XETAWAVE
CUSTOM RF SOLUTIONS

XETAEDGE DUAL BAND

100 MHz to 2.4 GHz Radios

Edge computer with two software defined radios · same or different bands



2 channels
2 software defined radios

Compatible
MDS x710, SDx, Transnet

Independent
Separate networks

Repeater
Back-to-back repeater

The XetaWave **XetaEdge Dual Band** radios are an extremely capable, flexible, and low-cost industrial edge computing device that integrates two independent software defined radios (SDR) into a single device. Each radio can operate within the same frequency band or across entirely different frequency bands. Models are also available with optional programmable I/O.

Any combination of XetaWave RF modules, spanning frequencies from 100 MHz to 2.4 GHz, can be paired to create a dual band solution. Each radio module retains its full native functionality, specifications, and feature set.

The **XetaEdge Dual Band** platform can be deployed as a back-to-back repeater, reducing system cost, weight, power consumption, and installation complexity. It can also serve as a bridge between different frequency bands or to connect separate wireless networks.

For applications requiring simultaneous transmit and receive, a **XetaEdge Dual Band** model configured with radios operating in the same frequency band provides 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 and 2400 MHz bands.

Network Types
Point-to-Point, Point-to-Multipoint, CSMA Peer-to-Peer, Enhanced MultiPoint, and Mesh.

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

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

MultiSpeed
Endpoints communicate at different RF data rates with the Access Point.

Repeater
Configurable as a back-to-back repeater eliminating bandwidth reduction, extra boxes, and cables.

Diagnostics
Monitoring TX/RX statistics (noise, RSSI and more), voltage, and temperature over SNMP and Modbus.

Apps
AUTOSOL eACM, Node-RED, Inductive Automation Ignition Edge, PLC Shift, and more apps supported.

Compatibility
Supports compatibility with MDS x710, SD Series, TransNET, and TransNext™ master and repeater radios.

Programmable I/O
I/O consisting of 4 analog inputs, outputs, or digital inputs and 4 digital inputs or outputs is available.

Ordering Information & Environmental

XetaWave can put any combination of RF modules together to create a dual band radio with and without programmable I/O. The list below identifies existing Debian and XetaEdge models. Please contact us for the availability of other models and combinations.

Model	Channel 1	Channel 2
200 MHz + 200 MHz		
XETAEC2X2-22MMDFB	217–222 MHz	217–222 MHz
XETAEC2X2-22MMDFB-IO	217–222 MHz	217–222 MHz
400 MHz + 400 MHz		
XETAEC4X4-22MMDFB	406–430 / 450–470 MHz	406–430 / 450–470 MHz
XETAEC4X4-22MMDFB-IO	406–430 / 450–470 MHz	406–430 / 450–470 MHz
XETAEC4BX4B-22MMDFB	450–470 MHz	450–470 MHz
XETAEC4BX4B-22MMDFB-IO	450–470 MHz	450–470 MHz
900 MHz + 900 MHz		
XETAEC9X9-22DMDFC	902–928 / 928–960 MHz	902–928 / 928–960 MHz
XETAEC9X9-22DMDFC-IO	902–928 / 928–960 MHz	902–928 / 928–960 MHz
XETAEC9X9-22DMDFD	902–928 / 928–960 MHz	902–928 / 928–960 MHz
XETAEC9X9-22IMDFC	902–928 MHz	902–928 MHz
XETAEC9X9-22IMDFC-IO	902–928 MHz	902–928 MHz
Mixed Band		
XETAEC9X4-22DMDFC	902–928 / 928–960 MHz	406–430 / 450–470 MHz
XETAEC9X4B-22DMDFC	902–928 / 928–960 MHz	450–470 MHz
XETAEC9X7-22DMDFB	902–928 / 928–960 MHz	757–758 / 787–788 MHz
XETAEC9X7-22DMDFB-IO	902–928 / 928–960 MHz	757–758 / 787–788 MHz
XETAEC9X24-22IMDFC	902–928 / 928–960 MHz	2.402–2.478 GHz

ENVIRONMENTAL & MECHANICAL

Op. Temp.	-40 °C to +60 °C (MAS) · -40 °C to +75 °C (ISM)
Humidity	95% @ +40 °C, non-condensing
Dimensions	6.62 × 3.45 × 1.83 in (L × W × H)
Weight	700 g
Safety	UL Class I, Div 2

Specifications subject to change without notice. **Rev. 11.2026**