



The **XetaEdge4** combines the **XetaEdge** and **Xeta4** to provide an extremely capable and flexible industrial Edge Computing application device with built-in 400 MHz software defined radio. The **XetaEdge4** is compatible with the Xeta4 family of radios and is Class 1 Div 2 certified.

The **XetaEdge4** is 100% open source allowing quick and simple hosting of many existing or new applications like the **AUTOSOL eACM** and the **Inductive Automation Ignition Edge** to offer multiple protocols to interact with exiting devices like flow meters, ROCs, and PLCs while reducing bandwidth needs with the use of the **MQTT** protocol.

The **XetaEdge4** supports multiple modulation schemes with auto configuration, **MultiSpeed MultiPoint™** mode, and **Enhanced MultiPoint, XetaEMP**, mode providing an increase in throughput and decrease in latency over our standard modes and against competitive products.

## Key Features

**High Speed** Over-the-air data rates from 5 kbps to 91 kbps.

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

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

**Networks** Point to Point, Point to MultiPoint, CSMA peer to peer, Enhanced MultiPoint, and 4710 A and B.

**Memory capacity** Host applications with 1 GB RAM and 4 GB Flash plus a micro SD slot.

**Apps** AUTOSOL eACM and Ignition Automation Ignition Edge installations available.

**Open Source** Utilize existing Linux applications or host new ones developed in Java, Python, Node-RED, Ruby, Perl, and many more.

## Processing

CPU	1 GHz ARM Cortex-A8
OS	Linux Debian, Ubuntu Server, Open Embedded
RAM / Flash / Expansion	1 GB / 4 GB / micro SD slot
Software	eACM, Node-RED, Python, more

## Data Transmission

Data Interface	Ethernet & RS232/485 Serial
Data Connector	RJ45 (2 Ethernet & 2 Serial)
Data Interface Rate	10/100 Mbps (Ethernet) Up to 1Mbps (Serial)
Data Encryption	128 & 256-bit AES
Error Handling	CRC, FEC, Retransmit on error
Error Correction	Goley, Small Block, Reed-Solomon
Operating Modes	Point to Point, Point to MultiPoint, Enhanced MultiPoint & Peer to Peer
RF Connector	TNC / 50 Ohms

## Power

Connector	2-pin Phoenix
Input Voltage	+10 to +32 Vdc
Transmit	225 mA @ +12 Vdc
Receive	190 mA @ +12 Vdc
Idle	176 mA @ +12 Vdc

## Environmental / Physical

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

## Ordering

XETAEC4-22MMDFB	Metal Enclosed, 2 Ethernet, 2 Serial, Debian
XETAEC4-22MMDFB-IO	Metal Enclosed, 2 Ethernet, 2 Serial, 8 I/O, Debian

## Transmitter

Frequency Range	406 to 430 & 450 to 470 MHz
RF Output Power	0.50 to 8 Watts
Modulation	MSK, QPSK, 8PSK, 16QAM 32QAM, 64QAM
RF Data Rate	5 kbps to 91 kbps
Occupied Bandwidth	6.25, 12.5, 25 & 50 kHz
Frequency Stability	1.0 ppm

## Receiver

Channel Size	Sensitivity	Data Rate	Modulation
6.25 kHz	-112 dBm	5 kbps	MSK
	-115 dBm	10 kbps	MSK
25 kHz	-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
	-107 dBm	18 kbps	MSK
50 kHz also available	-101 dBm	29 kbps	QPSK
	-98 dBm	44 kbps	8PSK
	-95 dBm	59 kbps	16QAM
	-89 dBm	76 kbps	32QAM
		91 kbps	64QAM

50 kHz also available

