

WZRDgate Gateway

WGW-330



- Network operates without infrastructure (i.e., no cell towers or satellites required)
- Free local area communications. You own the network
- Connects WZRDnet™ low-power wireless mesh network to external Wide Area Networks (WANs)
- Connects WZRDnet to VSATs, Mobile and Fixed Command and Control (C2) centers
- Access to external WANs via Wi-Fi, Ethernet, or analog (POTS) ports
- Multiple I/O ports for data collection and transmission including USB and RS232
- Mesh range of 2km per hop with up to 32 possible hops
- Available as a standalone unit or as part of the WZRDnet Tactical Kit
- Includes WZRDgate Software. A Web-Based Configuration Tool

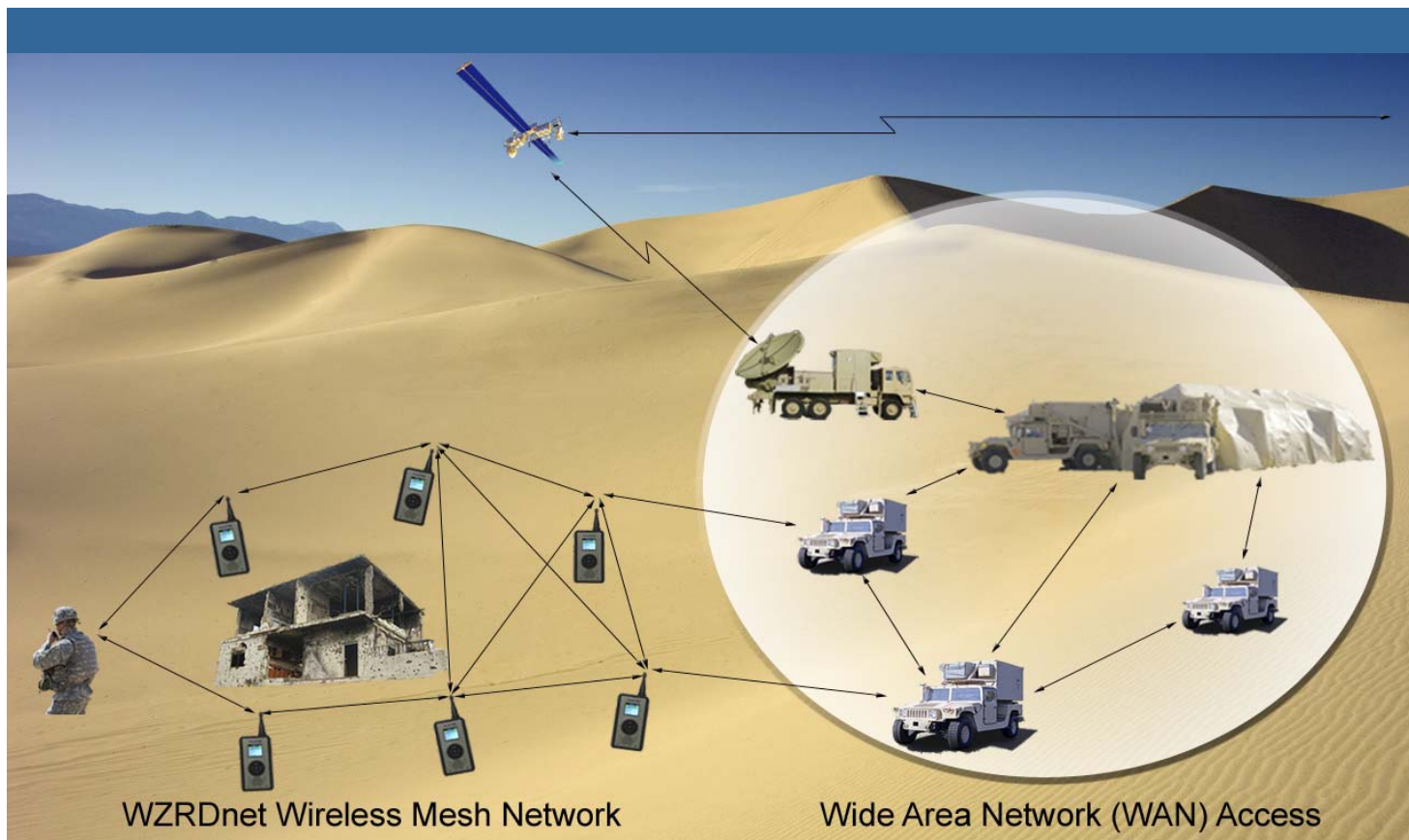


TALK WITHOUT TOWERS™

WZRDnet is a wireless ad-hoc mesh network that provides secure voice and data communications without the need for infrastructure (i.e., no cell towers or satellites required). In WZRDnet each handset is a router, relaying calls from originator to destination. Unlike other mesh networks, this architecture does not employ central routing tables thus avoiding single points of failure. WZRDnet is a low-power network that allows its light-weight handsets to provide service for 38 hours between battery recharges. WZRDnet is a true end-to-end packet switched network which facilitates straight-forward interoperability with Wide Area Networks (WANs) supporting peer-to-peer communications and direct dialing. This is accomplished via the WZRDnet Gateway which provides connectivity with any available IP network (e.g., Wi-Fi, VOIP, etc.), or analog network (i.e., PSTN).

The WZRDnet Gateway can interconnect with various WAN access systems like Very Small Aperture Terminals (VSATs), Broadband Global Area Network (BGAN) terminals, Rapid Response Tactical Routers (RRTRs), etc. It thus increases the availability of these access systems to network users that are not able to physically connect to or be in direct line-of-sight of these access systems. This clearly reduces cost by reducing the number of access systems required to cover a specific Area of Operations (AOO).

The Gateway is capable of interoperating with Wide Area Networks via Ethernet, analog PSTN, Wi-Fi, USB, and serial connections. Unlike other interoperability suites the WZRDnet Gateway includes an embedded call manager for improved call quality over bandwidth constrained networks (e.g. BGAN terminals). The Gateway can also be integrated into sensor networks for data collection and transmission. The Gateway is available in multiple configurations including Mobile, Rapid Response and Tactical Operation Command Center.



Technical Specifications

WZRDnet Tactical Kit

Size:	8.5 x 10 x 1.75 inch (½ of 1U Rack Space)
Software Architecture:	Programmable via web-based configuration tool
WAN Interfaces:	Wi-Fi 802.11 b/g
	Ethernet 10/100 Base-T (RJ-45 connector)
	RS232 Serial Port (DB-9 connector)
	Mini-USB Client Port
	USB 2.0 Full Speed (12 Mbps) Host
	RJ-11 Analog PSTN Interface (Qty 2)
Power:	88-264 VAC or 18-36 VDC
Additional Memory:	Secure Digital (SD) card

WZRDnet

Operating Frequency:	2.4 GHz (unlicensed ISM band)
Network Protocol:	IEEE 802.15.4
Network Data Rate:	250Kbps
Encryption:	AES-128 with OTAR
Single Hop Range:	2km
Hops Per Call:	32
Handset Battery Life:	38 Hours (5/5/90 Duty Cycle)

TELEGRID Technologies, Inc.
 19 Microlab Road
 Livingston, NJ 07039
 (973) 994-4440
 sales@telegrid.com