**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® 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
- Dual SIMs and Digi SureLink™ provide redundant connection
- Digi Remote Manager software for easy setup, configuration, and maintenances

**APPLICATION EXAMPLE**

![Diagram of Digi TransPort WR21 application example](image-url)

**RELATED PRODUCTS**
- Digi TransPort® WR11 XT
- Digi TransPort® WR31
- Digi TransPort® WR44 R
- Digi Remote Manager®
### SPECIFICATIONS

#### Digi TransPort® WR21

**Wireless Interfaces**

**Cellular**

<table>
<thead>
<tr>
<th>Region</th>
<th>Frequency Ranges</th>
<th>Transfer Rate (max)</th>
<th>Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTE - North America (M5)</td>
<td>LTE CAT 4: 700(B12,B13)/850(B5)/AWS(B4)/1900(B2) 3G HSPA+: 850/1900 MHz Transfer rate: 150 Mbps down, 50 Mbps up</td>
<td>150 Mbps down, 50 Mbps up</td>
<td>PTCRB, AT&amp;T, Verizon, Telus (pending)</td>
</tr>
<tr>
<td>LTE - EMEA/APAC (M7)</td>
<td>LTE CAT 4: 800(B20)/900(B8)/1800(B3)/2100(B1)/2600(B7) 3G HSPA+: 900/2100 MHz EDGE: 900/1800 MHz Transfer rate: 150 Mbps down, 50 Mbps up</td>
<td>150 Mbps down, 50 Mbps up</td>
<td>PTCRB, AT&amp;T, Verizon, Telus (pending)</td>
</tr>
<tr>
<td>LTE 450 - EMEA/APAC (M2)</td>
<td>LTE CAT 3: 450(B31)/800(B20)/1800(B3)/2600(B7) 3G HSPA+: 900/2100 MHz EDGE: 900/1800 MHz Transfer rate: 100 Mbps down, 50 Mbps up</td>
<td>100 Mbps down, 50 Mbps up</td>
<td>PTCRB, AT&amp;T, Verizon, Telus (pending)</td>
</tr>
<tr>
<td>Global HSPA+ (U9)</td>
<td>3G HSPA+: 850/900/1700 AWS/1900/2100 MHz 2G EDGE/GPRS: 850/900/1800/1900 MHz Transfer rate: 21 Mbps down, 5.76 Mbps up</td>
<td>21 Mbps down, 5.76 Mbps up</td>
<td>PTCRB, Vodafone</td>
</tr>
<tr>
<td>EMEA CDMA EV-DO (D5)</td>
<td>3G EVDO Rev B: 450 MHz 2G 1XRTT: 450 MHz Transfer rate: 14.7 Mbps down, 5.4 Mbps up</td>
<td>14.7 Mbps down, 5.4 Mbps up</td>
<td>PTCRB, Vodafone</td>
</tr>
</tbody>
</table>

**Connectors**

| SIM Slots | (2) 50 Ω SMA (center pin: female) |
| 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 |

*Transfer rates are theoretical and network operator dependent.

**Optional hardware.**
### Digi TransPort® WR21

#### 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/128 MB DDR2 SDRAM

**Power**
- **Input**: 9 – 30 VDC, 18W min power source required
- **Consumption**: 4W typical (Idle); 12W typical (Peak Tx/Rx)

**Connector**
- Depending on model: Locking barrel or screw-down removeable terminal block

**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 (Reduced cellular performance may occur above +50° 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 ANSI/ISA-12.12.01-2015

#### 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, AS/NZS CISPR 22, EN55022, EN55024 Class B

**Warranty**
- **Product Warranty**: 3 years + Digi Foundations****

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***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.

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### 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, SSSLv2, FIPS 197, open VPN client and server; PPTP, L2TP;
- (S) 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, PPTP, 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

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**WWW.DIGI.COM**
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

INFRASCTURE
- 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

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<th>PART NUMBERS</th>
<th>DIGI TRANSPORT WR21</th>
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<td>WR21-M52B-DE1-SB</td>
<td>Digi TransPort WR21 - 4G LTE North America, Dual Ethernet, RS-232</td>
</tr>
<tr>
<td>WR21-M72B-DE1-SB</td>
<td>Digi TransPort WR21 - 4G LTE EMEA/APAC, Dual Ethernet, RS-232</td>
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<tr>
<td>WR21-M22B-DE1-SB</td>
<td>Digi TransPort WR21 - 4G LTE EMEA/APAC (450MHz), Dual Ethernet, RS-232</td>
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<tr>
<td>WR21-U92B-DE1-SB</td>
<td>Digi TransPort WR21 - HSPA+ Global, Dual Ethernet, RS-232</td>
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<tr>
<td>WR21-M72A-DE1-TB</td>
<td>Digi TransPort WR21 - 4G LTE EMEA/APAC, Dual Ethernet, RS-232/422/485</td>
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<tr>
<td>WR21-D52A-DE1-TA</td>
<td>Digi TransPort WR21 - CDMA 450MHz, Dual Ethernet, RS-232/422/485</td>
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PART NUMBERS

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<thead>
<tr>
<th>PART NUMBERS</th>
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<td>DGF-BDL-PREM-1YR</td>
<td>Digi Foundations add-on bundle 1 year</td>
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<tr>
<td>DGF-BDL-PREM-3YR</td>
<td>Digi Foundations add-on bundle 3 years</td>
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<tr>
<td>DGF-BDL-PREM-5YR</td>
<td>Digi Foundations add-on bundle 5 years</td>
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<td>PART NUMBERS</td>
<td>ACCESSORIES*</td>
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<tr>
<td>7600960</td>
<td>Antenna - Cellular, 450 MHz</td>
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<td>7600926</td>
<td>Antenna - Cellular, 3G/4G/LTE</td>
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<tr>
<td>7600954</td>
<td>Antenna Base – SMA, 1m, RG174</td>
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<tr>
<td>7600259</td>
<td>Accessory Kit - DC Power</td>
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<tr>
<td>7600260</td>
<td>Accessory Kit - AC Power, Std Temperature, Int'l Plugs</td>
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<tr>
<td>7600261</td>
<td>Accessory Kit - AC Power, Extd Temperature, US and EU Cords</td>
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<tr>
<td>76000821</td>
<td>DC Power Cord - 2.1mm locking barrel plug to bare wire, 4m.</td>
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<tr>
<td>76000736</td>
<td>AC Power Supply - Extd Temperature, US and EU Power Cords to 12VDC - bare wire</td>
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<tr>
<td>76000823</td>
<td>AC Power Supply - Std Temperature, Universal Plugs (US, EU, UK, AU) to 12VDC - 2.1mm locking barrel plug</td>
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<tr>
<td>76000752</td>
<td>AC Power Supply - Extd Temperature, US and EU Power Cords to 12VDC - 2.1mm locking barrel</td>
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<tr>
<td>76000879</td>
<td>Mounting Bracket - DIN Rail</td>
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<tr>
<td>76000775</td>
<td>Mounting Bracket - Wall-mount</td>
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<tr>
<td>76000916</td>
<td>Mounting Bracket - DIN Rail</td>
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<td>76000787</td>
<td>SIM Slot Cover Plate - 10pk</td>
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<tr>
<td>76000826</td>
<td>Cable - Ethernet, RJ45 to RJ45, 2m</td>
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*Sold separately, unless otherwise noted.

FOR MORE INFORMATION
PLEASE VISIT www.digi.com