

Shipping Instructions for Caesium Devices

This document includes instructions for both international and U.S. domestic shipping of Symmetricom caesium devices. These devices include:

Model	Description
5071A	Primary frequency standard
05061-6077	Replacement standard performance caesium beam tube for the Hewlett-Packard 5061A/B Cesium Beam Frequency Standard
05061-6101	Replacement high performance caesium beam tube for the Hewlett-Packard 5061A/B Cesium Beam Frequency Standard
10890A	Replacement Long-Life caesium beam tube for the 5071A Primary Frequency Standard
10891A	Replacement high performance caesium beam tube for the 5071A Primary Frequency Standard

The Latin form “caesium” is the internationally recognized legal spelling. The common form “cesium” may still be found in older Symmetricom user’s manuals and publications. The caesium inside any of the devices is contained in a UN certified stainless steel cylinder. This cylinder meets all of the requirements for dangerous goods “containers” or “packages” for both international and U.S. domestic shipments. The instructions in this document refer to the labeling required on the outside of the carton or box that is used to enclose the caesium device.

U.S. Domestic Shipping

1. All U.S. domestic (only) shipments must use and comply with all the requirements of the DOT-SP11401 exemption. The document may be downloaded from the DOT web site at http://hazmat.dot.gov/sp_app/special_permits/docs/11000/E11401.pdf. All Symmetricom customers who are reshipping the Symmetricom device do not need to be listed as a grantee and may use Symmetricom’s exemption (see Par. 8a of DOT-SP11401). The prohibited “modifications or changes” to the “package” referenced in Par. 8a refers to the stainless steel caesium beam tube cylinder, and not any other external packaging (see Par. 7a). Follow normal shipping and handling practice and the following instructions.
2. Attach a copy of DOT-SP11401 to the outer box or container. The document may be legibly reduced, folded, placed in a clear plastic pouch and attached outside the package (see Par. 10). The title page should be readable through the pouch. Staple a copy of DOT-SP11401 to the shipping invoice so that the copy attached to the package will not be disturbed. Do not include this instruction sheet that you are now reading. Do not use the preprinted, bar-coded dangerous goods label offered by the shipper, which, if scanned, would incorrectly route the package to non-passenger aircraft.
3. Mark the outside of the package "DOT-SP11401 CAESIUM UN 1407". A downloadable template is available from <http://www.symmttm.com/5071A/Shipping>.
4. Limit to five units the maximum number of caesium devices in each shipment (par. 7b).
5. Comply with the training requirement (Par. 11) for “Hazmat employee” under 49CFR 172.704(a)(2) function-specific training (i). Explanation: This requirement is fully met if the person handling the transportation of the caesium device has read, understood and followed these instructions and DOT-SP11401.
6. Additional explanation: The following requirements of the IATA-DG regulations are waived by DOT-SP11401., i.e. not required for U.S. domestic only shipments. Paragraph numbers (Par. #) refer to the paragraphs in DOT-SP11401:

LABELING “Dangerous When Wet” and “Danger – Do not load in passenger aircraft” are waived (Par. 4).

PLACARDING “Dangerous When Wet” on the carrier’s vehicle is waived (Par. 4).

AUTHORIZED PACKAGING or UN (United Nations) certified packaging is waived (Par. 4). The stainless steel caesium beam tube cylinder comprises the authorized or prescribed packaging. No other packaging over the apparatus is required for compliance (Par. 4 and 7a).

PASSENGER AIRCRAFT is added as an authorized mode of shipment (Par. 9). Note: FedEx recognizes DOT exemptions. Some carriers, such as UPS and DHL may not recognize DOT exemptions. Check first with the carrier when using the exemption.

International Shipping

1. All overseas and international shipments must comply with the requirements of the UN/IATA dangerous goods regulations. Visit <http://www.iata.org/cargo/dg/index.htm>.
2. Mark the outside of the package: “Inner packages comply with prescribed specifications CAESIUM UN1407 0.009kg”, the UN package certification number, the “Dangerous when wet” and “Do not load in passenger aircraft” stickers. A downloadable template is available from the Symmetricom web sites noted above. Any suitable container that is reasonably strong for normal shipping and handling may be used. No other UN certified container is required by the regulation. Visit the Symmetricom web sites for more information.
3. Attach a Dangerous Goods Declaration (authorized, red-stripe bordered document) and fill identification as follows: Proper name CAESIUM; Class 4.3; UN No. UN1407; Packing group I; Quantity and type of packing: 1 Steel Container, 1A1 0.009 kg Overpack Used; Packing inst. 412. Cross out the words: “Passenger Aircraft” and “Radioactive”. Fill all relevant fields such as Shipper and Consignee appropriately.