DIGI TRANSPORT WR31

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

Digi TransPort® WR31 is an intelligent 4G LTE router designed for performance and reliability across a range of 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 Modbus bridging

– Extremely resilient cellular connection through Digi's patented SureLink™, VRRP+ protocol and dual SIM slots

– Dedicated GNSS Receiver supporting GPS, GLONASS, BeiDou, Galileo

– License-free enterprise software: VPN, firewall, logging and authentication

– Digi Remote Manager® device management tool

– Rugged enclosure, optimized for DIN rail or shelf mounting

– C1D2 and ATEX rated; NEMA TS2 temperature rated

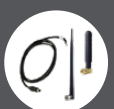– Digi Foundations™ 1-, 3- or 5-year subscription available

APPLICATION EXAMPLE

MANAGED SERVICE PROVIDER — DIGI REMOTE MANAGER® — CENTRAL APPLICATION

3G/4G/LTE

DIGI TRANSPORT® WR31

Traffic Controller Monitor

Industrial Controller

Meter

PLC

Security Camera

RELATED PRODUCTS

Digi TransPort® WR21

Digi TransPort® WR44 R

Digi Connect® Sensor+

Accessories

Digi Remote Manager®
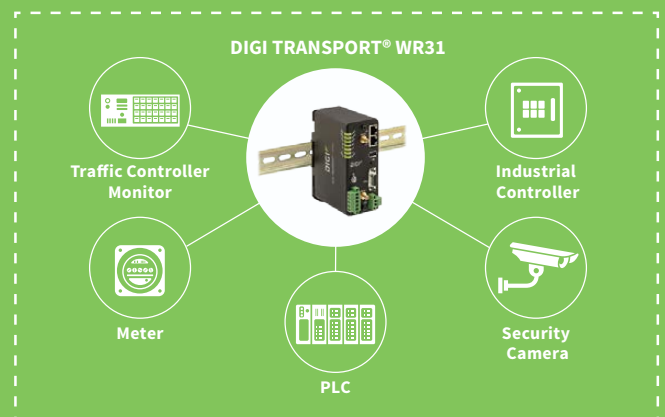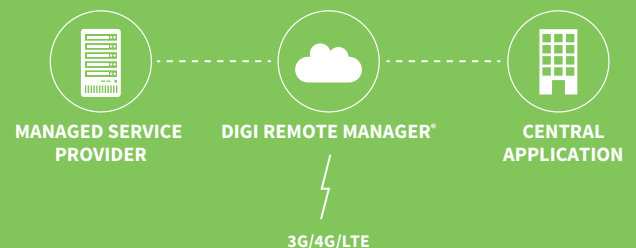
WIRELESS INTERFACES

CELLULAR

LTE - ANZ/LATAM (L9)	LTE-Advanced Cat 6: 700(B28)/850(B5,B18,B19)/900(B8)/1500(B21)/1800(B3)/1900(B39)/2100(B1)/2600(B7,B38)/2300(B40)/2500(B41) 3G HSPA+: 800/850/900/1700/2100 MHz Transfer rate (max): 300 Mbps down, 50 Mbps up GNSS: 30 channels (16 GPS, 14 GLONASS) simultaneous tracking
LTE - NORTH AMERICA (M8)	LTE-Advanced Cat 6: 700(B12,B13,B29)/800(B20,B26)/850(B5)/900(B8)/AWS(B4)/1800(B3)/1900(B2,B25)/2100(B1)/2300(B30)/2500(B41)/2600(B7) 3G HSPA+: 850/900/AWS/1800/1900/2100 MHz Transfer rate (max): 300 Mbps down, 50 Mbps up GNSS: 30 channels (16 GPS, 14 GLONASS) simultaneous tracking
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
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
CDMA EV-DO 450 MHZ - EMEA (D5)	3G EVDO Rev B: 450 MHz 2G 1XRTT: 450 MHz Transfer rate (max): 14.7 Mbps down, 5.4 Mbps up
CONNECTORS	(2) 50 Ω SMA (center pin: female)
SIM SLOTS	(2) Mini-SIM (2FF)
SIM SECURITY	Screw-down SIM cover
GNSS (SELECT MODELS)	Protocol NMEA 0183 V3.0 Acquisition Time Hot Start 1 s; Warm Start 29 s; Cold Start 32 s Accuracy Horizontal: < 2 m (50%), < 5 m (90%); Altitude: < 4 m (50%), < 8 m (90%); Velocity: < 0.2 m/s

SOFTWARE & MANAGEMENT

REMOTE MANAGEMENT	Digi Remote Manager® (cloud based); SNMP v1/v2c/v3 (user installed/managed)
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; 10/100 Mbps (auto-sensing)

SERIAL

PORTS	(1) DB-9; DCE
STANDARD	RS-232/422/485
SIGNAL SUPPORT	TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI
FLOW CONTROL	Software (XON/XOFF), hardware supported

I/O

CONNECTOR	5-pin screw down terminal block
DIGITAL	0-30 VDC, 200 mA max.; (2) I/O, software -selectable
ANALOG	(1) analog I/O; 4-20 mA or 0-10V, software selectable; 12 bit resolution

USB

PORTS	(1) USB 2.0 Type A

PHYSICAL

DIMENSIONS (L X W X H)	12.7 cm x 8.9 cm x 5.1 cm (5 in x 3.5 in x 2 in)
WEIGHT	.5 kg (1.1 lb.)
STATUS LEDS	Power, service, WWAN, 3x signal strength, user programmable
ENCLOSURE/RATING	Aluminum / IP30
MOUNTING	DIN rail mount included

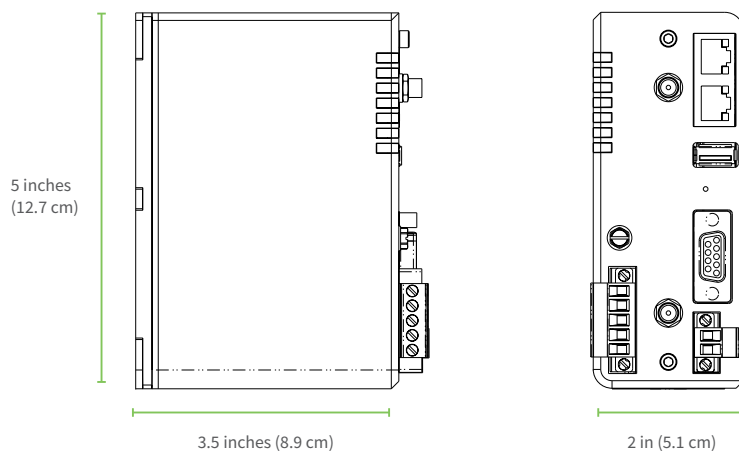| SPECIFICATIONS	Digi TransPort® WR31
POWER REQUIREMENTS	
POWER INPUT	9 – 30 VDC, 18 W min power source required
POWER CONNECTOR	Screw down removable terminal block
POWER CONSUMPTION	4 W typical (Idle); 12 W typical (Peak Tx/Rx)
ENVIRONMENTAL	
HAZARDOUS (CLASS 1 DIV 2)	Yes
OPERATING TEMPERATURE	-34° C to 74° C (-29° F to 165° F); reduced cellular performance may occur above 60° C (140° F)
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	
CELLULAR	PTCRB
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; UL 62368: 2014, 2nd Edition ATEX standards: Protection method ⟨Ex⟩ II 3 G Ex nA IIC T4 Gc EN 60079-0:2012+A11:2013, EN 60079-15:2010, DEMKO 15 ATEX 1574X Rev. 1
IECEX STANDARDS	US/UL/ExTR17.0077/00
EMISSIONS/IMMUNITY	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B
WARRANTY	
PRODUCT WARRANTY	3-year + Digi Foundations*

*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.
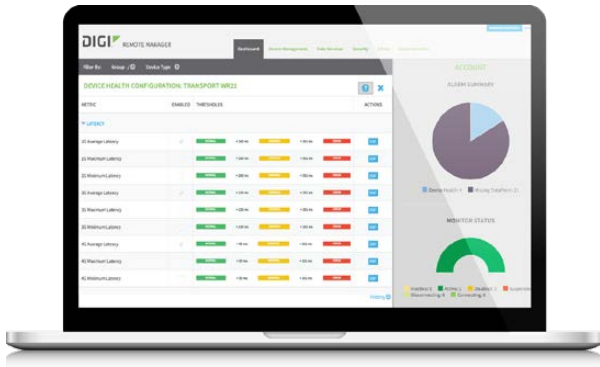
ENTERPRISE SOFTWARE	DESCRIPTION
PROTOCOL SUPPORT	HTTP, HTTPS, FTP, SFTP, SSL, SNMP, SNMP (v1/v2c/v3), SSH, Telnet and CLI for web management; remote management via Digi Remote Manager; SMS management, protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS, Dynamic DNS client compatible 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; (5) VPN tunnels (not upgradable); 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); IP failover: VRRP, VRRP+TM; automatic failover/failback to second GSM network/standby APN
OTHER PROTOCOLS	DDHCP; 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

5 inches (12.7 cm)

3.5 inches (8.9 cm)

2 in (5.1 cm)

DIGI.

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 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
– PCI certified; Attestation of Compliance

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.

– Digi Remote Manager® (DRM) gives you a single point of contact, command and control with sophisticated remote device monitoring and management tools.
– Digi Expert Support is available around the clock, seven days a week, around the world with experts ready to provide technical support by phone, email or online.
– Digi Limited Lifetime Warranty 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 WR31
WR31-M82A-DE1-TB	Digi TransPort WR31 - 4G LTE North America/EMEA, dual Ethernet, RS-232/422/485, Class 1 Div 2 (C1D2)
WR31-L92A-DE1-TB	Digi TransPort WR31 - 4G LTE LATAM/ANZ, dual Ethernet, RS-232/422/485, ATEX
WR31-M52A-DE1-TB	Digi TransPort WR31 - 4G LTE North America, dual Ethernet, RS-232/422/485, Class 1 Div 2 (C1D2)
WR31-M72A-DE1-TB	Digi TransPort WR31 - 4G LTE EMEA/APAC, dual Ethernet, RS-232/422/485, ATEX
WR31-M22A-DE1-TB	Digi TransPort WR31 - 4G LTE EMEA/APAC (450MHz), dual Ethernet, RS-232/422/485, ATEX
WR31-U92A-DE1-TB	Digi TransPort WR31 - HSPA+ Global, dual Ethernet, RS-232/422/485, Class 1 Div 2 (C1D2)
WR31-D52A-DE1-TB	Digi TransPort WR31 - CDMA 450MHz, dual Ethernet, RS-232/422/485, ATEX

DIGI FOUNDATIONS™	AVAILABLE FOR DIGI TRANSPORT WR31
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

PART NUMBERS	ACCESSORIES*
76000926	Antenna - cellular, 3G/4G/LTE
76000954	Antenna base – SMA, 1 m, RG174
76000736	AC power supply - extd temperature, US and EU power cords to 12 VDC - 2.1 mm locking barrel plug
76000966	Mounting bracket – wall mount
76000977	Mounting bracket – DIN rail
76000826	Cable - Ethernet, RJ-45 to RJ-45, 2 m

*Sold separately, unless otherwise noted.

FOR MORE INFORMATION
PLEASE VISIT DIGI.COM

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DIGI

Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

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