



A subsidiary of ASSA Industries, LLC

ANNEX 11 - Technical Description

The transmitter requesting certification is an integration of an FM transmitter module purchased through Matco and a power amplifier. The power amplifier is used to increase the output power. In order to control spurious emissions, we have incorporated an output RF filter and a video buffer section on the front end. The power amplifier consists of a bias circuit with switching regulators to maintain constant gain on the amplifier. The video buffer circuit consists of an operational amplifier that has a variable gain stage. The variable gain is used to maintain control of the video level into the transmitter module. In addition, to comply with the frequency limitation of the Part 90 regulation (2450-2483 MHz), we have limited the channel selection to channels 3 and channel 4 on the transmitter subsystem. Channel 3 on the subsystem is labeled as Channel 1 (2459 MHz) in the overall system, and Channel 4 on the subsystem is labeled as Channel 2 (2470 MHz) in the overall system. The channel is selected through a switch that will be made available to the end user. The antenna is an omni-directional, board-mounted disk antenna with 4 dBi gain.

The operation of the transmitter will consist of attaching a video source through the video connector, attaching the RF antenna and providing voltage through the power port and turning the external switch on.

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