

Enabling Secure and Seamless Operational Expansions

System Requirements

- Secure network architecture to make legacy OT equipment compliant with the latest cybersecurity requirements
- Future service scalability to avoid costly hardware upgrades or major network redesigns
- Secure remote maintenance while protecting critical systems from unauthorized access

Why Moxa

- Provides virtual patching through DPI by blocking harmful OT commands at the network level
- 8 ports for future expansion and high bandwidth to handle multiple devices simultaneously
- MRC enables remote maintenance with role-, time-, and protocol-based restrictions for secure third-party access

Featured Products

OnCell G4308-LTE4

8-port industrial LTE Cat. 4 secure cellular routers



Moxa Remote Connect (MRC)

Remote connection management platform for secure remote access



Expanding operations with new factories requires seamless and secure connectivity infrastructure. With Moxa's OnCell G4308-LTE4 secure cellular routers and Moxa Remote Connect (MRC) solution, system integrators have powerful tools to help factory owners navigate the challenges of expansion and automation, while also simplifying future maintenance.

Moxa Solutions

Expanding factories require more automation and integrated control systems like PLCs, IP cameras, HMIs, and IPCs. The SCADA system controls PLCs for precise automation. Meanwhile, IPCs collect and process data from various subsystems, and send it to the cloud for analysis. Given the system complexity and risk of cyberthreats, it is important factories deploy robust and versatile architecture that incorporates cellular routers, firewalls, and switches. Consolidating these functions into a single device, our OnCell G4308-LTE4 secure cellular routers replace the clunky, disaggregated architecture. Besides saving space, this combined design also cuts maintenance costs and speeds up troubleshooting. The robust hardware with 8 embedded Ethernet ports simplifies future device expansion while ensuring stable network performance even with heavy traffic, multiple VPNs, and active firewalls.

To comply with cybersecurity requirements, factory owners are looking for robust network security architecture. Our solution leverages Deep Packet Inspection (DPI) for OT protocol analysis, identifying and blocking malicious or unauthorized commands. This provides 'virtual patching' protection for legacy OT devices that cannot be easily updated.

Before, factory owners needed system integrators (SIs) for on-site troubleshooting, an inefficient and resource-intensive process. When using the OnCell cellular routers together with the Moxa Remote Connect (MRC) service, SIs can perform remote diagnostics, configurations, and firmware updates. To prevent unauthorized access, the factory owner can define access control rules based on role, time, and protocol. This solution drastically reduces maintenance costs while following on-site security guidelines.

