

Cisco Industrial Router Portfolio

Overview

A complete industrial routing portfolio supporting public and private cellular connectivity to provide secure and flexible connectivity wherever your business may operate.

Many industries, such as utilities, transportation, and oil and gas, are experiencing a significant transformation as they modernize their operations to improve safety and efficiency and meet the demands of the AI era. A modern communications network is central to this effort, enabling the secure, low-latency flow of critical data.

The business benefits of fortifying your industrial network edge include:

- Increasing the effectiveness of the power grid to deliver more electricity in the AI era, and meet the needs of a dynamic renewables power grid.
- Boosting pedestrian safety providing better traffic management, and supporting emergency vehicles.

- Improve safety by monitoring oil and gas pipelines in extremely remote locations.

But this transition isn't easy. The industrial network edge is **diverse**, with **every use case having different requirements**: space, power, access technologies, protocol support, certifications, and environmental constraints.

In the past, organizations have been forced to solve each use case independently, resulting in multiple vendors and deployment of multiple

networks, each requiring unique training and skillsets. And fragmented architectures make it challenging to deploy at scale.

Organizations cannot transform at the rate needed. **Missed insights are the norm**. They need a simple, more integrated approach that brings the **power of the enterprise network to scale and secure the industrial network edge** and to free up IT and operations so they can do more.



IR1000 Rugged
Series Secure
Routers



Catalyst
IR1800



Catalyst
IR1101



Catalyst
IR8100



Catalyst
IR8300

Benefits

- **Lower total cost of ownership** with a highly modular portfolio that offers multiple communication types for today's needs and is easily upgradable in the field for tomorrow's needs.
- **Boost operational efficiency and drive better business decisions** by tracking and monitoring equipment, assets, workers, and mission-critical processes.
- **Deploy firewalls with application awareness**, Intrusion Detection and Prevention (IDS/IPS) leveraging Cisco Talos® intelligence, and advanced malware protection, all without any additional hardware on certain industrial router models on-premises, and on all Cisco industrial router models when using Cisco Umbrella®.
- Future proof your industrial network for the post quantum era with secure communications and secure device capabilities.
- **Scale and deploy unified security policies with ease** with Cisco SD-WAN Manager.
- **Minimize operational costs** with fewer truck rolls, and simplify device deployment and operations with zero-touch configuration; manage, monitor, and update devices remotely.

The complete line of industrial routers includes:

- **The all-new IR1000 Rugged Series Secure Routers:** These routers distill decades of Cisco industrial networking expertise into an ultra-compact form factor that consumes less power, making it the ideal choice for tightly packed cabinets in utilities, roadways and intersections, or oil and gas deployments. They are small in size but big in capabilities, allowing you to deploy threat protection for critical infrastructure, ThousandEyes Assurance to provide visibility and control, and much more.
- [Cisco Catalyst® IR1100 Rugged Series Routers.](#) The IR1101 is a compact, expandable router, that provides secure connectivity for mission-critical use cases. It is well suited to industrial deployments ranging from distribution automation for utilities to transportation and oil and gas as well as remote asset management across the extended enterprise.
- [Cisco Catalyst IR1800 Rugged Series Routers.](#) Scale securely with built-in next-generation firewall capabilities. Power your critical services with dual simultaneous 5G cellular, Gigabit Ethernet, and more.
- [Cisco Catalyst IR8100 Heavy Duty Series Routers.](#) Ready for the outdoors, the

IR8100 Series is IP67 rated for dust and water protection and built for extreme temperatures; it goes wherever you need it to go with battery backup to ensure your network stays up. It's completely modular and upgradable, from 5G to future CPU, storage, and power-supply needs. The IR8100 also supports WI-SUN for Advanced Metering Infrastructure (AMI) use cases.

- [Cisco Catalyst IR8300 Rugged Series Router.](#) this rack-mount rugged router is one of Cisco's first industrial-grade, fully integrated switching and routing platforms. It offers advanced threat protection for critical infrastructure. Extend SD-WAN and ThousandEyes Assurance to the substation, to ensure secure and resilient operations. As a precision timing source, it keeps your assets in the field in sync, and it's utility certified (IEEE1613 and IEC61850) to help ensure compliance and reliability.

Next steps

To learn more about the Cisco industrial routing portfolio, visit <https://www.cisco.com/go/iot-routers>.