



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.

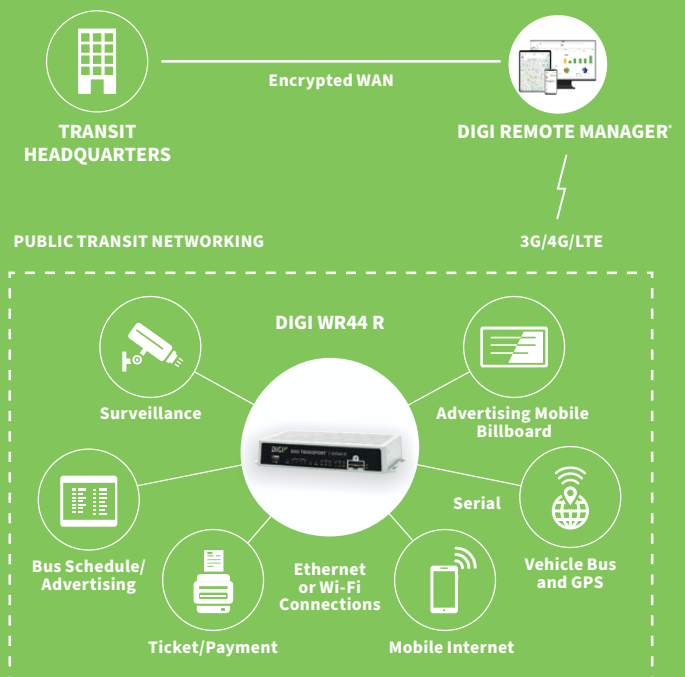
Digi WR44 R offers an advanced routing, security and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise class protocols incorporate BGP, OSPF and VRRP+. Advanced features allow the Digi WR44 R to be used as a component of a PCI compliant network.

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

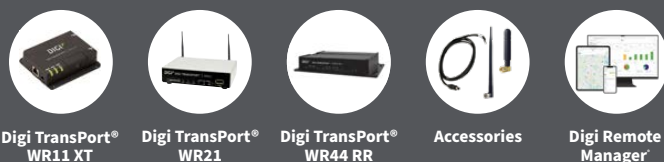
BENEFITS

- 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

APPLICATION EXAMPLE



RELATED PRODUCTS



Digi Transport®
WR11 XT

Digi Transport®
WR21

Digi Transport®
WR44 RR

Accessories

Digi Remote
Manager

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) |
|-------|---------------------------------------|

USB

| | |
|-------|--------------------|
| PORTS | (1) USB 2.0 Type A |
|-------|--------------------|

OTHER

| | |
|-----------------|--------------------------------|
| EXPANSION CARDS | Option of fleet expansion card |
|-----------------|--------------------------------|

* 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

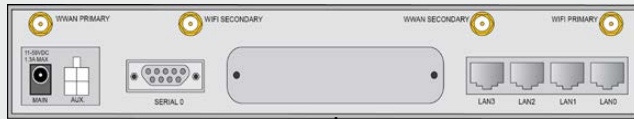
DESCRIPTION

| | |
|------------------|--|
| 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 |

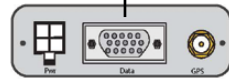
SPECIFICATIONS

CONNECTOR

SPECIFICATION



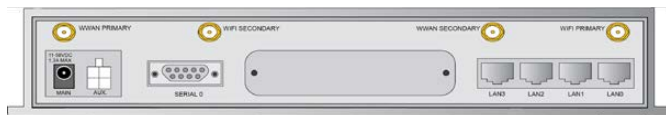
FLEET (F1)



(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 |

FOR MORE INFORMATION
PLEASE VISIT DIGI.COM

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