

ENTERPRISE-CLASS
CELLULAR ROUTERS FOR
RUGGED APPLICATIONS



Manage this device with
Digi Remote Manager



DIGI WR44 R

All-in-one cellular router with advanced routing and VPN features, designed specifically for use in rugged environments

Digi WR44 R is a rugged, all-in-one 4G LTE-Advanced mobile communications solution with true enterprise-class routing, security and firewall. Featuring a heavy-duty cast aluminum enclosure, it offers a flexible interface design with an optional integrated Wi-Fi access point (with multi SSID), USB, serial and 4-port Ethernet switch, as well as a variety of configuration options including GPS and CAN support.

These routers are ideal for transportation and mobile applications. Flexible power options include 9-36 VDC locking barrel or automotive Molex connectors for direct integration into vehicle applications. Also ideal for mobile

applications is the cellular to Wi-Fi autoswitch feature, which uses the highest speed/lowest cost WAN network available.

Digi WR44 R offers an advanced routing, security and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise class protocols incorporate BGP, OSPF and VRRP+. Advanced features allow the Digi WR44 R to be used as a component of a PCI compliant network.

Gain critical insights into your deployed devices and manage your network with **Digi Remote Manager**® — the command center for your deployment.

BENEFITS

- Rugged, enterprise-class cellular routers with advanced dynamic routing, security and firewall features
- Heavy-duty cast aluminum enclosure for reliable performance in rugged environments
- Integrated 802.11 ac/a/b/g/n; a/n Wi-Fi access point (optional) and 4-port Ethernet switch
- Flexible interfaces including GPS and CAN with DC power
- Cellular to Wi-Fi autoswitch feature automatically uses the highest speed/lowest cost WAN network available
- **Digi Remote Manager** platform for easy setup, mass configuration and management

RELATED PRODUCTS



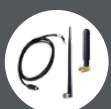
Digi TransPort®
WR11 XT



Digi TransPort®
WR21



Digi TransPort®
WR44 RR

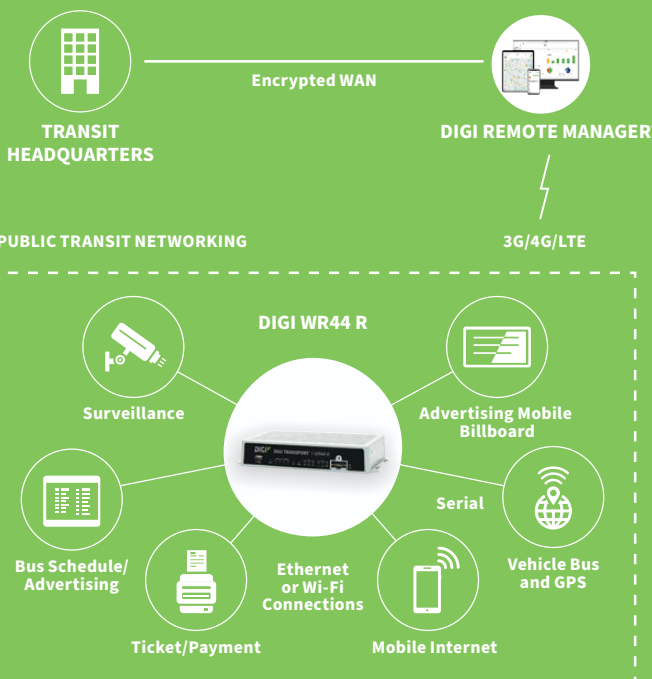


Accessories



Digi Remote
Manager

APPLICATION EXAMPLE



SPECIFICATIONS

DIGI WR44 R

WIRELESS INTERFACES

CELLULAR*

LTE - NORTH AMERICA/EMEA (M8)	LTE Advanced Cat 6: 700 (B12,B13,B29)/800 (B20,B26)/850 (B5)/900 (B8)/AWS (B4)/1800 (B3)/1900 (B2,B25)/2100 (B1)/2300 (B30)/2500 (B41)/2600 (B7); 3G HSPA+: 850/900/AWS/1800/1900/2100 MHz; Transfer rate (max): 300 Mbps down, 50 Mbps up; Approvals: PTCRB, AT&T, Verizon, Vodafone (pending)
LTE - EMEA/APAC (M7)	LTE Cat 4: 800 (B20)/900 (B8)/1800 (B3)/2100 (B1)/2600 (B7); HSPA: 900/2100 MHz; EDGE: 900/1800 MHz; Transfer rate (max): 150 Mbps down, 50 Mbps up
LTE - ANZ/LATAM (L9)	LTE-Advanced Cat 6: 700 (B28)/850 (B5,B18,B19)/900 (B8)/1500 (B21)/1800 (B3)/1900 (B39)/2100 (B1)/2600 (B7,B38)/2300 (B40)/2500 (B41); 3G HSPA+: 800/850/900/1700/2100 MHz; Transfer rate (max): 300 Mbps down, 50 Mbps up
LTE - EMEA/APAC (M2)	LTE Cat 3: 450(B31)/800(B20)/1800(B3)/2600 (B7); HSPA+: 900/2100 MHz; EDGE: 900/1800 MHz; Transfer rate (max): 100 Mbps down, 50 Mbps up
CONNECTOR	(2) 50 Ω SMA (Center pin: female)
SIM SLOTS	(2) Mini-SIM (2FF)
SIM SECURITY	SIM slot cover plate

WI-FI**

STANDARD	802.11 ac/a/b/g/n 2.4/5 GHz
MODES	Access point, client and support for multiple SSID
TRANSMIT POWER	20 dBm + 1.0/-1.5 dBm
RECEIVE SENSITIVITY	54 Mbps / <-72 dBm and 11 Mbps / -90 dBm
SECURITY	Open or shared key authentication; WEP (64- and 128-bit) encryption; WPA/WPA2 with RADIUS (WPA enterprise and pre-shared keys)
CONNECTORS	(2) 50 Ω RP-SMA (center pin: male)

GPS**

CHANNELS	50
SENSITIVITY	-163 dB
PROTOCOL	NMEA 0183 V2.3 sentence output; +3.3 VDC active antenna drive; NMEA stream to local serial port or over TCP/IP
NAVIGATION	Galileo ready
AUGMENTATION	SBAS
COLD START	< 27 seconds TTFF (90%)
HORIZONTAL ACCURACY	< 2.5 meters (90%)
VELOCITY ACCURACY	0.1m/s
CONNECTOR	(1) 50 Ω SMA (Center pin: female)
ADDITIONAL FEATURES	Send GPS via UDP/IP, TCP/IP (up to two destinations) or serial; customize and/or send data using Python; GPS status query; Time source capable

WIRED INTERFACES

SERIAL

PORTS	(1) DB-9; DCE
STANDARD	RS-232
SIGNAL SUPPORT	TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI
FLOW CONTROL	Software (XON/XOFF), hardware supported

ETHERNET

PORTS	(4) RJ-45; 10/100 Mbps (auto-sensing)
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USB

PORTS	(1) USB 2.0 Type A
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OTHER

EXPANSION CARDS	Option of fleet expansion card
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* Transfer rates are network operator dependent.

** Optional hardware.

SPECIFICATIONS

DIGI WR44 R

SOFTWARE	
REMOTE MANAGEMENT	Digi Remote Manager® (cloud based); SNMP v1/v2c/v3 (user installed/managed)
LOCAL MANAGEMENT	Web interface (HTTP/HTTPS); CLI (Telnet, SSH, SMS, serial port)
MANAGEMENT/ TROUBLESHOOTING TOOLS	FTP, SFTP, SCP, protocol analyzer with PCAP for Wireshark, event logging with Syslog and SMTP, NTP/SNTP
MEMORY	128 MB NAND Flash / 64 MB DDR2 SDRAM
POWER	
INPUT	9 – 36 VDC
CONSUMPTION	15 W max, 8.5 W typical
CONNECTOR	Locking barrel and 4-pin terminal block (2 pins are used for power; the other 2 pins are used for I/O)
PHYSICAL	
DIMENSIONS (L X W X H)	140 mm x 254 mm x 48 mm (5.5 in x 10 in x 1.9 in)
WEIGHT	1.1 kg (2.4 lbs)
STATUS LEDS	Power, LAN, Wi-Fi, serial, WWAN (link, act, SIM), signal strength
MATERIAL/RATING	Aluminum alloy / IP30
MOUNTING	(4) mounting slots on the unit's flange
ENVIRONMENTAL	
OPERATING TEMPERATURE	Non-Wi-Fi variants: -40° C to 70° C (-40° F to 158° F); single-Wi-Fi variants: -4° F to 158° F (-4° F to 158° F); dual-Wi-Fi variants: -20° C to +60° C (-4° F to 122° F); (reduced cellular performance may occur above 60° C / 140° F)
STORAGE TEMPERATURE	-40° C to 85° C (-40° F to 185° F)
RELATIVE HUMIDITY	0% to 95% (non-condensing) @ 25° C (77° F)
ETHERNET ISOLATION	1.5 kV RMS
SERIAL PORT PROTECTION (ESD)	15 kV
APPROVALS	
CELLULAR	PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511, visit www.digi.com/resources/certifications for latest certifications
CDMA/EV-DO	CDG TIA/EIA-690, CDG TIA/EIA-98-E
SAFETY	UL 60950, CSA 22.2 No. 60950, EN60950
EMISSIONS/IMMUNITY	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B
INDUSTRY	Vehicle Usage: E-Mark (Regulation 10.05) EN 300 019-2-5 (specification for environmental tests for ground vehicle installations - covers temperature, humidity, vibration and shock)
WARRANTY	
PRODUCT WARRANTY	3-year***

***Standard 3-year warranty upgradeable to 5 years with purchase of a Digi Remote Manager Premier 5-year subscription applicable to the product purchased only at the time of product purchase and with product registration at that time in Digi Remote Manager.

ENTERPRISE SOFTWARE

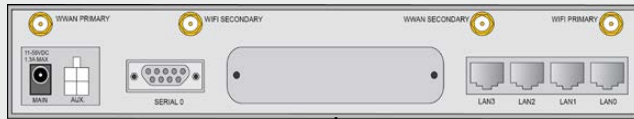
DESCRIPTION

PROTOCOLS	HTTPS, FTP, SFTP, TLS 1.2, SMTP, SNMP (v1/v2c/v3), SSH, Telnet and CLI for web management; remote management via Digi Remote Manager ; SMS management, protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS; dynamic DNS client compatible with BIND9/No-IP/DynDNS
SECURITY/VPN	Stateful inspection firewall with scripting, address and port translation; VPN: IPSec with IKEv1, IKEv2, NAT Traversal; TLS 1.2, FIPS 197, open VPN client and server; PPTP, L2TP; (5) VPN tunnels (upgradable to a maximum of 200); cryptology: SHA-1, MD5, RSA; encryption: DES, 3DES and AES up to 256-bit; authentication: RADIUS, TACACS+, SCEP for X.509 certificates; content filtering (via 3rd party); MAC address filtering; VLAN support; Ethernet port isolation
ROUTING/FAILOVER	IP pass-through ; NAT, NAPT with IP port forwarding; Ethernet bridging; GRE; multicast routing; routing protocols: PPP, PPPoE, RIP (v1, v2) OSPF, SRI, BGP, iGMP routing (multicast); RSTP (Rapid Spanning Tree Protocol); IP failover: VRRP, VRRP+TM; automatic failover/ failback to second GSM network/standby APN
OTHER PROTOCOLS	DHCP; dynamic DNS client compatible with BIND9/No-IP/DynDNS; QoS via TOS/DSCP/WRED; Modbus UDP/TCP to serial; X.25 including XOT, SNA/IP, TPAD and PAD; protocol switch; Modbus bridging for connecting diverse field assets

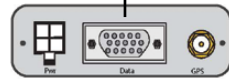
SPECIFICATIONS

CONNECTOR

SPECIFICATION



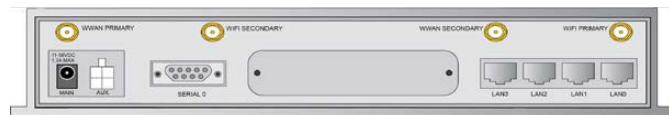
FLEET (F1)



(1) 4-pin, (1) 15-pin, (1) SMA

Flexible transportation/fleet focused applications requiring CAN bus, J1708, GPS, Non-isolated digital I/O, Ignition Sense, 3-Axis accelerometer and power control of Digi WR44 R interfaces. Fully programmable via Python for embedded Digi applications.

PRODUCT IMAGES



DIGI REMOTE MANAGER®



Digi Remote Manager is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, monitor and diagnose thousands of mission-critical devices from a single point of command — on your desktop, tablet or phone. All the while, its software-defined security diligently safeguards your entire Digi ecosystem.

Learn more at www.digi.com/digi-remote-manager

CAPABILITIES

- Activate, monitor and diagnose your mission-critical devices from a single point of command and control — on your desktop or mobile app
- Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
- Manage edge devices out-of-band via console terminal access
- Keep tabs on device health and connectivity across device deployments of any size
- Create detailed reports and enable real-time alerts for specified conditions
- Integrate device data through open APIs to gain deeper insights and control with third-party applications
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

INFRASTRUCTURE

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

SECURITY

- More than 175 security controls in place to protect your data
- Member of the Center for Internet Security® (CIS®)
- Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
- Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

PART NUMBERS	DIGI WR44 R
WR44-M800-AE1-RF	Digi WR44 R - 4G LTE North America/EMEA, 4 Ethernet, Wi-Fi, RS-232
WR44-M8F1-AE1-RF	Digi WR44 R - 4G LTE North America/EMEA, 4 Ethernet, Wi-Fi, RS-232, GNSS, CAN
WR44-L900-AE1-RF	Digi WR44 R - 4G LTE APAC/LATAM, 4 Ethernet, Wi-Fi, RS-232
WR44-L9F1-AE1-RF	Digi WR44 R - 4G LTE APAC/LATAM, 4 Ethernet, Wi-Fi, RS-232, GNSS, CAN
WR44-M2F1-NE1-RF	Digi WR44 R - 4G LTE EMEA/APAC (450 MHz), 4 Ethernet, Wi-Fi, RS-232, GNSS, CAN
WR44-M700-CE1-RF	Digi WR44 R - 4G LTE EMEA/APAC, 4 Ethernet, RS-232

PART NUMBERS	ACCESSORIES*
76000982	Accessory kit - Digi WR44 R
76002060	Accessory kit - AC power, std temperature, int'l plugs
76000945	Antenna - WiFi, table-top mount, 2450/5800 Mhz
76000960	Antenna - cellular, 450 MHz
76000926	Antenna - cellular, 3G/4G/LTE
76000842	Antenna, active GPS, 1575 MHz
76000954	Antenna base - SMA, 1 m, RG174
76000808	DC power cord - 4-pin connector to bare wire, 4 m
76000816	AC power supply - 18 VDC, extended temp. NEMA 5-15P (US) to 4-pin connector.
76000904	AC power supply - 18 VDC, extended temp. NEMA 5-15P (EU) to 4-pin connector
76000823	AC power supply - std temperature, universal plugs (US, EU, UK, AU) to 12 VDC - 2.1 mm locking barrel plug
76000826	Cable - Ethernet, RJ4-5 to RJ-45, 2 m

*Sold separately, unless otherwise noted.

PART NUMBERS	DIGI REMOTE MANAGER
DIGI-RM-STD-1YR	Digi Remote Manager Standard - 1-year subscription
DIGI-RM-PRM-1YR	Digi Remote Manager Premier - 1-year subscription
DIGI-RM-PRM-3YR	Digi Remote Manager Premier - 3-year subscription
DIGI-RM-PRM-5YR	Digi Remote Manager Premier - 5-year subscription

DIGI SERVICE AND SUPPORT / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit www.digi.com/support.

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909 Ridgebrook Road, Sparks, Maryland 21152, USA
TEL : +1-410-583-1701 FAX : +1-410-583-1704
E-mail: sales@pulsesupply.com
<https://www.pulsesupply.com/digi-iwr>

