

# R651 Network Router



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## Creating a robust communication path for smart grid applications and intelligent end devices

The Landis+Gyr R651 Network Router helps form the powerful Gridstream® Connect RF wireless mesh network used in advanced metering, distribution automation, and demand response applications. Network performance and reliability are assured via the router's basic mesh functions, including full two-way, peer-to-peer communication to all devices in the network, asynchronous spread spectrum frequency hopping, and dynamic message routing.

### FUNCTIONS:

The R651 Network Router is designed to deliver enhanced onboard memory and communication speeds to support future application and development needs. In addition, advanced functionality enables individual message prioritization, automatic network registration and localized intelligence. The Network Router also has GPS capability for enhanced location, troubleshooting, and optimization services.

### The Network Router offers several benefits:

- Interoperability to enable integration with numerous partners and supported devices
- Lower utility TCO via enhanced battery life (15 years) with lithium-ion technology
- Dynamic routing by each radio in the mesh network
- Backwards compatibility – Series 5 and Series 6 variants to support RF Mesh, Mesh IP, and future upgradability to Wi-SUN
- Support for distribution automation and mission critical grid sensors
- GPS capability enabled for better location and optimization services
- Available to order in a DC-powered configuration for specific deployment needs



INTEROPERABILITY



ENHANCED  
BATTERY LIFE



BACKWARDS  
COMPATIBILITY



GPS  
CAPABILITY

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## PRODUCT SPECIFICATIONS

<b>Size</b>	4.90" H x 11.82" W x 9.30" D
<b>Weight</b>	9.6 lbs
<b>GPS</b>	1.56GHz/1.57GHz/1.6GHz
<b>Operating Temperature</b>	-40°C to 80°C
<b>Power Supply</b>	Input AC Voltage: 120 -240 Vac -20%, +15% Power Consumption, Battery not charging: 7W typical Power Consumption, Battery charging: 9W typical
<b>RF Output Power</b>	Up to 30dBm
<b>General Radio Items</b>	RF Frequency Range: 902-928 MHz  Channel Spacing: 200, 400 kHz (RF Mesh IP) 100, 300, 500 kHz (RF Mesh)  RF Baud Rates: 50, 150, 200 kbps (RF Mesh IP) 9.6, 19.2, 38.4, 115.2 (RF Mesh)  Battery Backup Time: 10+ hours over the battery operating life  Battery Life: 15 years (full life of router)
<b>Processing</b>	RAM: 640 Kbytes Flash Memory: 2 MB + 4MB External
<b>Approvals</b>	FCC CFR Title 47 (Part 15, Subpart B and C)
<b>ANSI C12.1 Compliance</b>	Operating vibration; operating shock; electromagnetic radiation emissions, electromagnetic susceptibility, surge withstanding capability, electrostatic discharge
<b>Enclosure Material Type</b>	Aluminum/Nema-4
<b>Shipment Includes</b>	Router AC power cable (or DC cable for DC variant) Antenna kit Mounting hardware

This information is provided on an "as is" basis and does not imply any kind of guarantee or warranty, express or implied. Changes may be made to this information.

### GET IN TOUCH

For more information and nationwide warranty terms, visit us at [landisgyr.com](http://landisgyr.com) or call at 888-390-5733.



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