



4G LTE  
M2M ROUTER



# DIGI TRANSPORT® WR31

Intelligent 4G LTE router designed for critical infrastructure and industrial applications

The Digi TransPort WR31 is an intelligent 4G LTE router designed for critical infrastructure and industrial applications. It provides a secure, reliable connection to industrial controllers, process automation equipment and smart grid assets on third party sites or remote locations. Software-defined, multi-carrier networking and global LTE and HSPA+ options make it easy to get connected. This drop-in connectivity gives operators a way to reduce downtime and service calls and also increase revenue by bringing distributed sites online faster.

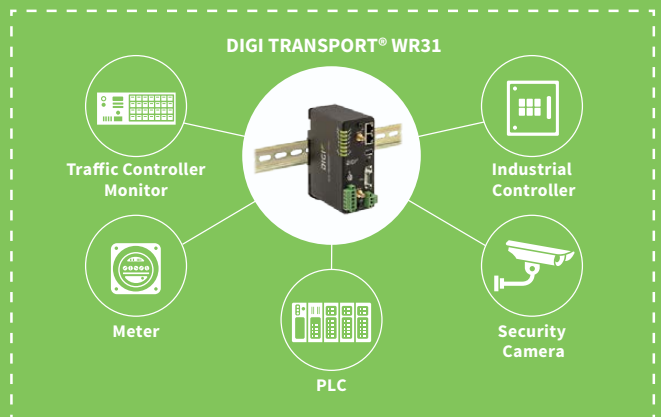
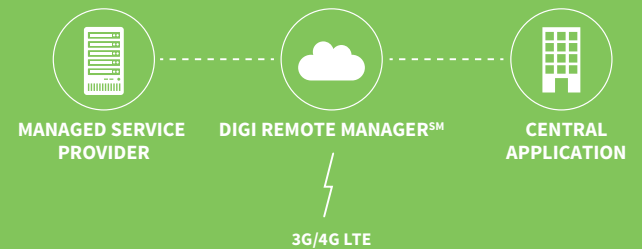
### Ideal for Connecting:

- Building and process automation controllers
- Smart grid assets (meters, switches, controllers)
- IP cameras and access controllers
- Remote data loggers, flow meters and sensing equipment
- Telco infrastructure
- Traffic and obstruction lighting

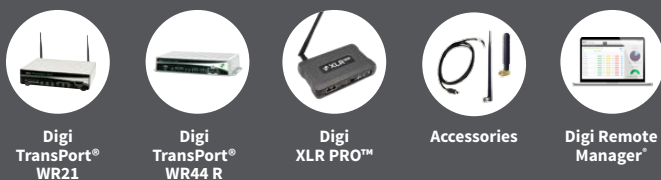
### BENEFITS

- Global HSPA+ and 4G LTE support and certification on major carrier networks around the world
- Ethernet, serial I/O and DNP3 and Modbus bridging for connecting diverse field assets
- Extremely resilient cellular connection through Digi's patented SureLink™, VRRP+ protocol, and dual SIM slots
- License-free enterprise software: VPN, firewall, logging and authentication
- Digi Remote Manager provides mass configuration, device management, and troubleshooting tools
- Rugged enclosure, optimized for DIN rail or shelf mounting
- C1D2 and ATEX rated

### APPLICATION EXAMPLE



### RELATED PRODUCTS



## SPECIFICATIONS

## Digi TransPort® WR31

## WIRELESS INTERFACES

## WWAN

<b>LTE – NORTH AMERICA (L5)</b>	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
<b>LTE 450 - EMEA/APAC (M2)</b>	Cellient MPL200, LTE: 450/800/900/1800/2600MHz; fallback to HSPA and 2G
<b>LTE – EMEA/APAC (L1)</b>	800/850/900/1800/1900/2100/2600 MHz; 3G fall back to 850/900/1900/2100MHz and 2G fall back to 850/900/1800/1900MHz; Transfer rate (max): 50 Mbps up, 100 Mbps down
<b>HSPA+ - (U9)</b>	850/900/1700 (AWS)/1900/2100 MHz; Transfer rate (max): 5.76 Mbps up, 21 Mbps down
<b>CONNECTORS</b>	2 x 50 Ω SMA (Center pin: female)
<b>SIM SLOTS</b>	2
<b>SIM SECURITY</b>	Screw-down SIM cover

## SOFTWARE &amp; MANAGEMENT

<b>REMOTE MANAGEMENT</b>	Digi Remote Manager®; SNMP v1/v2c/v3
<b>LOCAL MANAGEMENT</b>	WebUI (HTTP/HTTPS); CLI (Telnet, SSH, SMS)
<b>MANAGEMENT/ TROUBLESHOOTING TOOLS</b>	FTP, SFTP, SCP; Protocol analyzer with PCAP for Wireshark; Event logging with Syslog and SMTP; NTP/SNTP

## WIRED INTERFACES

## ETHERNET

<b>PORTS</b>	(2) RJ-45 ports
<b>PHYSICAL LAYER</b>	10/100Base-T
<b>DATA RATE</b>	10/100 Mbps (auto-sensing)
<b>MODE</b>	Full or half duplex (auto-sensing)
<b>INTERFACE</b>	Auto MDI/MDIX

## SERIAL

<b>PORTS</b>	RS-232/422/485
<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
<b>COM PORT REDIRECTOR</b>	Digi RealPort®

## I/O

<b>CONNECTOR</b>	(5) pin screw down terminal block
<b>DIGITAL</b>	0 – 30 VDC. (2) I/O, Software selectable
<b>ANALOG</b>	(1) analog I/O; 4-20mA or 0-10V, Software selectable; 12 bit resolution

## USB

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

## PHYSICAL

<b>DIMENSIONS (L X W X H)</b>	5 in x 3.5 in x 2 in (12.7 cm x 8.9 cm x 5.1 cm)
<b>WEIGHT</b>	1.1 lb. (.5 kg)
<b>STATUS LEDS</b>	Power, Service, WWAN, 3x Signal strength, User Programmable
<b>ENCLOSURE</b>	Aluminum, IP30 rating, chassis ground screw
<b>MOUNTING</b>	DIN rail, wall, or shelf mount

## POWER REQUIREMENTS

<b>POWER INPUT</b>	9-30 VDC
<b>POWER CONNECTOR</b>	Screw down removable terminal block
<b>POWER CONSUMPTION</b>	Typical 4 W (Max 6 W)


## SPECIFICATIONS

## Digi TransPort® WR31

### ENVIRONMENTAL

<b>HAZARDOUS (CLASS 1 DIV 2)</b>	Yes
<b>OPERATING TEMPERATURE</b>	-30° C to +70° C (-22° F to +158° F) Reduced cellular performance above 60° C
<b>STORAGE TEMPERATURE</b>	-40° C to +85° C (-40° F to +185° F)
<b>ETHERNET ISOLATION</b>	1.5 kV RMS
<b>SERIAL PORT PROTECTION (ESD)</b>	15 kV
<b>RELATIVE HUMIDITY</b>	5% to 95% (non-condensing)

### APPROVALS

<b>GSM/UMTS</b>	PTCRB
<b>CELLULAR CARRIERS</b>	Certified by most major carriers. See <a href="http://www.digi.com">www.digi.com</a> for a full list
<b>SAFETY</b>	Hazardous locations: ANSI/ISA-12.12.01-2015, CAN/CSA C22.2 NO.213-15 Ordinary locations: UL 60950-1, 2nd Edition, 2014-10-14 ATEX standards: Protection method  II 3 G Ex nA IIC T4 Gc EN 60079-0:2012+A11:2013, EN 60079-15:2010, DEMKO 15 ATEX 1574X
<b>EMISSIONS/IMMUNITY</b>	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B

### WARRANTY

<b>PRODUCT WARRANTY</b>	5 years
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## ENTERPRISE SOFTWARE

## DESCRIPTION

### PROTOCOL SUPPORT

HTTP, HTTPS, FTP, SFTP, SSL, SMTP, Device Cloud SNMP, 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, SSLv3, FIPS 197, Open VPN client and server; PPTP, L2TP; VPN Tunnels: 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

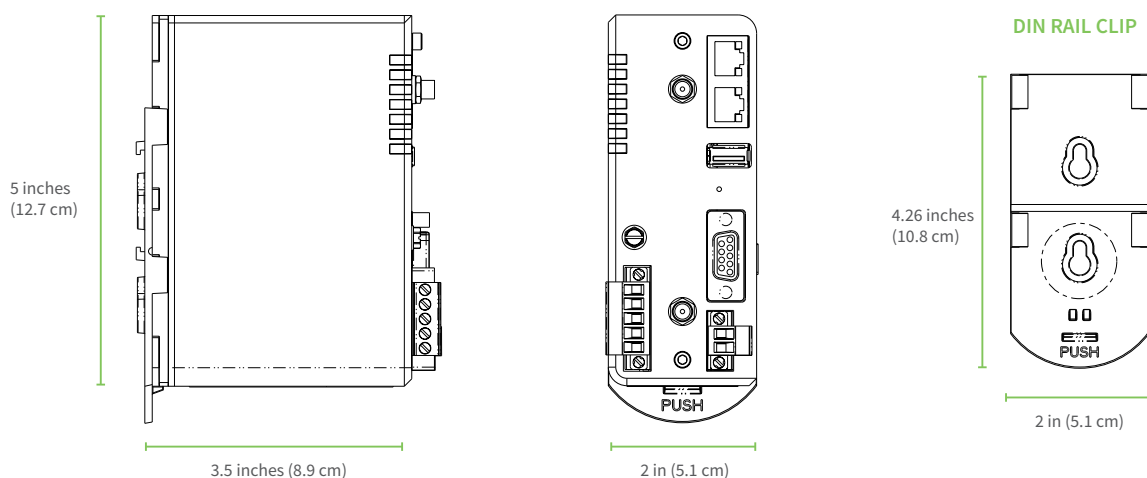
### ROUTING/FAILOVER

IP pass-through; NAT, NATP 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

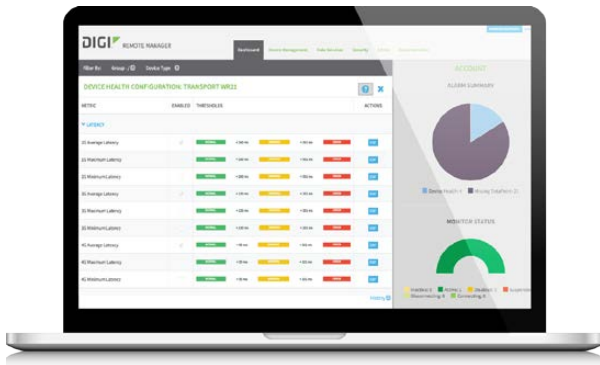
### OTHER PROTOCOLS

DHCP; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; QoS via TOS/DSCP/WRED; Ethernet, serial I/O and DNP3 and Modbus bridging for connecting diverse field assets

## PRODUCT IMAGES



# 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 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
- PCI certified; Attestation of Compliance

PART NUMBERS	DESCRIPTION
WR31-L12A-DE1-TB	Digi TransPort WR31 - Cellular (4G LTE International), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), I/O (2 Digital, 1 Analog), ATEX, Antennas & Power Supply not included
WR31-L52A-DE1-TB	Digi TransPort WR31 - Cellular (4G LTE Multi-Carrier Software Defined, North America), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), I/O (2 Digital, 1 Analog), Class 1 Division 2 (C1D2), Antennas & Power Supply not included
WR31-U92A-DE1-TB	Digi TransPort WR31 - Cellular (HSPA+ Global), Ethernet (2 Ports), Serial (1 RS-232/422/485 Port), I/O (2 Digital, 1 Analog), Class 1 Division 2 (C1D2), Antennas & Power Supply not included

FOR MORE INFORMATION  
PLEASE VISIT [WWW.DIGI.COM](http://WWW.DIGI.COM)

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