



# Cisco Catalyst IR8100 Heavy Duty Series Routers

Rugged, IP67-rated, 5G routers that are fully modular and multi-access capable, allowing you to converge today's technology with tomorrow's

## Benefits

**Ready for the outdoors:** IP67 rated for dust and water protection. Built for extreme temperatures. The IR8140 goes wherever you need it to go.

**5G, multi-access, fully modular, and upgradable:** It's not much of a stretch to say that the IR8100 is the last outdoor router you'll need to buy. It's completely modular and upgradable on-site, from 5G to a new CPU, storage, and power supply. The IR8140's chassis is designed to adapt to future changes in business or technology needs for many years to come.

**Converges today's technology with tomorrow's:** With modules for Wi-SUN, LoRaWAN, 4G LTE, private LTE, FirstNet Ready, and 5G, and adaptability for whatever connectivity the future calls for, the IR8100 can adapt and will be there for you.

**Offers multilayered security:** From its manufacturing process to its physical locking design to its numerous software security features, including Unified Threat Defense, Cisco TrustSec®, and more, the IR8140 is the most secure outdoor router you can find.

**Enables both IT and operations to scale with simplicity and unified management:** IT can implement security and network policies using the same tools they use in the enterprise, such as Cisco vManage for SD-WAN and Cisco DNA Center. OT can use Cisco IoT Operations Dashboard or third-party applications to manage the IR8100 as well.

**Qualifies and securely deploys services more quickly:** Using the highly programmable, open, and standards-based APIs of the Cisco IOS® XE operating system, now included in the IR8100.



## Use cases

### Utilities

For grid modernization, Advanced Metering Infrastructure (AMI), Distribution Automation (DA), and demand response: Connect sensors, monitor and control the grid infrastructure, and restore power quickly using the multiple communications technologies that the IR8140 is capable of to securely converge on a standards-based IP network.

### Connected communities

Securely connect mission-critical assets to help ensure public safety.

### Transportation

Connect remote assets and use the built-in edge compute capabilities of the IR8140 to make roadways and intersections safer.

### Oil and gas and mining

Gain visibility into and control over remote mission-critical assets to increase operational efficiency.

## Call to action

Learn more: [cisco.com/go/ir8100](https://cisco.com/go/ir8100)

## Product overview

As the storm's intensity increased, the engineers in the electric utility's control center knew there would be significant power outages. But this year would be different. They now had far more granular control of the network thanks to the IP67-rated Cisco® Catalyst® IR8100 Heavy Duty Series Routers deployed in the field. The routers provided the network visibility to see where the power was down, isolate it, and then redirect it. An outage that would have lasted hours could now be resolved in minutes.

This is just one example of the capabilities of the new Catalyst IR8100 Heavy Duty Series. Whether it's supporting thousands of LoRaWAN- or Wi-SUN-enabled sensors deployed in a city or rural area, enabling FirstNet communications, private LTE, fiber or 5G backhaul, or connecting a roadway in extreme cold so drivers are warned of hazardous conditions, the IR8100 delivers the modular flexibility, security, and scalability you need to be successful in your outdoor and industrial deployments.

Cisco Catalyst IR8100 Heavy Duty Series Routers offer enterprise-grade security from the hardware to the network communications all the way to the industrial assets. Scale and simplify operations with powerful network management tools for configuration and monitoring.

## What it does

The IR8140 is the next generation of the Cisco 1240 Connected Grid Router. It runs on Cisco IOS XE, is built with multilayered security, zero-touch provisioning, and self-healing features, and meets IEC 61850-3 and IEEE1613 standards for utility deployments. Its fully modular design makes it a future-ready multiservice router. With its 5G, public or private LTE, Wi-SUN, LoRaWAN, and even more connectivity options – as well as the increased storage, CPU upgrades, and power supply upgrades – the IR8140 can adapt effortlessly to the future, with simple, easy-to-swap modules that enable upgrades in the field. Utilities can converge various applications such as AMI, demand response, distribution automation, etc. using an 802.15.4 Wi-SUN-based mesh aggregated at the IR8140, and transportation and mining companies can efficiently get the data they need in the field by converging various communications technologies.

Other offerings on the market have shorter lifecycles requiring rip and replace and higher upkeep and replacement costs, as well as their own IT management dashboards, separate from other networking equipment.

