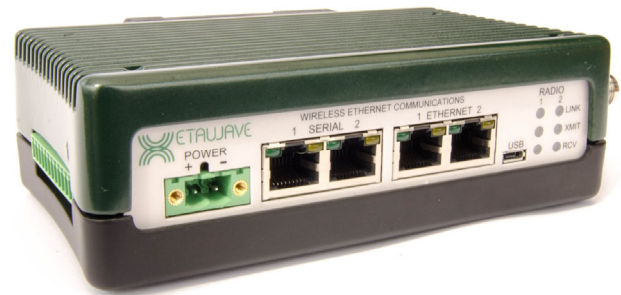


## *400 MHz ETSI/RED Ethernet Software Defined Industrial Radio*

The **Xeta4 400 MHz Ethernet radio** is an extremely capable and flexible industrial software defined radio. The **Xeta4** Ethernet radio is offered with an option to include 8 programmable inputs and outputs. The **Xeta4** is based on the XetaWave patent pending **Dual Decode Digital Architecture™** that offers significant receiver performance.

The **Xeta4** supports multiple modulation schemes and features that can selectively switch to achieve optimal data throughput given the available channel size and environmental noise.



**MultiSpeed MultiPoint™** mode enables Endpoints operating at different over-the-air data transfer rates to communicate with an Access Point over the same network. The new **Enhanced MultiPoint, XetaEMP**, mode provides an increase in throughput and decreased in latency over our standard modes and against competitive products.

## Key Features

**High Speed** Over-the-air data transfer rates from 5 kbps to 61 kbps and increased throughput with the **XetaEMP** mode.

**Selective Modulation** Multiple MSK, PSK, and QAM modulations.

**Dual Mode** Duplex and single channel operations.

**Network Types** Point to Point, Point to MultiPoint, CSMA peer to peer, and Enhanced MultiPoint.

**Adjustable RF Output** 50 mW to 8 Watts (+17 to +39 dBm) RF output.

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

**MultiSpeed Multipoint** Access Points communicate with Endpoints operating at different RF Data Rates.

**XetaEMP** New protocol with increased throughput and decreased latency.

# Xeta4 ETSI/RED Specifications

## Transmitter

Frequency Range	406 to 470 MHz
RF Output Power	0.50 to 8 Watts
Modulation	MSK, QPSK, 8PSK, 16QAM 32QAM, 64QAM
RF Data Rate	5 kbps to 61 kbps
Occupied Bandwidth	6.25 & 12.5 kHz
Frequency Stability	1.0 ppm

## Data Transmission

Data Interface	Ethernet & RS232/422/485 Serial
Data Connector	RJ45 (2 Ethernet & 2 Serial)
Data Interface Rate	10/100 Mbps (Ethernet) Up to 230.4 kbps (Serial)
Data Encryption	128 & 256-bit AES
Error Handling	CRC, FEC, Retransmit on error
Error Correction	Goley, Small Block, Reed-Solomon
RF Connector	TNC / 50 Ohms

## Networking

Protocols	TCP, UDP, ARP, DHCP, NTP, FTP, ICMP, HTTP, & HTTPS
Management	Web GUI, SNMP v1, v2, & v3
Serial	TCP/UDP Server, TCP Client,
VLAN	802.1q VLANs and trunks
Features	IP Routing, Net Filter, NAT, Port Forwarding, Modbus TCP/RTU Bridging, Data Concentrator, PLC, Wire Replacement, XetaEMP

*Specifications subject to change without notice.* 5.2020

## Ordering (other variants available)

XETA4-22MMLEA	Metal Enclosed, 2 Ethernet & 2 Serial, Linux
XETA4-22MMLEA-IO	Metal Enclosed, 2 Ethernet & 2 Serial, 8 IO, Linux

## Receiver

Channel Size	Sensitivity	Data Rate	Modulation
6.25 kHz	-112 dBm	5 kbps	MSK
12.5 kHz	-115 dBm	10 kbps	MSK
	-104 dBm	20 kbps	QPSK
	-100 dBm	31 kbps	8PSK
	-95 dBm	41 kbps	16QAM
	-91 dBm	51 kbps	32QAM
	-90 dBm	61 kbps	64QAM

## Power

Input Voltage	+12 to +32 Vdc
Transmit Current	2.6 A @ +12 Vdc
Receive Current	300 mA @ +12 Vdc
Power Connector	2-pin Phoenix

## Environmental / Physical

Op. Temperature	-40°C to +75°C
Humidity	95% @ +40°C non-condensing
Safety	UL Class 1 Div 2
Dimensions	6.62" x 3.45" x 1.83" (L x W x H)
Weight	700 grams

