

Features

- Renews Original Instrument Life Span
- Restores Cesium Performance Capabilities
- Direct "drop in" replacement for FTS, Hewlett Packard & FEI
- Exceeds or Meets Original Performance Specifications
- Commercial, Military & Telecom Stratum I Installations
- Choice of Caesium Beam Tube Warranty
- Choice of Standard Performance or High Performance Tube
- Installation & Service Available



CAESIUM PRODUCTS
Modules, Instruments, Militarized Instruments and Replacement Tubes

Direct Replacement Caesium Beam Tubes



Overview

Installation of a Datum/FTS direct cesium beam tube replacement restores caesium performance and extends the caesium instrument's life span at a fraction of the cost of new instrument. The appropriate high or standard performance replacement caesium beam tube exceeds or meets the original performance levels when all other components of the instrument perform to original specifications. Specific replacement caesium beam tube kits exist for several models of caesium instrument manufactured by Hewlett Packard, FEI and Datum/FTS.

Replacement Caesium Beam Tubes for HP Instruments:

Tubes for HP Instruments:
For Hewlett Packard instruments the Datum/FTS direct replacement caesium beam tube is significantly smaller and lighter than the original caesium beam tube. Besides the caesium beam tube, the Hewlett Packard replacement caesium beam tube kit includes key electrical parts and bracket adapters as well as detailed installation and alignment procedures. Installation requires no mechanical changes to the original configuration and the kit's mechanical adapter brackets even incorporate storage for the original hold-down clamps.

Installation and Maintenance Service:

Some direct replacement caesium beam tube installations require a minor modification to the instrument. Rather than perform an installation you can send the instrument to the main Datum/FTS service center or one of several qualified international and domestic locations for professional installation. This ensures proper installation and verification.



Datum

Timing, Test & Measurement

Direct Replacement Caesium Beam Tubes

Specifications

Standard Performance Caesium Beam Tubes

Replace for:

DATUM:
FTS 4060
FTS 4040A

Warranty

8-Year

DATUM:
FTS 4065 series
FTS 4040A/RS

8-Year

Hewlett Packard:
HP 5061A/B

8-Year

FEI:
FE 1824/U
FE 1824A/U*
FE 5450A

8-Year

* May require option 0/1824A/U consult factory.

Accuracy to: ¹

<1E-12

Stability (Allan Deviation) to: ²

1	<1.2 E-11
10	<8.5 E-12
100	<2.7 E-12
1,000	<8.5 E-13
10,000	<2.7 E-13
100,000	<8.5 E-14
5 Days	<5.0 E-14

^{1&2} Indicates typical caesium beam tube stability and accuracy when installed in a caesium frequency standard. Actual performance is dependent on the caesium frequency standard's oscillator and electronics.

High Performance Caesium Beam Tubes

Replace for:

DATUM:
FTS 4065A/B
FTS 4040A/RS

Warranty

3-Year

Hewlett Packard:
HP 5061A/B

3-Year

Accuracy to: ³

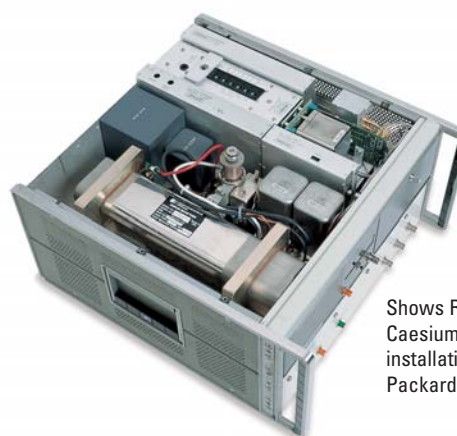
<1 E-12

Stability (Allan Deviation) to: ⁴

1	5 E-12
100	2.7E-13
1,000	8.5E-13
10,000	2.7E-13
100,000	8.5E-14

^{3&4} Indicates typical caesium beam tube stability and accuracy when installed in a caesium frequency standard. Actual performance is dependent on the caesium frequency standard's oscillator and electronics.

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Shows Replacement Caesium Beam Tube installation in Hewlett Packard instrument.



Shows Replacement Caesium Beam Tube installation in FEI instrument.

Specifications subject to change without notice.