

Dual Band Debian

135 MHz to 2.4 GHz Ethernet Software Defined Industrial Radios

The XetaWave **Dual Band** radio is an extremely capable, flexible, and low cost industrial software defined radio (SDR) that supports two radios with each operating in the same frequency band or in totally different frequency bands. The XetaWave Dual Band radio is also available with optional programmable I/O.

Any of XetaWave's RF modules - ranging from 135 MHz to 2.4 GHz can be combined together creating a dual band radio. Each radio complies with its original specifications and supports all of its existing features.

The **Dual Band** radio can be configured as a back-to-back repeater reducing cost, weight, and power consumption while also eliminating cables. It can



also be used to bridge between two different frequency bands or bridge between two networks. **Compatibility** with **MDS x710**, **SD Series**, and **TransNET**TM master and repeater radios is supported and the **Dual Band** radio also supports full duplex operation.

Key Features

Performance All features and specifications of the single version radio are supported.

Wide Selection Frequency selections in the 100, 200, 400, 700, 800, 900, 1400, and 2400 MHz bands.

Operating System Powerful, open Debian Linux Operating System.

MultiSpeed Multipoint Access Point communicates with Endpoints operating at different RF data rates.

Secure Over-the-air data encryption using 128-bit and 256-bit AES.

Adjustable RF Output RF output power for each radio module is user controlled.

Network Types Point to Point, Point to Multipoint, Enhanced MultiPoint (EMP), Peer to Peer, and MESH (ISM only).

Repeater Units can be configured as back-to-back repeaters eliminating extra boxes and cabling.

Dual Band Options

XetaWave has the ability to put any combination of RF modules together to create dual band radios with and without programmable input/output signals. The list below identifies existing Debian Linux models. Please contact us for the availability of other models and combinations.

Model	Band 1	Band 2
XETA1X1-22MMDFA	150-174 MHz	150-174 MHz
XETA2X2-22MMDFB	217-222 MHz	217-222 MHz
XETA2X2-22MMDFB-IO	217-222 MHz	217-222 MHz
XETA4X4-22MMDFB	406-430/450-470 MHz	406-430/450-470 MHz
XETA4X4-22MMDFB-IO	406-430/450-470 MHz	406-430/450-470 MHz
XETA4BX4B-22MMDFB	450-470 MHz	450-470 MHz
XETA4BX4B-22MMDFB-IO	450-470 MHz	450-470 MHz
XETA7X7-22MMDFB	757-758/787-788 MHz	757-758/787-788 MHz
XETA7X7-22MMDFB-IO	757-758/787-788 MHz	757-758/787-788 MHz
XETA9X9-22DMDFC	902-928/928-960 MHz	902-928/928-960 MHz
XETA9X9-22DMDFC-IO	902-928/928-960 MHz	902-928/928-960 MHz
XETA9X9-22IMDFC	902-928 MHz	902-928 MHz
XETA9X9-22IMDFC-IO	902-928 MHz	902-928 MHz
XETA14X14-22MMDFA	1.427-1.432 GHz	1.427-1.432 GHz
XETA14X14-22MMDFA-IO	1.427-1.432 GHz	1.427-1.432 GHz
XETA24X24-22IMDFB	2.402-2.478 GHz	2.402-2.478 GHz
XETA24X24-22IMDFB-IO	2.402-2.478 GHz	2.402-2.478 GHz
XETA9X1-22DMDFC	902-928/928-960 GHz	150-174 GHz
XETA9X4-22DMDFC	902-928/928-960 MHz	406-430/450-470 MHz
XETA9X4-22DMDFC-IO	902-928/928-960 MHz	406-430/450-470 MHz
XETA9X4B-22DMDFC	902-928/928-960 MHz	450-470 MHz
XETA9X24-22DMDFC	902-928/928-960 MHz	2.402-2.478 GHz
XETA9X24-22DMDFC-IO	902-928/928-960 MHz	2.402-2.478 GHz

Environmental / Physical

-40°C to +60°C (MAS)/+75°C (ISM)	
95% @ +40°C non-condensing	
UL Class 1 Div 2	
6.62" x 3.45" x 1.83" (L x W x H)	
700 grams	



Specifications subject to change without notice.

3.2025