



Building on the success of L, S, C, X and Ku-band multiplexers launched over the last four years, MtronPTI is now introducing a Ku-band Integrated Microwave Assembly (IMA) to support broadband communication datalinks used in applications like manned and unmanned aircraft, on the move and fixed ground stations, shipboard beyond line-of-sight wideband satellite communications and all unmanned vehicles. This integrated Ku-band microwave assembly incorporates low insertion loss, high power handling, high isolation between bands, Ku-band diplexer filters that are interconnected with two wave guide RF switches, a coupler and a low pass filter for harmonic suppression. RF cables are fed from the diplexers to a separate RF module consisting of an RF board with low noise amplifiers and an RF switch that switches the receive signal between the two paths. The module contains peripheral control and status circuitry for user access.

MtronPTI's integrated microwave assembly design and development modeling uses the same circuit, electromagnetic, mechanical, thermal, and stress analysis tools as our customers. This allows MtronPTI's IMAs design synthesis to be effortlessly integrated into the customer's system synthesis at early stages in the development process. This design collaboration essentially makes MtronPTI's design team an extension of the customer's design team and allows our customer's resources to focus on their areas of expertise. The end result of having MtronPTI focus on the design concept, prototype development and transition to full rate production is a shortened design cycle and getting our customer's system to market faster.

Features:

Low Insertion Loss: <math><2.0\text{dB}</math>

High Power Handling: 100W CW

Isolation Between the bands: -125dB

Harmonic Suppression: 2nd -70dB, 3rd -25dB

IMA Noise Figure : <math><3.8\text{dB}</math>

Small Size: 9x7x4 inches max

Applications:

UAS

Satcom

EW







