



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 multicarrier 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
- Enterprise Routing features for security, logging, and redundancy (e.g. stateful firewall, VPN, SNMP); no annual enterprise software license required
- Digi Remote Manager provides mass configuration, device management, and troubleshooting tools
- Rugged aluminum enclosure, optimized for Din rail or shelf mounting

## RELATED PRODUCTS



Digi  
TransPort®  
WR21



Digi  
TransPort®  
WR44 R



Digi  
XLR PRO™



Accessories



Digi Remote  
Manager™

## 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 & 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

POTS	(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

POTS	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
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 (PENDING)

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	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

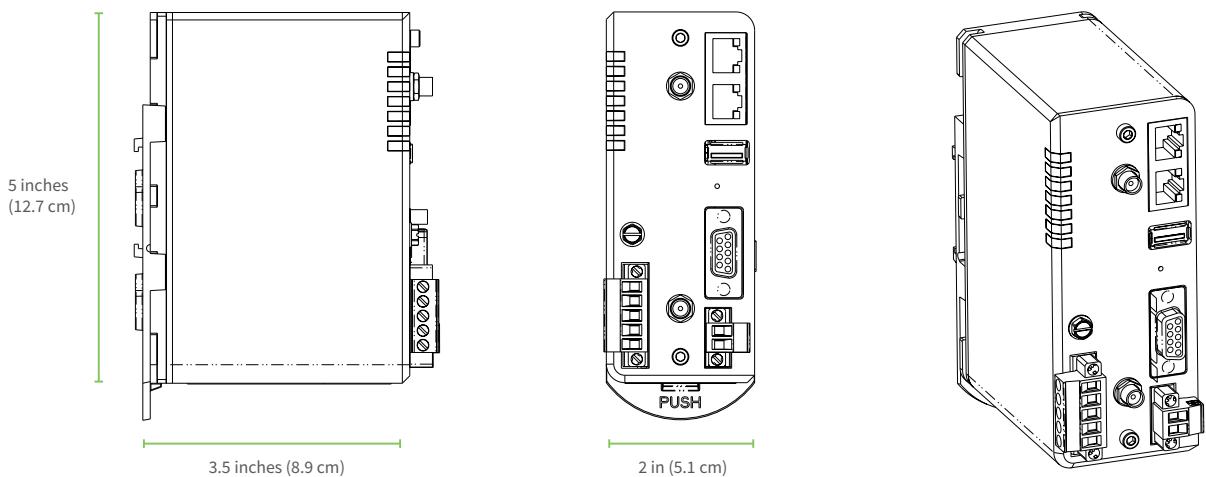
PRODUCT WARRANTY	5 years
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## ENTERPRISE SOFTWARE

## 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); IPv6 (firmware upgradable); RSTP (Rapid Spanning Tree Protocol); IP Failover: VRRP, VRRP+TM; Automatic failover/ fallback to second GSM network/Standby APN
OTHER PROTOCOLS	DHCP; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; QoS via TOS/DSQ/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

### 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

### 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

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

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

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