

# ZUMEDGE®

## ZU1100 Wire Replacement



The FreeWave ZumEdge ZU1100 is a powerful wire replacement solution that leverages cutting-edge wireless technology to eliminate the constraints of traditional wired I/O systems. Designed for industrial-grade reliability, it seamlessly replaces wired connections, reducing installation and maintenance costs while enhancing operational flexibility. With robust security, long-range connectivity, and remote management capabilities, the ZumEdge ZU1100 is the ultimate choice for modern IIoT deployments, ensuring seamless, secure, and efficient industrial automation.

### KEY FEATURES

- > **Wire Replacement**  
Provides an alternative in situations where running wires is not feasible
- > **Bi-directional Analog and Digital I/O**  
Allows bi-directional monitoring, command and control
- > **True Plug-and-Play**  
Pre-configured I/O mapping is fixed, reducing installation and set-up time
- > **Rugged, Functional Solution**  
Applicable in a variety of industries where Analog and Digital I/O must be extended and a wired solution is not feasible

**Say goodbye to the limitations of wires and hello to a smarter, more connected future with ZumEdge ZU1100.**

### DITCH THE WIRES, STAY CONNECTED - SEAMLESSLY

Traditional wired I/O connections are costly, cumbersome, and prone to failure—slowing down operations and limiting scalability. The FreeWave ZumEdge ZU1100 is the ultimate wire replacement solution, delivering real-time, bi-directional data transfer without the hassle of hard-wired infrastructure.

Powered by an intelligent 900 MHz wireless platform with edge computing and stackable I/O, the ZumEdge ZU1100 ensures cost-effective, reliable, and scalable industrial connectivity. Whether you're monitoring remote assets or optimizing automation, this solution keeps your data flowing—without the limitations of wires.

#### Why Choose the ZumEdge ZU1100?

- **Effortless Wireless Integration** – Replace wired I/O with seamless, high-precision analog and digital signal transfer.
- **Remote Monitoring & Control** – Manage applications from anywhere, reducing operational complexity.
- **Significant Cost Savings** – Eliminate expensive wiring, installation, and maintenance costs.
- **Easily Scalable** – Tailor your network to meet specific operational needs.
- **Optimized Efficiency** – Improve productivity with real-time monitoring and automation.

#### Built for Industrial Demands

From oil & gas, water management, and irrigation to utilities and remote operations, the ZumEdge ZU1100 is designed for critical applications. Monitor multi-well pad sites, underground storage, lift stations, and groundwater usage—all while enjoying secure, reliable wireless performance.

# FREEWAVE ZUMEDGE ZU1100

## TECHNICAL SPECIFICATIONS

### TRANSMITTER

<b>Frequency Range</b>	902 to 928 MHz
<b>Output Power</b>	Fixed at 1W
<b>Range</b>	97 km (60 miles) with clear line of sight
<b>RF Data Rates</b>	115.2 kbps fixed

### I/O

Analog Inputs	4-20mA
Analog Outputs	4-20mA
Digital Inputs	0 to 2.5 = Logic 0, 3.0 to PWC VDS = Logic 1
Digital Outputs	Isolated N.O. Switch Output
Power Supply	Operating Voltage +6 to +30 VDC Current Consumption Voltage Transmit Receive Idle 12 VDC 377mA 159 mA 143 mA

### INTERFACES

<b>Data Connectors</b>	Four RJ-45 (2 Ethernet, 2 Serial)
<b>USB Connectors</b>	Micro USB (used for configuration only)
<b>RF Connector</b>	TNC
<b>Power Connectors</b>	Phoenix Contact (#1776692)

### POWER REQUIREMENTS

<b>Operating Voltage</b>	+6 to +30 VDC			
<b>Current Consumption</b>	<b>Voltage</b>	<b>Transmit</b>	<b>Receive</b>	<b>Idle</b>
	12 VDC	377 mA	159 mA	143 mA

### GENERAL INFORMATION

<b>Operating Temperature</b>	-40 to +75 C
<b>Humidity</b>	0 to 95% non-condensing
<b>Dimensions</b>	165.28 L x 153.96 W x 27.55 H (mm) 6.51 L x 6.06 W x 1.08 H (inches)
<b>Weight</b>	500C / 1.0lbs
<b>Reliability</b>	MTBF 206,186
<b>Safety</b>	Class 1, Division 2, Groups A-D
<b>UL</b>	 

### ORDERING INFORMATION

<b>Model Number</b>	ZU1100
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### > ZU1100 Applications



OIL & GAS    UTILITIES    SCADA    MUNICIPAL    ENTERPRISE

## CONTACT US

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