

4G LTE  
M2M ROUTER

# DIGI TRANSPORT<sup>®</sup> 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 and I/O 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 aluminum enclosure, optimized for DIN rail or shelf mounting
- C1D2 and ATEX rated

## RELATED PRODUCTS



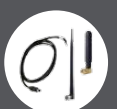
Digi TransPort<sup>®</sup>  
WR21



Digi TransPort<sup>®</sup>  
WR44 R



Digi XLR PRO™

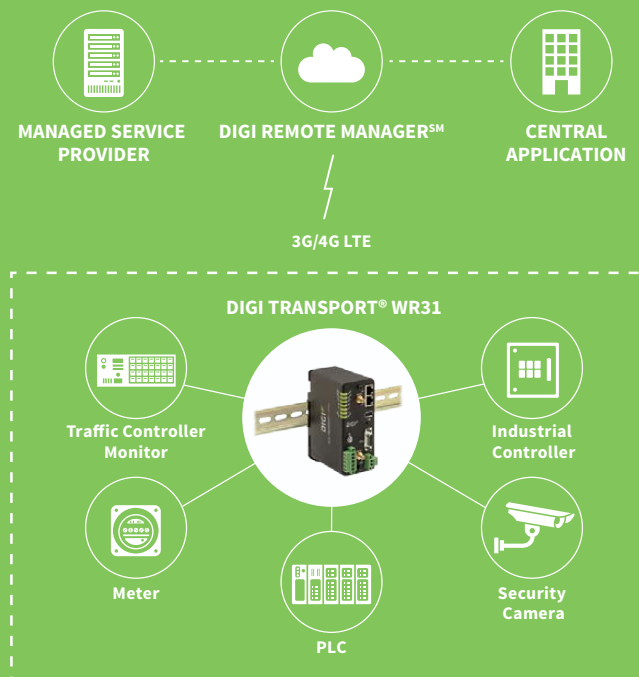


Accessories



Digi Remote Manager<sup>SM</sup>

## APPLICATION EXAMPLE



## SPECIFICATIONS

## Digi TransPort® WR31

## WIRELESS INTERFACES

## WWAN

## 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

## LTE – EMEA/APAC (L1)

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

## HSPA+ - (U9)

850/900/1700 (AWS)/1900/2100 MHz; Transfer rate (max): 5.76 Mbps up, 21 Mbps down

## CONNECTORS

1 x 50 Ω SMA (Center pin: female); 2x connectors for LTE models

## SIM SLOTS

2

## SIM SECURITY

Screw-down SIM cover

## SOFTWARE &amp; MANAGEMENT

## REMOTE MANAGEMENT

Digi Remote Manager<sup>SM</sup>; SNMP v1/v2c/v3

## LOCAL MANAGEMENT

WebUI (HTTP/HTTPS); CLI (Telnet, SSH, SMS)

MANAGEMENT/  
TROUBLESHOOTING TOOLS

FTP, SFTP, SCP; Protocol analyzer with PCAP for Wireshark; Event logging with Syslog and SMTP; NTP/SNTP

## WIRED INTERFACES

## ETHERNET

## PORTS

(2) RJ-45 ports

## PHYSICAL LAYER

10/100Base-T

## DATA RATE

10/100 Mbps (auto-sensing)

## MODE

Full or half duplex (auto-sensing)

## INTERFACE

Auto MDI/MDIX

## SERIAL

## PORTS

RS-232/422/485

## DTE/DCE

DCE

## SIGNAL SUPPORT

TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI

## FLOW CONTROL

Software (XON/XOFF), Hardware supported

## COM PORT REDIRECTOR

Digi RealPort®

## I/O

## CONNECTOR

(5) pin screw down terminal block

## DIGITAL

0 – 30 VDC. (2) I/O, Software selectable

## ANALOG

(1) analog I/O; 4-20mA or 0-10V, Software selectable; 12 bit resolution

## USB

## PORTS

(1) USB Type A

## STANDARD

USB 2.0

## PHYSICAL

## DIMENSIONS (L X W X H)

5 in x 3.5 in x 2 in (12.7 cm x 8.9 cm x 5.1 cm)

## WEIGHT

1.1 lb. (.5 kg)

## STATUS LEDS

Power, Service, WWAN, 3x Signal strength, User Programmable

## ENCLOSURE

Aluminum, IP30 rating, chassis ground screw

## MOUNTING

DIN rail, wall, or shelf mount

## POWER REQUIREMENTS

## POWER INPUT

9-30 VDC

## POWER CONNECTOR

Screw down removable terminal block

## POWER CONSUMPTION

Typical 4 W (Max 6 W)


## SPECIFICATIONS

## Digi TransPort® WR31

### ENVIRONMENTAL

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

### APPROVALS

GSM/UMTS	PTCRB
CELLULAR CARRIERS	Certified by most major carriers. See <a href="http://www.digi.com">www.digi.com</a> for a full list
SAFETY	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
EMISSIONS/IMMUNITY	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B

### WARRANTY

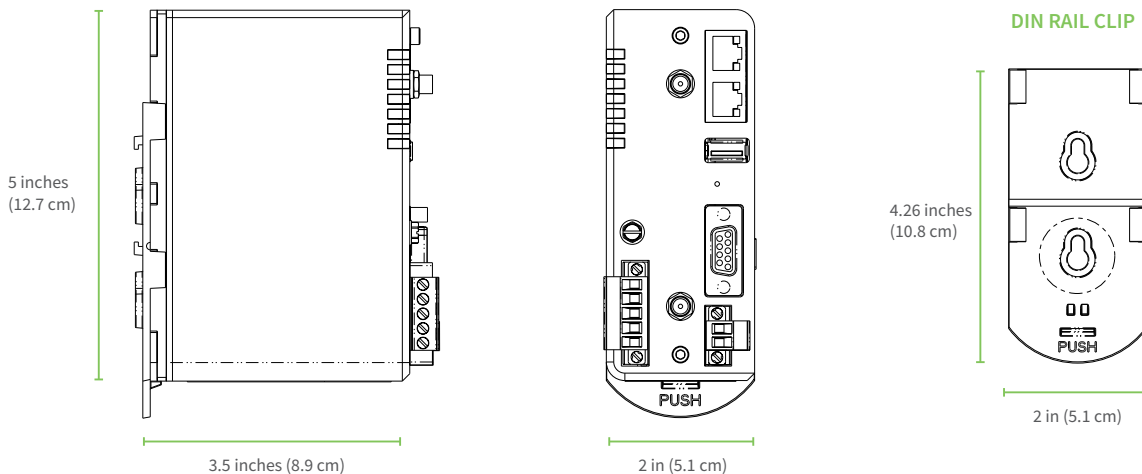
PRODUCT WARRANTY	5 years
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## ENTERPRISE SOFTWARE

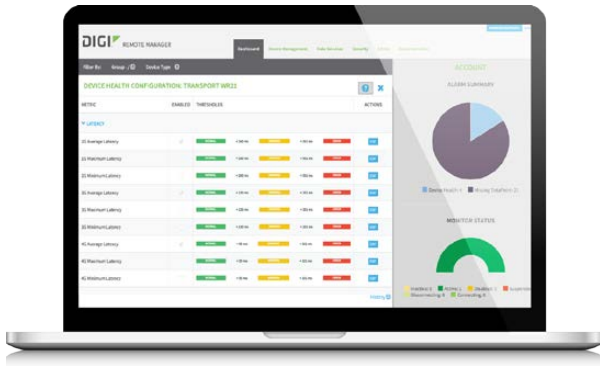
## DESCRIPTION

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, 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
OTHER PROTOCOLS	DHCP; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; QoS via TOS/DSCP/WRED

## PRODUCT IMAGES



# 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
- PCI certified; Attestation of Compliance

PART NUMBERS	DESCRIPTION
WR31-L52A-DE1-TB	TransPort WR31, North America Multi-Carrier Software Defined 4G LTE, Power Supply and Antenna not included
WR31-L12A-DE1-TB	TransPort WR31, 4G LTE EMEA & APAC, Power Supply and Antenna not included
WR31-U92A-DE1-TB	TransPort WR31, Global HSPA+, Power Supply and Antenna not included