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# Digi TransPort® Routers

Models WR11, WR21, WR31, WR41, WR44, WR44 R,  
WR44 RR

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User Guide

## Revision history—90001019

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Revision	Date	Description
N	January 2016	<ul style="list-style-type: none"><li>■ Updated TransPort WR31 serial pinout diagram.</li><li>■ Updated Dynamic DNS content.</li></ul>
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- Trace (if possible)
- Description of issue
- Steps to reproduce

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## Digi TransPort<sup>®</sup> routers

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The Digi TransPort WR family of 3G/4G cellular routers offers an all-in-one mobile communications solution with true enterprise class routing, security and firewall. These multifunction cellular routers feature a flexible design with optional integrated Wi-Fi access point (with multi SSID) / client, USB, serial, VDSL, 1-, 2- or 4-port Ethernet switch with VLAN. Additional configuration options include multiple serial ports (async or sync), GPS or telemetry I/O.

The Digi TransPort family offers an advanced routing, security and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise class protocols incorporate BGP, OSPF and VRRP+, a patented technology built upon the popular VRRP failover standard providing true auto-sensing, auto-failure and auto-recovery of any line drop.

Digi TransPort WR routers are ideal for transportation, POS, energy, medical, financial and digital signage as well as cellular backup and remote device connectivity applications.

Digi management solutions provide easy setup, configuration and maintenance of large installations of remote Digi TransPort devices. Digi Remote Manager offers web-based device management for remote Digi cellular routers and gateways. Digi TransPort routers have the following features:

- Enterprise class cellular routers with advanced dynamic routing, security and firewall features.
- High speed LTE/4G router with fall back to both GSM and CDMA 3G/2G technologies.
- Optional integrated Wi-Fi access point and multiport Ethernet switch.
- Flexible interfaces including serial (async/sync), GPS, VDSL, USB, CAN Bus and telemetry I/O, with flexible DC power options.
- Powerful integrated end user programming.
- Remote Management via windows remote management software or cloud hosted Remote Manager.

### TransPort WR11

Digi TransPort WR11 is a full-featured, cellular router offering the flexibility to scale from basic connectivity applications to enterprise class routing and security solutions. With its high performance architecture, Digi TransPort WR11 is designed for Wide Area Network connectivity including 2.5G, 3G, and 4G networks. The TransPort WR11 XT model has a metal enclosure and allows an extended operating temperature range.



## TransPort WR21

Digi TransPort WR21 is a full-featured, cellular router offering the flexibility to scale from basic connectivity applications to enterprise class routing and security solutions. With its high performance architecture, Digi TransPort WR21 is designed for Wide Area Network connectivity including 2.5G/3G/4G networks.

Digi TransPort WR21 is available with a range of Ethernet, Serial (RS232, RS422/485), and Power connector options.

Digi TransPort WR21 also offers an optional advanced routing, security, and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise class protocols incorporate BGP, OSPF, and VRRP+, a patented technology built upon the popular VRRP failover standard providing true auto sensing, auto failure, and auto recovery of any line drop.



## TransPort WR31

Digi's TransPort WR31 is an intelligent 4G LTE router designed for critical infrastructure and industrial applications.



Key features of the TransPort WR31 include:

- Global HSPA+ and 4G LTE support and certification on major carrier networks around the world.
- Software defined multi-carrier networking with Gobi 4G LTE, meaning one device that operates in 2G, 3G, or 4G across all major North American carriers.
- 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.
- GPS capabilities are available for GPS-enabled models.
- Digi Remote Manager provides mass configuration, device management, and troubleshooting tools.
- Rugged aluminum enclosure, optimized for Din rail or shelf mounting.
- Optional weatherproof enclosure.
- 5 year warranty standard—no additional cost.

The TransPort WR31 provides a secure, reliable connection to industrial controllers, process automation equipment, and smart grid assets on third party sites or remote locations. This drop-in connectivity gives operators a way to reduce the cost of downtime and service calls and also increase revenue by bringing distributed sites online faster.

The TransPort WR31 is ideal for connecting the following:

- 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



## TransPort WR41

The Digi TransPort WR family of cellular routers offers an all-in-one mobile communications solution with true enterprise class routing, security, and firewall. These multifunction cellular routers feature a flexible design with an optional integrated Wi-Fi access point (with multi SSID) / Client, USB, serial, and Ethernet, as well as a variety of configuration options including multiple serial ports (async or sync), GPS or I/O telemetry modules.

The Digi TransPort family also offers an advanced routing, security, and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise class protocols incorporate BGP, OSPF, and VRRP+, a patented technology built upon the popular VRRP failover standard providing true auto sensing, auto failure and auto recovery of any line drop.

Digi TransPort WR routers are ideal for transportation and mobile applications. Flexible power options include AC, DC and 4-pin Molex connectors for direct integration into vehicle applications.

Also available is the Digi Remote Manager™, which provides easy setup, configuration, and maintenance of large installations of Digi TransPort devices.



## TransPort WR44 / WR44 R



The Digi TransPort WR44 cellular router is an all-in-one mobile communications solution with true enterprise-class routing, security, and firewall. This multifunction cellular router features a flexible design with integrated Wi-Fi access point, USB, serial, and 4-port Ethernet switch, as well as a variety of configuration options including multiple serial ports (async or sync) and GPS or I/O telemetry modules.

The Digi TransPort family offers an advanced routing, security and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise-class protocols incorporate BGP, OSPF, and VRRP+, a patented technology built upon the popular VRRP failover standard providing true auto sensing, auto failure and auto recovery of any line drop.

Digi TransPort WR44 is ideal for transportation and mobile applications. Flexible power options include 11-58 VDC barrel or molex connectors for direct integration into vehicle applications. Digi Remote Manager™ provides easy setup, configuration, and maintenance of large installations of Digi TransPort devices.

## TransPort WR44 RR

Digi TransPort WR44 RR is a rugged enterprise-class cellular router designed for rail environments. Its rail industry ratings, versatility, security features, and performance make it ideal for applications such as Positive Train Control (PTC), wayside device communications, and on-board passenger Internet access.

Digi TransPort WR44 RR provides a reliable primary high speed cellular network connection or can act as a secure backup connection to the existing railroad network. It features a flexible communications design with 3G/4G multicarrier GSM/CDMA cellular, plus integrated Wi-Fi a/ac/b/g/n access point, serial, and 4-port Ethernet switch. It also features full on-board train certifications, including AREMA C/H and EN50155. Communications interfaces include hardened connectors, including M12 for Ethernet and serial, as well as TNC connectors for antenna connections.

Digi management solutions provide easy setup, configuration, and maintenance of large installations of remote Digi TransPort devices. Digi Remote Manager offers web-based device management for remote Digi cellular routers and gateways.



## Hardware features

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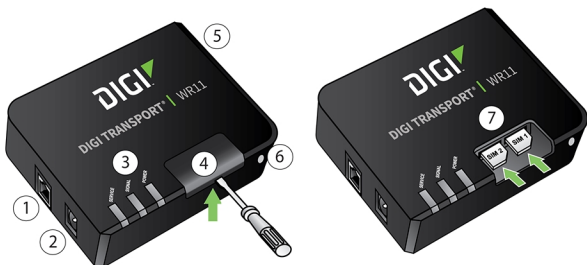
## TransPort WR11 hardware features

### TransPort WR11 EVDO model



1. **LAN port:** Connects the device to a 10/100 base-T Local Area Network (LAN). The port can perform auto-sensing for speed and wiring, so it can accept straight-through or cross-over cable connections.
2. **Power connector:** This locking power connector connects the device to a power source. The connector should be inserted and rotated to lock in place. Center pin is positive.
3. **LEDs:**
  - **Service LED:** Indicates the presence and level of cellular service running on the device.
    - Off:** No cellular service
    - 1 Blink:** Device is running 1xRTT service
    - 2 Blinks:** Device is running EDVO Rev 0 service
    - 3 Blinks:** Device is running EDVO Rev A service
  - **Signal LED:** Indicates strength of cellular signal.
    - Off:** Poor or No signal. Place the device in a location where it gets a better signal.
    - Amber:** Fair
    - Green:** Good
  - **Power LED**
    - Off:** No power
    - Green:** TransPort device is powered
4. **Cellular antenna connector:** This SMA female connector connects the device's primary cellular antenna.
5. **Reset button:** Resets the router to factory defaults. See [Reset the router to factory defaults](#).

## TransPort WR11 HSPA+ model



1. **LAN port:** Connects the device to a 10/100 base-T Local Area Network (LAN). The port can perform auto-sensing for speed and wiring, so it can accept straight-through or cross-over cable connections.
2. **Power connector:** This locking power connector connects the device to a power source. The connector should be inserted and rotated to lock in place. Center pin is positive.
3. **LEDs:**
  - **SERVICE LED:** Indicates the presence and level of cellular service running on the device.
    - Off:** No cellular service
    - 1 Blink:** GPRS mode
    - 2 Blinks:** EDGE mode
    - 3 Blinks:** UMTS mode
    - 4 Blinks:** HSDPA mode
    - 5 Blinks:** HSUPA mode
  - **SIGNAL LED:** Indicates strength of cellular signal.
    - Off:** Poor or No signal. Place the device in a location where it gets a better signal.
    - Amber:** Fair
    - Green:** Good
  - **POWER LED:**
    - Off:** No power
    - Green:** TransPort device is powered
4. **SIM door:** Encloses the SIM sockets. The SIM door must be removed to install the SIM cards For installation details, refer to the Quick Start Guide that came with your device.
 

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**Note** To remove the SIM door, hold the device on a flat surface and using a screwdriver, firmly pull the cover straight up.

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5. **Cellular antenna connector:** This SMA female connector connects the device's primary cellular antenna.
6. **Reset button:** Resets the router to factory defaults. See [Reset the router to factory defaults](#).
7. **SIM Sockets:** **SIM 1** and **SIM 2** are for use with the SIMs.