



COMPACT ENTERPRISE  
CLASS 3G/4G/LTE  
ROUTER



# DIGI TRANSPORT WR21

Compact, flexible, low-cost 3G/4G/LTE enterprise router for remote and mobile networking applications

Digi TransPort® WR21 is a full-featured cellular router offering the flexibility to scale from basic connectivity applications to enterprise class routing and security solutions. With its high-performance architecture, Digi TransPort WR21 provides primary and backup WWAN connectivity over 3G/4G/LTE. The platform includes software selectable multi-carrier and regional LTE variants.

Flexible power and connectivity options, along with extended temperature ranges make Digi TransPort WR21 a versatile product for both commercial and industrial environments.

Digi TransPort WR21 supports enterprise software features for advanced security (stateful firewall, MAC filtering, VPN), redundancy (VRRP+, SureLink®) and management (SNMP, event logging, analyzer trace, and QOS), enabling the product to be used in PCI or NERC-CIP compliant applications.

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

- Compact, low-cost, flexible cellular routing platform with enterprise feature set
- Enterprise software with advanced routing protocols, VPN and stateful firewall
- High-performance architecture, flexible power and extended operating temperature
- 3G/4G cellular interface supporting LTE and HSPA+ networks worldwide
- Redundant connectivity with dual SIMs and Digi SureLink™
- Digi Remote Manager® software for easy setup, configuration and maintenances
- Digi Foundations™ 1-, 3- or 5-year subscription available

## RELATED PRODUCTS



Digi TransPort®  
WR11 XT



Digi TransPort®  
WR31



Digi TransPort®  
WR44 R

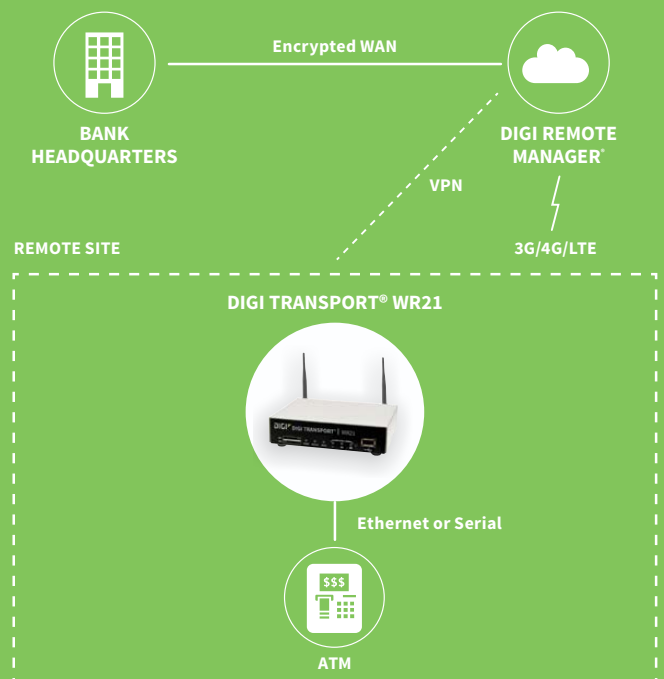


Accessories



Digi Remote  
Manager®

## APPLICATION EXAMPLE



## SPECIFICATIONS

# Digi TransPort® WR21

### WIRELESS INTERFACES

#### CELLULAR\*

<b>LTE - NORTH AMERICA (M5)</b>	LTE Cat 4: 700(B12,13)/850(B5)/AWS(B4)/1900(B2) 3G HSPA+: 850/1900 MHz Transfer rate (max): 150 Mbps down, 50 Mbps up Approvals: PTCRB, AT&T, Verizon, Telus (pending)
<b>LTE - EMEA/APAC (M7)</b>	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
<b>LTE 450 - EMEA/APAC (M2)</b>	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
<b>GLOBAL HSPA+ (U9)</b>	3G HSPA+: 850/900/1700AWS/1900/2100 MHz 2G EDGE/GPRS: 850/900/1800/1900 MHz Transfer rate (max): 21 Mbps down, 5.76 Mbps up Approvals: PTCRB, Vodafone
<b>EMEA CDMA EV-DO (D5)</b>	3G EVDO Rev B: 450 MHz 2G 1XRTT: 450 MHz Transfer rate (max): 14.7 Mbps down, 5.4 Mbps up
<b>GSM-R (R5)</b>	900/1800/1900 MHz (TRM-5); GPRS Class 10; transfer rate (max): 42.8 Kbps up, 85.6 Kbps down
<b>CONNECTORS</b>	(2) 50 Ω SMA (center pin: female)
<b>SIM SLOTS</b>	(2) Mini-SIM (2FF)
<b>SIM SECURITY</b>	Optional SIM slot cover plate

#### GPS\*\*

<b>CHANNELS</b>	12 channel, continuous tracking
<b>SENSITIVITY</b>	Tracking1: -161 dBm; Acquisition2 (Assisted, non-LTE): -158 dBm; Acquisition (Assisted, LTE): -153 dBm; Acquisition (Standalone): -145 dBm
<b>PROTOCOL</b>	NMEA 0183 V3.0
<b>COLD START</b>	< 0.2 m/s
<b>HORIZONTAL ACCURACY</b>	< 2 m (50%); < 5 m (90%)
<b>VELOCITY ACCURACY</b>	< 0.2 m/s

#### OTHER

<b>ADDITIONAL FEATURES</b>	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

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

#### ETHERNET

<b>PORTS</b>	(2) RJ-45; 10/100 Mbps (auto-sensing)
--------------	---------------------------------------

#### USB

<b>PORTS</b>	(1) USB 2.0 Type A
--------------	--------------------

\*Transfer rates are theoretical and network operator dependent.

\*\*Optional hardware.

## SPECIFICATIONS

## Digi TransPort® WR21

### MANAGEMENT

<b>REMOTE MANAGEMENT</b>	Digi Remote Manager (cloud based); SNMP v1/v2c/v3 (user installed/managed)
<b>LOCAL MANAGEMENT</b>	Web interface (HTTP/HTTPS); CLI (Telnet, SSH, SMS, serial port)
<b>MANAGEMENT/TROUBLESHOOTING TOOLS</b>	FTP, SFTP, SCP; protocol analyzer with PCAP for Wireshark; event logging with Syslog and SMTP; NTP/SNTP
<b>MEMORY</b>	128 MB NAND Flash/128 MB DDR2 SDRAM

### POWER

<b>INPUT</b>	9 – 30 VDC, 18 W min power source required
<b>CONSUMPTION</b>	4 W typical (Idle); 12 W typical (Peak Tx/Rx)
<b>CONNECTOR</b>	Depending on model: locking barrel or screw-down removeable terminal block

### PHYSICAL

<b>DIMENSIONS (L X W X H)</b>	100 mm x 131 mm x 32 mm (3.9 in x 5.2 in x 1.3 in)
<b>WEIGHT</b>	0.49 kg (1.08 lb)
<b>STATUS LEDS</b>	Power, service, WWAN, 3x signal strength
<b>ENCLOSURE MATERIAL/RATING</b>	Industrial (metal)/ IP30
<b>MOUNTING</b>	Brackets for wall mount & DIN rail sold separately

### ENVIRONMENTAL

<b>OPERATING TEMPERATURE***</b>	-35° C to 70° C (-31° F to 158° F); reduced cellular performance may occur above 50° C (122° F)
<b>STORAGE TEMPERATURE</b>	-40° C to 85° C (-40° F to 185° F)
<b>RELATIVE HUMIDITY</b>	0% to 95% (non-condensing) @ 25° C (77° F)
<b>ETHERNET ISOLATION</b>	1.5 kV RMS
<b>SERIAL PORT PROTECTION (ESD)</b>	15 kV
<b>HAZARDOUS (CLASS 1 DIV 2)</b>	Models with serial (RS-232/422/485) compliant to ANSI/ISA-12.12.01-2015

### APPROVALS

<b>CELLULAR</b>	PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511
<b>SAFETY</b>	UL 60950, CSA 22.2 No. 60950, EN60950
<b>EMISSIONS/IMMUNITY</b>	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B

### WARRANTY

<b>PRODUCT WARRANTY</b>	3-year + Digi Foundations****
-------------------------	-------------------------------

\*\*\*Standard temperature power supplies may reduce temperature range.

\*\*\*\*Digi Foundations can extend the standard three-year warranty to a Limited Lifetime Warranty that provides replacement with a new or similar Digi product for a period of five years from the date of purchase. After five years from the purchase date, the warranty value will revert to a 40 percent credit towards the MSRP of an equivalent product from Digi.

## ENTERPRISE SOFTWARE

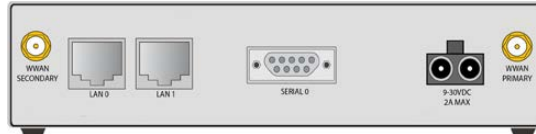
## DESCRIPTION

<b>PROTOCOLS</b>	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
<b>SECURITY/VPN</b>	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 (not upgradable); Maximum VPN tunnels available: 5; 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; Ethernet port isolation
<b>ROUTING/FAILOVER</b>	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); IP failover: VRRP, VRRP+TM; Automatic failover/failback to second GSM network/standby APN; Verizon NEMO/DMNR for primary wireless access
<b>OTHER PROTOCOLS</b>	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

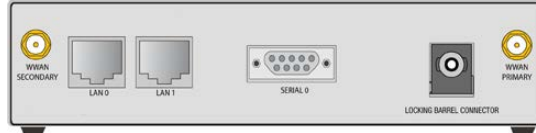
## PRODUCT IMAGES



WR21 - FRONT

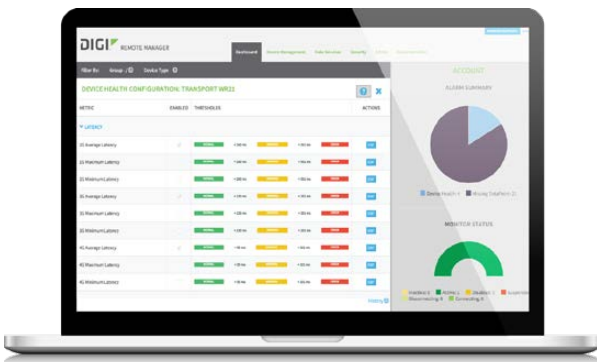


WR21 - RS-232/422/485 Models



WR21 - RS-232 Models

## 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

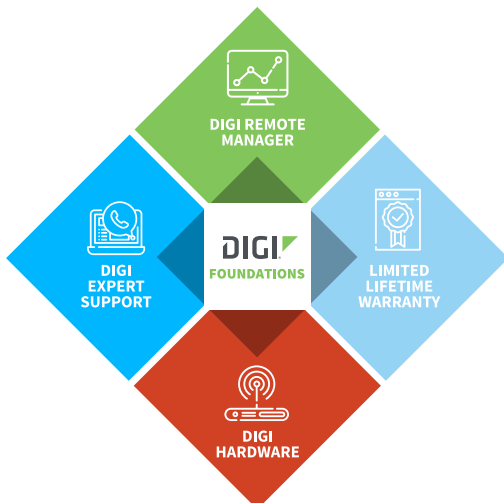
### INFRASTRUCTURE

- 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

## DIGI FOUNDATIONS™



### IT'S TIME TO CONNECT WITH CONFIDENCE

The convenient, comprehensive and secure way to integrate IoT communications hardware, device management software, global support and lifetime warranty protection into a connectivity solution to simplify your IoT network growth.

- [Digi Remote Manager®](#) (DRM) gives you a single point of contact, command and control with sophisticated remote device monitoring and management tools.
- [Digi Expert Support](#) is available around the clock, seven days a week, around the world with experts ready to provide technical support by phone, email or online.
- [Digi Limited Lifetime Warranty](#) lowers the total cost of ownership with hardware protection and equipment upgrades to expand your network as needs evolve.

Digi Foundations, with DRM, simplifies network and device management – for hundreds or hundreds-of-thousands of Digi or third-party devices – with options to upgrade as technology evolves. Isn't it time you got better connected?

For more information visit: [digi.com/foundations](http://digi.com/foundations)

PART NUMBERS	DIGI TRANSPORT WR21
WR21-M52B-DE1-SB	Digi TransPort WR21 - 4G LTE North America, dual Ethernet, RS-232
WR21-M72B-DE1-SB	Digi TransPort WR21 - 4G LTE EMEA/APAC, dual Ethernet, RS-232
WR21-M22B-DE1-SB	Digi TransPort WR21 - 4G LTE EMEA/APAC (450MHz), dual Ethernet, RS-232
WR21-U92B-DE1-SB	Digi TransPort WR21 - HSPA+ Global, dual Ethernet, RS-232
WR21-R52A-DE1-TB	Digi TransPort WR21 - GSM-R, dual Ethernet, RS-232/422/485
WR21-M52A-DE1-TB	Digi TransPort WR21 - 4G LTE North America, dual Ethernet, RS-232/422/485
WR21-M72A-DE1-TB	Digi TransPort WR21 - 4G LTE EMEA/APAC, dual Ethernet, RS-232/422/485
WR21-D52A-DE1-TA	Digi TransPort WR21 - CDMA 450MHz, dual Ethernet, RS-232/422/485

PART NUMBERS	ACCESSORIES*
76000960	Antenna - cellular, 450 MHz
76000926	Antenna - cellular, 3G/4G/LTE
76000954	Antenna base - SMA, 1m, RG174
76002059	Accessory kit - DC power
76002060	Accessory kit - AC power, std temperature, int'l plugs
76002061	Accessory kit - AC power, extd temperature, US and EU cords
76000821	DC power cord - 2.1mm locking barrel plug to bare wire, 4m.
76000736	AC power supply - extd temperature, US and EU power cords to 12 VDC - bare wire
76000823	AC power supply - Std temperature, universal plugs (US, EU, UK, AU) to 12 VDC - 2.1mm locking barrel plug
76000752	AC power supply - extd temperature, US and EU power cords to 12 VDC - 2.1mm locking barrel
76000879	Mounting bracket - DIN rail
76000775	Mounting bracket - wall-mount
76000916	Mounting bracket - DIN rail
76000787	SIM slot cover plate - 10pk
76000826	Cable - Ethernet, RJ-45 to RJ-45, 2m

\*Sold separately, unless otherwise noted.

DIGI FOUNDATIONS™	AVAILABLE FOR DIGI TRANSPORT WR21
DGF-BDL-STAN-1YR	Digi Foundations add-on, 1 year, includes Expert Support, Digi Remote Manager, and Limited Lifetime Warranty
DGF-BDL-STAN-3YR	Digi Foundations add-on, 3 years, includes Expert Support, Digi Remote Manager, and Limited Lifetime Warranty
DGF-BDL-STAN-5YR	Digi Foundations add-on, 5 years, includes Expert Support, Digi Remote Manager, and Limited Lifetime Warranty

**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](http://www.digi.com/support).

© 1996-2019 Digi International Inc. All rights reserved.  
All trademarks are the property of their respective owners.

91001409  
D1/1019

**DIGI INTERNATIONAL WORLDWIDE HQ**  
877-912-3444 / 952-912-3444 / [www.digi.com](http://www.digi.com)

**DIGI INTERNATIONAL JAPAN**  
+81-3-5428-0261 / [www.digi-intl.co.jp](http://www.digi-intl.co.jp)

**DIGI INTERNATIONAL GERMANY**  
+49-89-540-428-0

**DIGI INTERNATIONAL SINGAPORE**  
+65-6213-5380

**DIGI INTERNATIONAL CHINA**  
+86-21-50492199 / [www.digi.com.cn](http://www.digi.com.cn)

