



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.

The 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<sup>SM</sup> offers web-based device management for remote Digi cellular routers and gateways.

## BENEFITS

- Compact, low-cost, flexible cellular routing platform with standard and enterprise feature sets
- Standard option includes basic routing and IP filtering; Enterprise option includes advanced routing protocols, VPN and stateful firewall
- High-performance architecture, flexible power and extended operating temperature
- 2.5G/3G/4G cellular interface including: including LTE, HSPA, HSPA+ and CDMA: 1xRTT, EV-DO
- RS-232 serial and 10/100 Ethernet or RS-232/422/485 serial and 2-port Ethernet switch
- Digi Remote Manager software for easy setup, configuration, and maintenances

## RELATED PRODUCTS



Digi TransPort®  
WR11



Digi TransPort®  
WR44



Digi TransPort®  
WR44 R

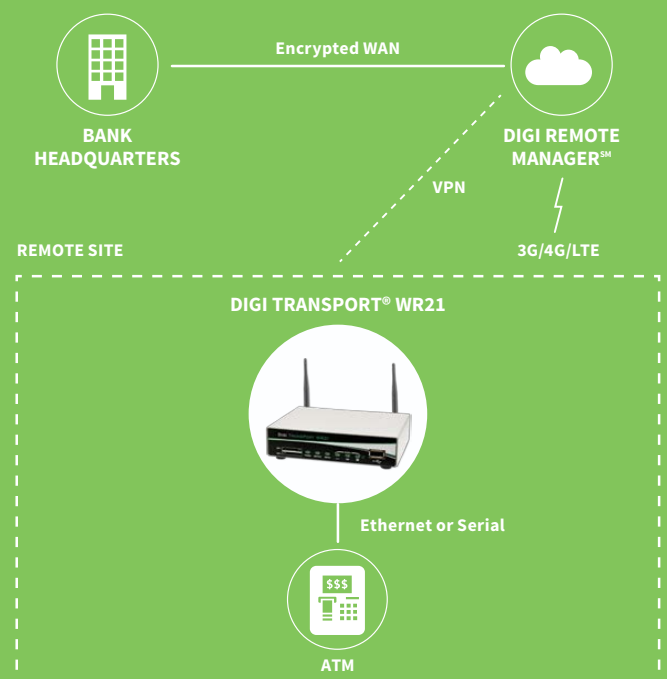


Accessories



Digi Remote  
Manager<sup>SM</sup>

## APPLICATION EXAMPLE



## SPECIFICATIONS

## Digi TransPort® WR21

## WIRELESS INTERFACES

## WWAN\*\*

LTE - EMEA (L1)	800/850/900/1800/1900/2100/2600 MHz; 3G fall back to 850/900/1900/2100 MHz and 2G fall back to 850/900/1800/1900 MHz; Transfer rate (max): 50 Mbps up, 100 Mbps down
LTE - NORTH AMERICA (L5)	Software defined multi-carrier (Verizon, AT&T, and Sprint) 700/850/1700(AWS)/1900 MHz; 2G/3G GSM fall back to 850/900/1700AWS/1800/1900/2100 MHz; 2G/3G CDMA fall back to 800/1900 MHz; Transfer rate (max): 50 Mbps up, 100 Mbps down, Verizon Private Network, DMNR and PNTM Approved
LTE - NORTH AMERICA (L6)	700/850/1700(AWS)/1900 MHz; 2G/3G fall back to 850/1900 MHz; Transfer rate (max): 50 Mbps up, 100 Mbps down
LTE - VERIZON (L8)	700/1700(AWS) MHz; No 2G/3G fall back; Transfer rate (max): 50 Mbps Up, 100 Mbps Down, Verizon Private Network, DMNR and PNTM Approved
HSPA+ (U9)	850/900/1700 (AWS)/1900/2100 MHz; Transfer rate (max): 5.76 Mbps up, 21 Mbps down
CDMA EV-DO (DX)*	450 MHz; EV-DO Rev B; R-UIM support; Transfer rate (max): 14.7 Mbps up; 5.4 Mbps down
CDMA 1XRTT (BX)*	800/1900 MHz; Transfer rate (max): 153 Kbps up/down
GSM-R (R5)*	900/1800/1900 MHz (TRM-5); GPRS Class 10; Transfer rate (max): 42.8 Kbps up, 85.6 Kbps down
CONNECTORS	Ux, Lx variants: 2 x 50 Ω SMA (Center pin: female); Dx, Bx variants: 1 x 50 Ω SMA (Center pin: female)
SIM SLOTS	2, Mini-SIM (2FF)
SIM SECURITY	Optional SIM slot cover plate

## GPS\*

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

## OTHER

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
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## WIRED INTERFACES

## SERIAL

PORTS	1
STANDARD	Option of RS-232 or RS-232/422/485
ASYNCH/SYNC	Async
DTE/DCE	DCE
SIGNAL SUPPORT	TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI
FLOW CONTROL	Software (XON/XOFF), Hardware supported
COM PORT REDIRECTOR	RealPort®
CONNECTOR	DB-9

## ETHERNET

PORTS	2
STANDARD	IEEE 802.3
PHYSICAL LAYER	10/100 Base-T
DATA RATE	10/100 Mbit/s
MODE	Full or Half duplex
INTERFACE	Auto MDI/MDIX
CONNECTOR	RJ-45

## USB

PORTS	1
STANDARD	USB 2.0
SIGNALING	High-speed
CONNECTOR	Type A

\* Optional hardware. Lead time and/or minimum order quantity may apply. Contact Digi Sales for details.

\*\* Transfer rates are theoretical and network operator dependent

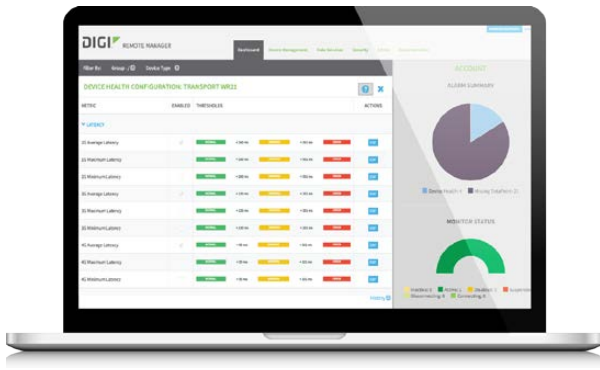
SPECIFICATIONS		Digi TransPort® WR21	
MANAGEMENT			
REMOTE MANAGEMENT		Digi Remote Manager, Digi Device Cloud (cloud based); SNMP v1/v2c/v3 (user installed/managed)	
LOCAL MANAGEMENT		Web interface (HTTP/HTTPS); CLI (Telnet, SSH, SMS, Serial Port)	
MANAGEMENT/ TROUBLESHOOTING TOOLS		FTP, SFTP, SCP; Protocol analyzer with PCAP for Wireshark; Event logging with Syslog and SMTP; NTP/SNTP	
MEMORY		128 MB NAND Flash/128 MB DDR2 SDRAM	
POWER			
INPUT		9-30 VDC	
CONSUMPTION		6W max, 4W typical	
CONNECTOR		Depending on model: Locking barrel or screw-down removeable terminal block	
DC POWER CORD*		Locking barrel to bare wire	
DC POWER SUPPLY*		100-240 VAC 50/60 Hz; Option of standard temperature or extended temperature	
PHYSICAL			
DIMENSIONS (L X W X H)		3.9 in x 5.2 in x 1.3 in (100 mm x 131 mm x 32 mm)	
WEIGHT		1.08 lb (0.49 kg)	
STATUS LEDS		Power, Service, WWAN, 3x Signal strength	
ENCLOSURE MATERIAL/RATING		Industrial (Metal)/ IP30	
MOUNTING		Brackets for wall mount & DIN rail sold separately	
ENVIRONMENTAL			
OPERATING TEMPERATURE ***		-35° C to +70° C	
STORAGE TEMPERATURE		-40° C to +85° C	
RELATIVE HUMIDITY		0% to 95% (non-condensing) @ 25° C	
ETHERNET ISOLATION		1.5 kV RMS	
SERIAL PORT PROTECTION (ESD)		15 kV	
HAZARDOUS (CLASS 1 DIV 2)		Models with Serial (RS-232/422/485) compliant to UL1604 standard	
APPROVALS			
GSM/UMTS		PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511	
CDMA/EV-DO		CDG TIA/EIA-690, CDG TIA/EIA-98-E	
CELLULAR CARRIERS		Certified by most major carriers. See www.digi.com for a full list.	
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	
WARRANTY			
PRODUCT WARRANTY		5 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		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; VPN Tunnels included: 5; 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	
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; Verizon NEMO/DMNR for Primary Wireless Access	
OTHER PROTOCOLS		DHCP; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; QoS via TOS/DSCP/WRED	
SPECIALTY/LEGACY PROTOCOLS		RealPort®; Modbus UDP/TCP to serial; X.25 including XOT, SNA/IP, TPAD and PAD; Protocol switch*	

\* Optional hardware. Lead time and/or minimum order quantity may apply. Contact Digi Sales for details.

\*\*\* Reduced cellular performance may occur above +60° C. Standard temperature power supplies may reduce temperature range.

# DIGI REMOTE MANAGER<sup>SM</sup>



## 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 multiple commercial-grade SAS 70 certified facilities in North America and Europe
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

## SECURITY

- Certified SSAE-16 and ISO27001 facilities
- Member of the Cloud Security Alliance
- 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	DESCRIPTION
WR21-U92A-DE1-TA	Digi TransPort WR21 - Cellular (HSPA+ Global), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), Class 1 Division 2 (C1D2), Antennas included, Power Supply not included (International)
WR21-U92A-DE1-TB	Digi TransPort WR21 - Cellular (HSPA+ Global), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), Class 1 Division 2 (C1D2), Antennas & Power Supply not included
WR21-U92B-DE1-SB	Digi TransPort WR21 - Cellular (HSPA+ Global), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply not included (International)
WR21-U92B-DE1-SW	Digi TransPort WR21 - Cellular (HSPA+ Global), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply included (International)
WR21-L12A-DE1-TA	Digi TransPort WR21 - Cellular (4G LTE International), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), Class 1 Division 2 (C1D2), Antennas included, Power Supply not included (International)
WR21-L12B-DE1-SB	Digi TransPort WR21 - Cellular (4G LTE International), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply not included (International)
WR21-L12B-DE1-SW	Digi TransPort WR21 - Cellular (4G LTE International), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply included (International)
WR21-L52A-DE1-TA	Digi TransPort WR21 - Cellular (4G LTE Multi-Carrier Software Defined, North America), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), Class 1 Division 2 (C1D2), Antennas included, Power Supply not included
WR21-L52B-DE1-SB	Digi TransPort WR21 - Cellular (4G LTE Multi-Carrier Software Defined, North America), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply not included
WR21-L52B-DE1-SU	Digi TransPort WR21 - Cellular (4G LTE Multi-Carrier Software Defined, North America), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply included
WR21-L62A-DE1-TA	Digi TransPort WR21 - Cellular (4G LTE North America (AT&T and GSM Carriers)), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), Class 1 Division 2 (C1D2), Antennas included, Power Supply not included
WR21-L62B-DE1-SB	Digi TransPort WR21 - Cellular (4G LTE North America (AT&T and GSM Carriers)), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply not included
WR21-L62B-DE1-SU	Digi TransPort WR21 - Cellular (4G LTE North America (AT&T and GSM Carriers)), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply included
WR21-L82A-DE1-TB	Digi TransPort WR21 - Cellular (4G LTE Verizon), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), Class 1 Division 2 (C1D2), Antennas & Power Supply not included
WR21-L82B-DE1-SB	Digi TransPort WR21 - Cellular (4G LTE Verizon), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply not included
WR21-L82B-DE1-SU	Digi TransPort WR21 - Cellular (4G LTE Verizon), Ethernet (2 Ports), Serial (1 RS-232 Port), Antennas & Power Supply included
WR21-L52A-GE1-TA	Digi TransPort WR21 - Cellular (4G LTE Multi-Carrier Software Defined, North America), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), GPS, Class 1 Division 2 (C1D2), Antennas included, Power Supply not included

**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).

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