For the convenience of our customers, ORTEC offers alpha particle sources for energy calibration of charged-particle detectors and spectrometers. They are carefully manufactured to ensure source integrity while providing minimum self-absorption. Two types of sources are available: a source calibrated to within 1% of the absolute disintegration rate, and a less expensive uncalibrated version. The calibrated source is useful primarily for absolute activity and efficiency measurements. The uncalibrated version is an ideal source of nearly monoenergetic alpha particles for spectrometer calibration.

CALIBRATED ^{241}Am SOURCE ORTEC Am-1C

Isotopically pure ^{241}Am of 0.1-µCi nominal activity is electrodeposited on platinum and is calibrated to within 1% of the absolute disintegration rate. The energy spectrum from ^{241}Am contains alphas of 5.486 MeV (85%), 5.443 MeV (12.8%), and others <2% each.

UNCALIBRATED ^{241}Am SOURCE ORTEC Am-1U

This source is identical to the one described above, except that it has not been calibrated.
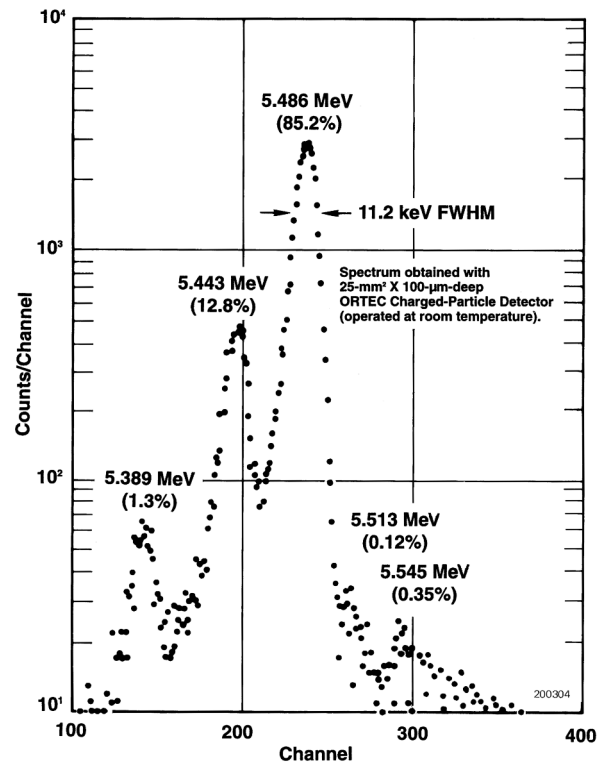
Specifications

The alpha sources are electrodeposited on 0.127-mm-thick, 12.7-mm-diam. platinum foil. The active source diameter is nominally 3 mm, and equivalent source thickness is <8 keV. The source holder is stainless steel, 6.35 mm thick and 17.46 mm in outside diameter. USA users must have an NRC and/or Agreement State License with provisions for type and quantity of isotope involved. **A copy of this license**, authorizing the possession of the source ordered, must accompany an order for these ORTEC sources.

Ordering Information

To order, specify:

Model	Description
Am-1C	Calibrated ^{241}Am Source
Am-1U	Uncalibrated ^{241}Am Source

Typical ^{241}Am Spectrum Obtained with an ORTEC Partially-Depleted Detector.