

DIGI

USAT
Connect What's Critical™

HIGH-SPEED LTE NETWORKING PLATFORM



Manage this device with Digi Remote Manager

DIGI LR54

High-speed LTE-Advanced and Wi-Fi router in a durable hardware package for demanding IoT applications

Digi LR54 is a high-speed LTE-Advanced networking platform designed for retail, commercial and managed networking applications across distributed enterprises. Each device features an LTE-Advanced Cat 6 modem with speeds up to 300 Mbps and support for global deployments with a single hardware version, as well as a 4-port Gigabit Ethernet switch and serial port for console access. The routers include license-free enterprise software features like VPN, firewall and SNMP.

The Wi-Fi variant features dual-band, dual-concurrent 5 GHz and 2.4 GHz radios, personal/enterprise security, and multiple SSIDs for maximum range and throughput performance in IoT applications.

Digi LR54 is now powered by Digi Accelerated Linux (DAL), and is an ideal solution for connecting:

- Retail branch sites
- Self-service kiosks
- Remote offices/equipment
- Digital media installations
- Security monitoring equipment
- Guest and employee Wi-Fi users

FEATURES AND BENEFITS

- High-speed LTE Advanced (300 Mbps downlink) for digital content and business networking applications
- Optional 802.11 b/g/n/ac Wi-Fi supporting captive portal and content filtering
- Ability to run 2.4 GHz and 5.0 GHz Wi-Fi concurrently
- Automated fail-over/fail-back between Ethernet, cellular (dual SIMs) and IPsec tunnels
- On-board Python environment for custom programming
- Digi Remote Manager® provides mass configuration, device management and troubleshooting tools
- Digi TrustFence® security: authenticated boot, dedicated security co-processor, encrypted data storage, unique default password and certificate management

RELATED PRODUCTS



Digi TX54



Digi IX20



Digi WR31

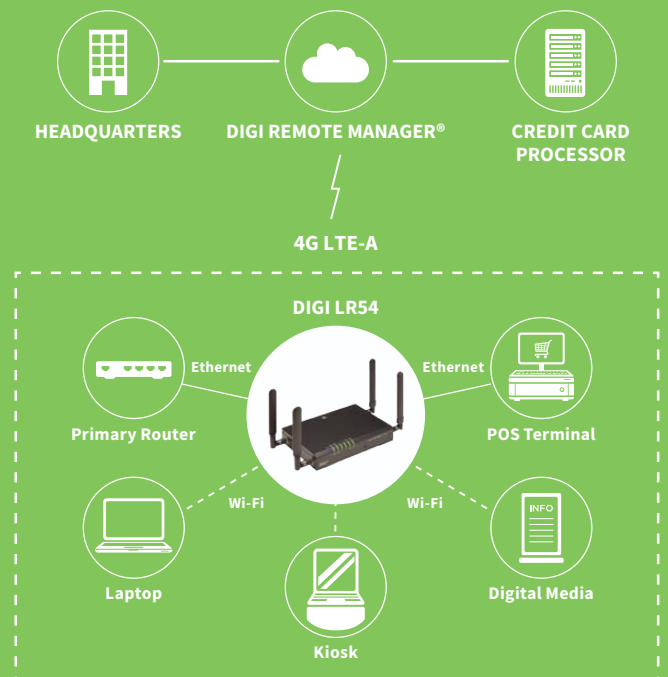


Digi 6310-DX



Digi Remote Manager

APPLICATION EXAMPLE



SPECIFICATIONS

DIGI LR54

WIRELESS INTERFACES

CELLULAR*

LTE/HSPA+	Coverage: North America / EMEA 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, 150 Mbps up Approvals: visit https://www.digi.com/resources/certifications for latest cellular certifications
CONNECTOR	(2) 50 Ω SMA (center pin: female)
SIM SLOTS	(2) Mini-SIM (2FF)
SIM SECURITY	SIM slot cover plate

WI-FI

802.11	Simultaneous dual band (2.4 GHz and 5 GHz) 802.11 b/g/n/ac connection Wi-Fi maximum data rates: 54 Mbps (802.11a); 11 Mbps (802.11b); 54 Mbps (802.11g); 300 Mbps (802.11n); 866 Mbps (802.11ac)
TX POWER	2.4 GHz 19 dBm (802.11g/n), 19 dBm (802.11b) 5 GHz 22.9 dBm for all modes
RX SENSITIVITY	-87 dBm / 11 Mbps (802.11b) -71 dBm / 54 Mbps and -90 dBm / 6 Mbps (802.11a) -74 dBm / 54 Mbps and -92 dBm / 6 Mbps (802.11g) -66 dBm / 300 Mbps and -92 dBm / 6 Mbps (802.11n 2.4 GHz) -67 dBm / 300 Mbps and -89 dBm / 6 Mbps (802.11n 5 GHz) -57 dBm / 866 Mbps and -83 dBm / 29 Mbps (802.11ac)
MODES	Access point, support for multiple SSID
SECURITY	Mixed WPA/WPA2-personal; WPA2-personal; mixed WPA/WPA2-enterprise; WPA2-enterprise
CONNECTORS	(2) 50 Ω RP-SMA (center pin: male)

WIRED INTERFACES

SERIAL

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

ETHERNET

PORTS	(4) RJ-45; 10/100/1000 Mbit/s (auto-sensing)
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MANAGEMENT

REMOTE MANAGEMENT	Digi Remote Manager® (cloud based); SNMP v1/v2c/v3 (user installed/managed)
LOCAL MANAGEMENT	Web interface (HTTPS); CLI (SSH, serial port)
MEMORY	256 MB Flash; 100 MB user available memory

POWER

INPUT	12 VDC
CONNECTOR	4-pin terminal block; power supply comes with US plug (IEC Type A) and an EU plug (IEC Type C)
CONSUMPTION	13.68 W max, 11.4 W average
DC POWER SUPPLY	100-240 VAC 50 / 60 Hz

PHYSICAL

DIMENSIONS (L X W X H)	207 mm x 140 mm x 38 mm (8.15 in x 5.5 in x 1.5 in)
WEIGHT	1.32 kg (2.90 lb)
STATUS LEDs	Power, WWAN signal, WWAN service, SIM 1, SIM 2, 2.4 GHz and 5 GHz LEDs on Wi-Fi version
MATERIAL/RATING**	Industrial (metal) / IP30
MOUNTING	Wall mount bracket sold separately

* Transfer rates are network operator dependent

**The enclosure rating is self-declared and has not been formally verified by an independent lab

SPECIFICATIONS

DIGI LR54

ENVIRONMENTAL

OPERATING TEMPERATURE ***	-20° C to 70° C (-4° F to 158° F)
STORAGE TEMPERATURE	-40° C to 85° C (-40° F to 185° F)
RELATIVE HUMIDITY	0% to 95% (non-condensing) @ 25° C (77° F)

APPROVALS

CELLULAR	Visit https://www.digi.com/resources/certifications for latest cellular certifications
MATERIALS	RoHS
SAFETY	CB Scheme, IEC 60950-1
EMISSIONS/IMMUNITY	CE, FCC Part 15 Class B

WARRANTY

PRODUCT WARRANTY	3-year****
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***The enclosure rating is self-declared and has not been formally verified by an independent lab

****Standard 3-year warranty upgradeable to 5 years with purchase of a Digi Remote Manager 5-year subscription.

ENTERPRISE SOFTWARE

DESCRIPTION

PROTOCOL SUPPORT	HTTP, HTTPS, FTP client, SSL, TLS v1.2, SCP (client and server), SFTP, SMTP client for use by scripts and the command line, SNMP (v2/v3), SSH; remote management via Digi Remote Manager®; protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS; dynamic DNS client compatible with BIND9/No-IP/DynDNS; captive portal, Intelliflow; X.509 certificate management
SECURITY	IP filtering, stateful firewall, custom firewall rules (iptables), address and port translation; Authentication: RADIUS, TACACS+; certificates; MAC address filtering; VLAN support, TLS 1.2 and TLS 1.3; LDAP, Wi-Fi client isolation, unique default Wi-Fi SSID and passphrase (for LR54W variant)
VPN	IPSec with IKEv1, IKEv2, NAT Traversal; OpenVPN client and server; GRE VPN tunnels; Cryptology: SHA-1/256/384/512, MD5, RSA; Encryption: 3DES and AES up to 256-bit (CBC mode for IPsec); Diffie Hellman: DH groups 1-32
ROUTING/FAILOVER	IP pass-through; NAT, NAPT with IP port forwarding; Ethernet bridging; GRE; multicast routing; Routing protocols: RIP (v1, v2) OSPF, BGP; VRRP; automatic failover, Digi SureLink®; Babel, IS-IS
OTHER PROTOCOLS	DHCP; dynamic DNS client compatible with No-IP/DynDNS; Nagios, DNS server, NTP server, multicast, mDNS, IPerf
LOCAL MANAGEMENT	Web interface (HTTP/HTTPS); CLI (SSH, serial port); role-based user access, including read-only user access; OTA firmware updates for both device and cellular modem
MANAGEMENT / TROUBLESHOOTING PROTOCOLS	Protocol analyzer with PCAP for Wireshark, event and system logging (with syslog), accessible from Digi Remote Manager, SFTP or SCP, Wi-Fi scanner (same scanner as Digi TX54 and Digi TX64), Digi Remote Manager proxy and watchdog, Intelliflow, netflow
PROGRAMMING TOOLS / ENVIRONMENTS	Python v3.6.10 (updated in 20.5 x firmware release), shell scripting

PRODUCT IMAGES

DIGI LR54



DIGI LR54 (WITH WI-FI)



DIGI REMOTE MANAGER®



Digi Remote Manager is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, monitor and diagnose thousands of mission-critical devices from a single point of command — on your desktop, tablet or phone. All the while, its software-defined security diligently safeguards your entire Digi ecosystem.

Learn more at www.digi.com/digi-remote-manager

CAPABILITIES

- Activate, monitor and diagnose your mission-critical devices from a single point of command and control — on your desktop or mobile app
- Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
- Manage edge devices out-of-band via console terminal access
- Keep tabs on device health and connectivity across device deployments of any size
- Create detailed reports and enable real-time alerts for specified conditions
- Integrate device data through open APIs to gain deeper insights and control with third-party applications
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

INFRASTRUCTURE

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

SECURITY

- More than 175 security controls in place to protect your data
- Member of the Center for Internet Security® (CIS®)
- Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
- Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

PART NUMBERS	DIGI LR54
LR54-AA401	Digi LR54 - 4G LTE North America / EMEA, No Wi-Fi
LR54-AW401	Digi LR54 - 4G LTE North America / EMEA, Wi-Fi

PART NUMBERS	ACCESSORIES
78000001	Mounting bracket - wall-mount

PART NUMBERS	DIGI REMOTE MANAGER®
DIGI-RM-STD-1YR	Digi Remote Manager Standard - 1-year subscription
DIGI-RM-PRM-1YR	Digi Remote Manager Premier - 1-year subscription
DIGI-RM-PRM-3YR	Digi Remote Manager Premier 3-year subscription
DIGI-RM-PRM-5YR	Digi Remote Manager Premier - 5-year subscription

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