

Cisco IR1000 Rugged Series Secure Routers



Many industries, such as utilities, transportation, and oil and gas, are experiencing a significant transformation as they revamp their operations to improve safety and efficiency. A modern communications network is central to this effort, enabling the secure, low-latency flow of critical data—especially vital with the increasing demands of AI at the industrial edge.

But bringing IT networking capabilities to the physical world has many challenges, one of them being crowded cabinets with very little space to spare for an industrial networking device such as an industrial router.

In addition, many of these mission-critical cabinets are located in remote areas that are off the grid, so connectivity equipment has to be low power, and able to run on solar and batteries.

Finally, maintaining connectivity in resource-constrained environments demands robust cybersecurity to protect critical infrastructure.

The new Cisco IR1000 Rugged Series Secure Routers, address these needs. While it's an all-new router, it's based on decades of industrial and enterprise routing expertise. The IR1000 Rugged Series delivers robust connectivity in an ultra-compact, energy-efficient design,

making it ideal for distribution and renewable energy sites where space and power are limited. Built from the ground up to address a variety of industrial use cases including utilities, the IR1000 Rugged Series helps ensure reliable remote monitoring of assets such as capacitor bank controllers in Fault Location, Isolation, and Service Restoration (FLISR) environments—even those using solar or battery power. With a power draw of under 5 watts and integrated sleep mode functionality, the IR1000 Rugged Series increases cabinet battery life, extending uptime and enhancing the availability of other connected assets. Its low power consumption expands visibility and control to previously hard-to-reach locations, driving greater operational efficiency while reducing energy usage.

Key features

- Ultra-compact design with flexible mounting options
- Ultra-low power consumption
- Protection from future quantum attacks with Cisco Post-Quantum Cryptography (PQC)
- Flexible connectivity as your needs evolve
- Embedded application-layer firewall for OT
- Threat protection for critical infrastructure
- Support for Cisco ThousandEyes® Assurance
- Pair with a low-power 5G reduced capabilities (RedCap) pluggable interface module, offering a lightweight 5G technology designed for Industrial IoT

Use cases

- Utilities Distribution automation
- Traffic and roadways cabinets
- Roadways digital signage
- Oil and gas pipelines
- Rail tracksic
- ATMs