



SOUTHWEST MICROWAVE, INC.

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February 25, 2008

FEDERAL COMMUNICATIONS COMMISSION
Laboratory Division
Equipment Authorization Branch

Dear Sirs

Southwest Microwave hereby makes application for a class 2 permissive change to its Model 310B Bi-static, K-Band microwave link certified under file number 31010/EQU 4-3-3 dated May 10, 1985 (FCC Identifier: CA68H9310B). The sensor has been designed for use as an outdoor security device and is intended for use in high end industrial and military applications. This change is required because certain customers such as oil refineries and chemical plants require that the system be repackaged into an explosion proof enclosure. In order to reduce the cost and additional weight of a much larger enclosure, Southwest Microwave has chosen to reduce the size of the antenna and provide a shorter range system.

The RF assemblies, printed circuit boards and modulation scheme remain the same as in the original submittal.

The parabolic antenna reflector diameter is changed from nine to five inches resulting in a 5.1 dB reduction of antenna gain, which is permissible under paragraph 2.1043(b)(2) of the FCC rules. In addition to the antenna change, a .062 inch ABS disk is inserted between the antenna and the glass window of the enclosure in order to reduce losses due to reflection.

In order to differentiate the explosion proof product from our standard 310B models, Southwest Microwave proposes to add a five digit number 310B-33456T for the transmitter and 310B-33456R for the receiver followed by the six digit numerical identifier as shown on exhibit I.


The following items are included in this application:

1. Description of product
2. Representative Photographs
 - a. Exhibit A: Exterior front view of enclosure.
 - b. Exhibit B: Exterior side view of enclosure showing adjustable mount.
 - c. Exhibit C: Interior view showing receiver printed circuit board and RF detector.
 - d. Exhibit D: Interior view showing printed circuit board and RF transmitter.
 - e. Exhibit E: Interior view showing antenna and mounting plate attached to front cover.
 - f. Exhibit F: Reduced diameter antenna assembly on mounting plate.
3. Exhibit G: E-Plane Antenna Profile through enclosure window at 3 meters.
4. Exhibit H: H-Plane Antenna Profile through enclosure window at 3 meters.
5. Exhibit I: Sample label and location on the unit.

The charge class II permissive charge is \$60.00 and will be paid on line through the Fee-Filer.

We trust this information will meet with your approval and that this permissive change will be allowed.

Respectfully Submitted,


Edward J. Foley
Vice President, Engineering
Southwest Microwave, Inc.