

# FIBER OPTIC RF DISTRIBUTION & DIGITAL SIGNALS CONTROL NETWORK



## Printed Circuit Board (PCB) Mountable Dual Carrier Multi-Modulated (DCMM™) RF Photonic Link

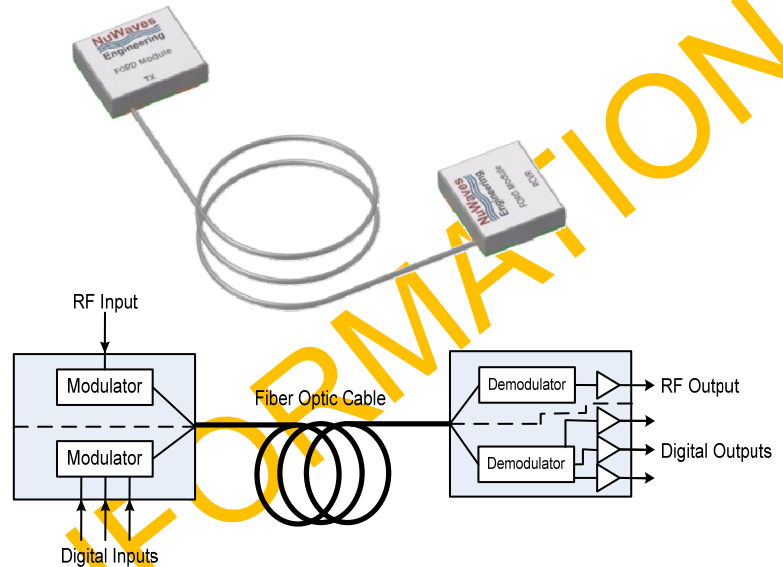
### FEATURES

#### Transmitter Module

- Miniature form factor
- RF and digital inputs
- DC Power 5 VDC
- 10 MHz - 2 GHz RF input
- +/- 1 dB bandwidth flatness
- 3 digital signal inputs
- DC - 100 MHz Digital bandwidth
- Low power consumption
- Surface mount
- High isolation between channels
- On/Off control
- Case dimensions of 0.5" x 0.5" x 0.125"

#### Receiver Module

- Miniature form factor
- RF and digital outputs
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- 10 MHz - 2 GHz RF output
- +/- 1 dB bandwidth flatness
- 3 digital signal output
- DC - 100 MHz digital bandwidth
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### PRODUCT DESCRIPTION

#### *NuWaves' RF/Digital over Fiber Modular System*

**NuWaves' RF over Fiber Modular System** is a complete system solution for your RF and digital distribution needs. This system utilizes high-tech radio frequency, digital, and photonics technologies developed by NuWaves under contract with the Air Force Research Laboratory (AFRL) under the Small Business Innovative Research (SBIR) program. This system distributes an RF signal and up to three digital or clock signals across printed circuit boards or from one subsystem to another. The benefits are many, inclusive of low cross coupling, immunity to inter-board EMI/RFI, high isolation of adjacent circuitry, low power, and miniature form factor. The innovative RF Photonic project improves upon state-of-the-art by achieving a novel Dual Carrier Multi-Modulated (DCMM™) technique, High Fidelity Auto Lasing, High Fidelity Auto Recovery, and a unique post assembly self-locking fiber connection; thereby distributing multiple signals with spectrally pure RF characteristics (SFDR, etc.) over user defined fiber cable lengths.



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