150	38×150	50×140	50×180

Arrangement of pipe base: standard eight feet type, four feet used, cathode for foot 1 and 5, anticathode for foot 3 and 7	Standard eight feet type, two feet used, cathode for foot 1, anticathode for foot 3	Standard eight feet type, cathode for foot 1, anticathode for foot 3	Cathode for foot 1 and anticathode for foot 3 and 7, special plug	Down-lead plug is the same with that of Hollow cathode Lamp by PE Company
---	---	--	---	---

**Start Voltage:**  $\leq 350V$

**Background:** The background strength near the main analysis line is lower than 1% of the analysis strength

**Time for warm-up:**  $< 30\text{min}$ , usually from 5-15min

**Stability:** baseline drift of copper lamp within 30min  $< 1\%$ , baseline drift of lamps of other elements within 5min  $< 1\%$

**Noise:**  $< 0.3\%$

**Service life:** lamps with common elements  $\geq 5000\text{mA.h}$ , lamps with fusible and volatile elements  $\geq 3000\text{mA.h}$

**Maximum working current:** from 10—20Ma

### • *Advantage*

- **High Intensity:** Karaltay lamps are specially designed to emit high intensity at the recommended operating current, resulting in low S/N ratio.
- **Low Operating Current:** Our lamps may be operated at only half the instrument manufacturer's recommended current for sufficient intensity, resulting in long lifetime of the lamps.
- **Design:** Our lamps are specially designed to meet or exceed requirements for various types of AAS, and to provide low detection limits for your most difficult analysis. We also manufacture Argon and/or Neon gas-filled lamps.
- **Quality Control:** Karaltay utilizes Total Quality Control (TQC) to monitor, control and inspect every single step of the hollow cathode lamp manufacturing process. The materials are carefully selected in our manufacturing to avoid spectral interference from the fill gas or impurities in the cathode material.
- **Wide Selection:** Single-element & multi-element lamps.

### • **List of Atomic Absorption Spectrometer Manufacturers**

We are able to supply more than 60 different hollow cathode lamps of both 37mm (1.5") and 50mm (2") diameter, a variety Deuterium lamps and High Intensity Hollow Cathode Lamps for use with most available spectrometers.

**Karaltay's HCL can be used in Atomic Absorption Spectrometers manufactured by:**

*Perkin-Elmer, coded and uncoded Varian*

*BUCK Scientific*

*GBC*

*Hitachi*

*Shimadzu*

*Thermal Jarrel Ash II*

*Unicom LEEMAN Labs*

*Phillips*

**• Over 60 varieties:**

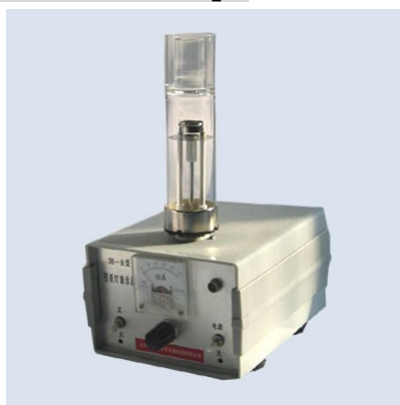
H																		He
Li	Be											B	C	N	O	F	Ne	
Na	Mg											Al	Si	P	S	Cl	Ar	
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	
Cs	Ba	La-Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn	
Fr	Ra	Ac-Lr																
4f	La	Ce	Pr	Nb	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu			
5f	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr			

**Element lamps include over 60 varieties**

Ca-Mg	Ag-Cd	Sr-Al	Sn-Al	Pb-Cu	Pb-Cd	Fe-Mg
Zn-Cu-Ca-Mg-Fe						

**Cathode Activator**

**--special power supply for hollow cathode lamps**



The HCL Activator is a power supply specially designed to activate hollow cathode lamps. In general, the emission intensity and stability of an HCL can diminish after prolonged storage (longer than 3 months), or after prolonged operation. After Treatments with the HCL Activator, the durability of the lamp and the stability of the emission signal can improve dramatically.

***Note: For detailed information, please download the brochure.***

**DL series  
deuterium lamps**



Are the ideal light source to violet spectrophotometers, liquid chromatography, violet energy test and atomic absorption spectrum background deduction !



**Capability**

Type	Kindling Voltage	Anticathode Current	Pipe Voltage	Filament Voltage	Filament Voltage	Service Life
DL 2.5	<300 V DC	Max 300mA DC	70±10V	2.5Vac	4A	1000hs
DL 10	<300 V DC	Max 300mA DC	70±10V	10Vac	0.5A	1000hs

**Note: For detailed information, please download the brochure.**