# AEI Mount Electron Sources

## Model HWES 101262 Tungsten Filament Source

- High quality / precision cleaned
- Fully annealed / strain free
- Exceptional stability
- Special wire / shock resistant
- Pre-fired / inspected
- International standard AEI mount
- Non-standard mounting available
- New packaging / individually secured
- Filaments visible in unopened box

Cathode heating current range: 2.5A-2.8A
Cathode loading: 1.0A/cm²
(Higher loadings will result in reduced lifetime)
Emission area: Elliptical: 50 x 100 µm, 5 x 10⁻⁵cm²
Operating temperature: Approximately 2700°K
Energy Spread: Approximately 0.7 eV
Lifetime: 100 hours at medium currents
Recommended Power supply capability: 2V, 3A

## Model HWES 101263 Barium Oxide Electron Source

- Oxide planar cathode
- Low light / low temperature
- Not harmed by repeated exposure to atmosphere when cold
- Good stability
- Low energy spread
- International standard AEI mount
- Non-standard mounting available

Cathode heating current range: 1.0A-1.2A
Cathode loading: 1.0A/cm²
(Higher loadings will result in reduced lifetime)
Emission area: Circular: Ø840 µm, 5.52 x 10⁻³cm²
Operating temperature: Approximately 1200°K
Energy Spread: Approximately 0.3 eV
Lifetime: About 1000 hours at medium currents
Recommended Power supply capability: 2V, 2A
Suggested storage: dry environment (closed container, with desiccant)

## Model HWES 101264 Tantalum Electron Source

- Refractory metal planar cathode
- Not harmed by repeated exposure to atmosphere when cold
- Exceptional stability
- Low energy spread
- Accurately pre-aligned
- International standard AEI mount
- Non-standard mounting available

Cathode heating current range: 1.4A-1.8A
Cathode loading: 0.05A/cm²
(Higher loadings will result in reduced lifetime)
Emission area: Circular: Ø840 µm, 5.52 x 10⁻³cm²
Operating temperature: Approximately 2500°K
Energy Spread: Approximately 0.6 eV
Lifetime: 100’s of hours with medium currents
Recommended Power supply capability: 2V, 2A