

# ZumiQ™ App Server Network Appliance



**ZIQ-PE**



**ZIQ-P**

## CAPABILITIES

Programmable network appliance loaded with the ZumiQ Application Environment for the development and deployment of Industrial Internet of Things (IIoT) applications at the edge.

Develop applications using maker platforms such as Raspberry Pi and easily deploy them on ZumiQ.

Utilizes the same ZumiQ Application Environment as the ZumLink 900 Series radios to deliver the same application to different network architectures.

Low power consumption, wide operating temperatures, and C1D2 certification allow for the delivery of applications to unique edge environments.

## OVERVIEW

FreeWave's programmable ZumiQ App Server provides ruggedized Edge Intelligence for IIoT networks and device ecosystems. Loaded with the ZumiQ Application Environment and standard serial and Ethernet interfaces, the ZumiQ App Server is a programmable network appliance that provides a secure home for applications that rely on sensor data to deliver industrial process intelligence.

### Delivering Intelligence to the Edge

ZumiQ App Server allows industrial users to make better, faster decisions by placing sensor queries, analytics, and intelligence at the "edge" where operational devices reside. Not only does this distributed architecture provide alerts with minimum latency, it also improves data visibility without increased bandwidth by pushing only data that has changed. By reducing reliance on core computers (or even the Cloud), ZumiQ App Server can eliminate data bottlenecks and points of failure that are inherent in traditional industrial networks.

### Deploy in Any Network

ZumiQ App Server's open-source platform allows the device to work with either custom or 3rd party applications. ZumiQ can execute multiple applications simultaneously and integrate into any type of Ethernet network; wired or wireless, even non-FreeWave networks. Combine the ZumiQ App Server with ZumLink 900 Series radios to migrate to a smart wireless network.

## SOLUTIONS



DRONES & ROBOTICS



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GOV & DEFENSE



IRRIGATION & PRECISION AGRICULTURE



ASSET TRACKING



OIL & GAS



WATER & WASTEWATER



SMART CITIES



UTILITIES

## BENEFITS

### Versatile App Development and Deployment

The ZumIQ App Server supports application development and deployment based on the open-source Linux operating system. Any Linux-compatible language is supported, including Java, Python, Javascript (Node.js), and Node-RED. This allows you to develop on a maker platform and deploy on ZumIQ or to install 3rd-party edge applications that enable enterprise solutions.

### Add Intelligence to PLC and SCADA Infrastructure

Legacy ladder logic code can be converted to an application using compilers available at [www.openplcproject.com](http://www.openplcproject.com). Additionally, edge applications that enable newer bi-directional SCADA architecture can be deployed on ZumIQ.

### Delivers Apps to Wired or Wireless Networks

The ZumIQ App Server utilizes the same Linux Application Environment available on the ZumLink 900 Series Radios. A combination of both products allows you to deliver the same application to any type of network.

### Edge Intelligence in Harsh Outdoor Conditions

With C1D2 certification and a design that withstands extreme temperatures and humidity, the ZumIQ App Server can be deployed into locations where a standard computer cannot reside.

### Low Power Consumption Edge Devices

ZumIQ App Server is designed for low power consumption, leveraging FreeWave's more than 25 years of experience delivering communications in rugged, remote environments. Therefore, it can be powered by batteries, fuel cell, solar, wind turbines, or DC.

### Enclosed and Board-level Versions

Offered in both ZIQ-PE rugged enclosed and ZIQ-P board-level versions, the ZumIQ App Server is designed to provide performance, reliability, and quality in a form factor for applications where space is at a premium.

## TECHNICAL SPECIFICATIONS

### COMPUTER

<b>CPU</b>	ARM Cortex-A8 1GHz
<b>Operating System</b>	Debian (Linux Kernel v3.14.1)
<b>RAM</b>	512 MB
<b>User Storage</b>	1 GB

### INTERFACES

<b>Data Connectors</b>	1 Ethernet: RJ45, 10 / 100 / 1000 Mbps 2 Serial: RJ45, RS232 / RS422 / RS485
<b>USB Connector</b>	1 Micro USB
<b>Power Connector</b>	ZIQ-P: Phoenix (#1776692) ZIQ-PE: Circular (#CRD-021717-02-A)

### POWER REQUIREMENTS

<b>Operating Voltage</b>	+6 to +30 VDC (+/- 10%)
<b>Power Consumption</b>	2W

### CERTIFICATION

<b>Safety</b>	Class 1 Div 2 Groups A-D
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### GENERAL INFORMATION

<b>Operating Temperature</b>	-40°C to +75°C (-40°F to +167°F)
<b>Humidity</b>	0 to 95%, non-condensing
<b>Dimensions</b>	
<b>ZIQ-P:</b>	69.67 L x 82.04 W x 31.75 H (mm) 6.68 L x 3.23 W x 1.25 H (in)
<b>ZIQ-PE:</b>	191.04 L x 109.47 W x 41.91 H (mm) 7.5 L x 4.3 W x 1.7 H (in)
<b>Weight</b>	
<b>ZIQ-P:</b>	172g (0.38 lbs)
<b>ZIQ-PE:</b>	750g (1.7 lbs)

### INFORMATION TO ORDER

Model Number	Description
ZIQ-P	Board level, App Server
ZIQ-PE	Rugged enclosed, App Server

## CONTACT US

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