DIGI TRANSPORT® WR44 RR

Rugged, all-in-one cellular router with 3G/4G GPS. Designed for use on-board rail vehicles.

Digi TransPort WR44 RR is a rugged enterprise-class cellular router designed for rail environments. Its rail industry ratings, versatility, security features and performance make it ideal for applications such as Positive Train Control (PTC), wayside device communications and on-board passenger Internet access.

Digi TransPort WR44 RR provides a reliable primary high speed cellular network connection or can act as a secure backup connection to the existing railroad network. It features a flexible communications design with 3G/4G multicarrier cellular, plus integrated Wi-Fi ac/b/g/n; a/n access point, serial and 4-port Ethernet switch. It also features full on-board train certifications, including AAR S-9401 and EN50155. Communications interfaces include hardened connectors, including M12 for Ethernet and serial, as well as TNC connectors for antenna connections.

Digi management solutions provide easy setup, configuration and maintenance of large installations of remote Digi TransPort devices. Digi Remote Manager® offers web-based device management for remote Digi cellular routers, gateways and third-party devices.

BENEFITS
- Heavy-duty enclosure and connectors designed for shock and high vibration environments
- Enterprise-class routing, VPN and firewall capabilities
- Optional integrated 802.11 ac/b/g/n; a/n Wi-Fi access point
- Dual SIM for carrier redundancy
- Cellular to Wi-Fi autoswitch
- Full on-board train certs including AAR S-9401 and EN50155
- Digi Remote Manager® provides mass configuration, device management and troubleshooting tools

APPLICATION EXAMPLE

DIGI TRANSPORT® WR44 RR

DIGI REMOTE MANAGER®

DIGI TRANSPORT® WR44 RR

TRAIN SCHEDULE/ADVERTISING

SURVEILLANCE

ADVERTISING MOBILE BILLBOARD

TICKET/PAYMENT

HEADQUARTERS

3G/4G/LTE

DIGITAL COMMUNICATIONS SOLUTIONS FOR TRAINS

Digi Remote Manager®

Digi TransPort® WR44 RR

ACCESSORIES

RELATED PRODUCTS

Digi TransPort® WR11 XT
Digi TransPort® WR21
Digi TransPort® WR44 R
Digi Remote Manager®

Downloaded from Arrow.com.
## Specificações Digi TransPort® WR44 RR

### Interfaces Sem Fio

#### Celular*

**LTE - América do Norte/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 - 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

#### Conector
- 2x 50 Ω TNC (Center pin: female)

#### Slots Cartão SIM
- 2x Mini-SIM (2FF)

#### Segurança do Cartão SIM
- Slot de cobertura do cartão SIM

### Wi-Fi**

#### Standard
- 802.11 ac/a/b/g/n 2.4/5 GHz

#### Modos
- Acesso ponto, cliente e suporte para múltiplos SSID

#### Potência de Transmissão
- 16 – 22 dBm, +/- 2 dB

#### Sensibilidade de Recepção
- 71 – 93 dBm, +/- 2dB

#### Segurança
- Autenticação com chave aberta ou compartilhada; WEP (64- e 128-bit) criptografia; WPA/WPA2 com RADIUS (WPA Enterprise e chaves pre-shares)

#### Conector Wi-Fi
- 2x 50 Ω RP-TNC (Center pin: male)

### GPS**

#### Canais
- 50

#### Sensibilidade
- -163 dB

#### Protocolo
- NMEA 0183 V2.3 sentença de saída; +3.3 VDC ativo de antena de drive; NMEA stream to local serial port or over TCP/IP

#### Navegação
- Galileu pronto

#### Aumentação
- SBAS

#### Inicio Frío
- < 27 segundos TTTF (90%)

#### Precisão Horizontal
- < 2.5 metros (90%)

#### Velocidade
- 0.1 m/s

#### Conector GPS
- 1x 50 Ω RP-TNC (Center pin: male)

#### Características Adicionais
- Enviar GPS via UDP/IP, TCP/IP (até duas destinações) ou serial; Personalizar e/ou enviar dados usando Python; Status de GPS; Fonte de tempo capaz

### Interfaces Pecas

#### Serial

- 1x 5-pin A-coded M12 female; DCE

#### Standard
- RS-232

#### Suporte Sinal
- TXD, RXD, RTS, CTS, GND

#### Controle de Fluxo
- Software (XON/XOFF), hardware supported

#### Ethernet

- 4x 10/100 Mbps (auto-sensing)

#### Conector Ethernet
- Opção de 4-pin D-coded M12 female ou 8-pin A-coded M12 female

#### I/O

#### Entrada/Saída Digital
- Entrada: 4 - 28 VDC; Saída: 28 VDC 50 mA max

#### Conector Entrada/Saída Digital
- 4-pin A-coded M12 male (2 pins are used for I/O; the other 2 pins are used for DC power)

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* Transfer rates are network operator dependent.

** Optional hardware.
## SPECIFICATIONS

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<th><strong>Digi TransPort® WR44 RR</strong></th>
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### MANAGEMENT

**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**
- 15W max, 8.5W typical

**CONNECTOR**
- 4-pin A-coded M12 male (2 pins are used for power; the other 2 pins are used for I/O)

**DC POWER CORD**
- 4-pin A-coded M12 female to bare wire

### PHYSICAL

**DIMENSIONS (L X W X H)**
- 11.5 in x 6.65 in x 2.05 in (29.2 cm x 16.9 cm x 5.2 cm)

**WEIGHT**
- 5.7 lbs (2.6 kg)

**STATUS LEDS**
- Power, LAN, Wi-Fi, Serial, WWAN (Link, Act, SIM), Signal strength

**MATERIAL/RATING**
- Aluminium alloy/ IP54

**MOUNTING**
- (4) mounting slots on the unit’s flange

### ENVIRONMENTAL

**OPERATING TEMPERATURE**
- -40° C to +70° C; (Reduced cellular performance may occur above +60° C)

**STORAGE TEMPERATURE**
- -40° C to +85° C

**RELATIVE HUMIDITY**
- 0% to 95% (non-condensing) @ 25° C

**ETHERNET ISOLATION**
- 2 kV RMS

**SERIAL PORT PROTECTION (ESD)**
- 10 kV

**CONFORMAL COATING**
- Available upon request

### APPROVALS

**CELLULAR**
- PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511

**SAFETY**
- UL 60950, CSA 22.2 No. 60950, EN60950

**EMISSIONS/IMMUNITY**
- CE, FCC Part 15 Class B, A5/NZS CISPR 22, EN55024, EN55022 Class B

**INDUSTRY**
- EN50155, EN45545-2 (all variants); AAR S-9401 (select variants)

### WARRANTY

**PRODUCT WARRANTY**
- 3 years

## ENTERPRISE SOFTWARE

### DESCRIPTION

**PROTOCOLS**
- HTTP, HTTPS, FTP, SFTP, SSL, 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**
- IP filtering, Stateful inspection firewall with scripting, address and port translation;
- VPN: IPSec with IKEv1, IKEv2, NAT Traversal; SSL, SSLv2, 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 (CBC mode for IPsec); Authentication: RADIUS, TACACS+, SCEP for X.509 certificates; Content filtering (via 3rd party); MAC address filtering; VLAN support

**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 X.21, SNA/SP, TPAD and PAD; Protocol switch; Modbus bridging for connecting diverse field assets

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*Optional hardware.

***The enclosure rating is self-declared and has not been formally verified by an independent lab.*
DIGI REMOTE MANAGER®

CAPABILITIES
- Centralized management of remote devices over 3G/4G/LTE
- Define standard configurations and automatically monitor individual devices for PCI security compliance
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss
- No servers or applications to operate and maintain
- Complete tasks for your entire device network in minutes
- Edit configurations and update firmware for your individual devices or groups
- Monitor the status and location of your remote device via a web browser
- Active or deactivate cellular lines and monitor data to ensure you never incur overage charges

INFRASTRUCTURE
- Hosted in a commercial-grade SAS 70-certified environment
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

SECURITY
- Certified SSAE-16 facilities
- Over 175 Security Controls in place to protect your data
- Enables compliance with security frameworks like PCI, HIPAA, NIST and more
- Earned SkyHigh’s Cloud Trust Program highest ranking of Enterprise-Ready

PRODUCT IMAGES

PART NUMBERS

<table>
<thead>
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<tbody>
<tr>
<td>WR44-M8G4-AE1-MD</td>
<td>Digi TransPort WR44 RR - 4G LTE North America/EMEA, Wi-Fi (802.11ac)</td>
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<tr>
<td>WR44-L9G4-AE1-MD</td>
<td>Digi TransPort WR44 RR - 4G LTE LATAM/ANZ, Wi-Fi (802.11ac)</td>
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PART NUMBERS

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<th>PART NUMBERS</th>
<th>ACCESSORIES*</th>
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<tr>
<td>76000983</td>
<td>Accessory Kit - TransPort WR44 RR</td>
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*Sold separately, unless otherwise noted.