

COMPACT ENTERPRISE CLASS 3G/4G/LTE ROUTER



# **DIGITRANSPORT 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.

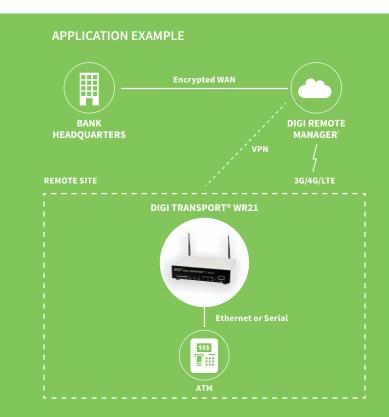
Digi TransPort WR21 supports enterprise software features for advanced security (stateful firewall, MAC filtering, VPN), redundancy (VRRP+, SureLink®) and management (SNMP, event logging, analyzer trace, and QOS), enabling the product to be used in PCI or NERC-CIP compliant applications.

Digi management solutions provide easy setup, configuration and maintenance of large installations of remote Digi TransPort devices. Digi Remote Manager® offers webbased 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® Digi TransPort® Digi TransPort® WR31 Digi TransPort® WR31 Digi TransPort® Digi Remote Manager



SPECIFICATIONS	Digi TransPort® WR21
WIRELESS INTERFACES	
CELLULAR*	
LTE - NORTH AMERICA (M5)	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)
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 450 - 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
GLOBAL HSPA+ (U9)	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
EMEA CDMA EV-DO (D5)	3G EVDO Rev B: 450 MHz 2G 1XRTT: 450 MHz Transfer rate (max): 14.7 Mbps down, 5.4 Mbps up
GSM-R (R5)	900/1800/1900 MHz (TRM-5); GPRS Class 10; transfer rate (max): 42.8 Kbps up, 85.6 Kbps down
CONNECTORS	(2) 50 $\Omega$ 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
WIRED INTERFACES	
SERIAL	
PORTS	(1) DB-9; DCE
DTE/DCE	DCE
SIGNAL SUPPORT	TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI
FLOW CONTROL	Software (XON/XOFF), hardware supported
ETHERNET	
PORTS	(2) RJ-45; 10/100 Mbps (auto-sensing)
USB	
PORTS	(1) USB 2.0 Type A

 $<sup>{}^\</sup>star \text{Transfer}$  rates are theoretical and network operator dependent.



<sup>\*\*</sup>Optional hardware.

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/128 MB DDR2 SDRAM         POWER	
LOCAL MANAGEMENT  MANAGEMENT/ TROUBLESHOOTING TOOLS  MEMORY  128 MB NAND Flash/128 MB DDR2 SDRAM  POWER  Web interface (HTTP/HTTPS); CLI (Telnet, SSH, SMS, serial port)  FTP, SFTP, SCP; protocol analyzer with PCAP for Wireshark; event logging with Syslog and SMTP; NTP/SNTP  128 MB NAND Flash/128 MB DDR2 SDRAM	
MANAGEMENT/ TROUBLESHOOTING TOOLS  MEMORY  128 MB NAND Flash/128 MB DDR2 SDRAM  POWER	
TROUBLESHOOTING TOOLS  MEMORY  128 MB NAND Flash/128 MB DDR2 SDRAM  POWER	
POWER	
INPUT 9 – 30 VDC, 18 W min power source required	
CONSUMPTION 4 W typical (Idle); 12 W typical (Peak Tx/Rx)	
CONNECTOR Depending on model: locking barrel or screw-down removeable terminal block	
PHYSICAL	
DIMENSIONS (L X W X H) 100 mm x 131 mm x 32 mm (3.9 in x 5.2 in x 1.3 in)	
WEIGHT 0.49 kg (1.08 lb)	
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 (-31° F to 158° F); reduced cellular performance may occur above 50° C (122° 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	
HAZARDOUS (CLASS 1 DIV 2) Models with serial (RS-232/422/485) compliant to ANSI/ISA-12.12.01-2015	
APPROVALS	
CELLULAR PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511	
<b>SAFETY</b> 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 3-year + Digi Foundations****	

<sup>\*\*\*</sup>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
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; (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
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); 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; 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®**



### **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

### **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

### **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.

- <u>Digi Remote Manager®</u> (DRM) gives you a single point of contact, command and control with sophisticated remote device monitoring and management tools.
- <u>Digi Expert Support</u> is available around the clock, seven days a week, around the
  world with experts ready to provide technical support by phone, email or online.
- <u>Digi Limited Lifetime Warranty</u> 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

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 Etherent, 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

 $<sup>{}^{\</sup>star}\mathsf{Sold}\ \mathsf{separately,}\ \mathsf{unless}\ \mathsf{otherwise}\ \mathsf{noted}.$ 

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.

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