

KEEP MINING KEEP MOVING

Industrial Communication and Computing Solutions for Mining Digitalization



The mining industry is at yet another crossroads in its hundreds of years of history. To stay profitable amidst technology changes, the industry is embracing automation, unmanned operations, and decarbonization. At the same time, it must confront a multitude of internal and external challenges.

The Ever-changing Landscape in the Mining Industry

Internal Challenges

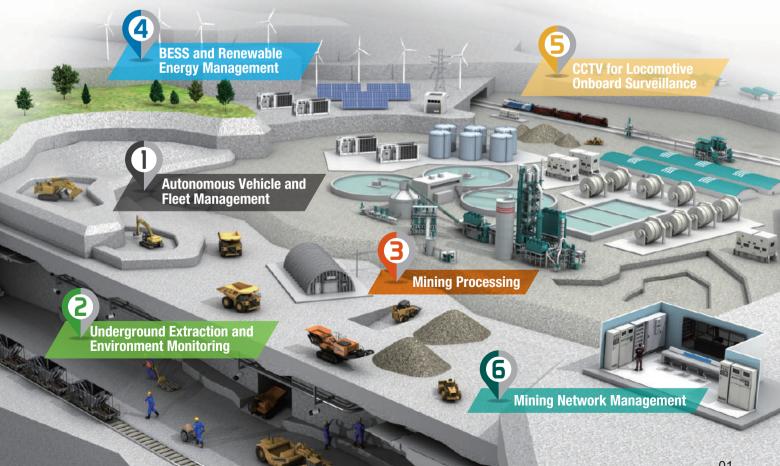
Changing terrainsmining deeper underground, digging farther into mountains

External Challenges

Evolving cyberthreats-As mining equipment gets connected, cyberthreats are not affecting IT only but also OT Changing conditionsflooding, toxic gases, explosions, mine collapses Changing technologiesautomation, remote controlling, decarbonization

Evolving energy diversity-Embracing net zero calls for renewable energy and more complex grid management **Evolving mining commodity selection**-Fast deployment and adjustments to absorb market fluctuations in mineral demand

Embrace Changes with Advanced Automation Networks - Let Moxa Help Keep You Moving Forward.



Moxa facilitates agile responses to diverse changes in the mining industry

Be Agile Today:

> Availability

From wired and wireless connectivity to high bandwidth, advanced redundancy, and roaming capabilities for industrial networks

> Visibility

Full visibility of wired and wireless devices from field sites to remote control centers

> Interoperability

Multiple protocols and edge computing fulfill OT/IT data convergence

Be Agile for the Future:

> Cybersecurity

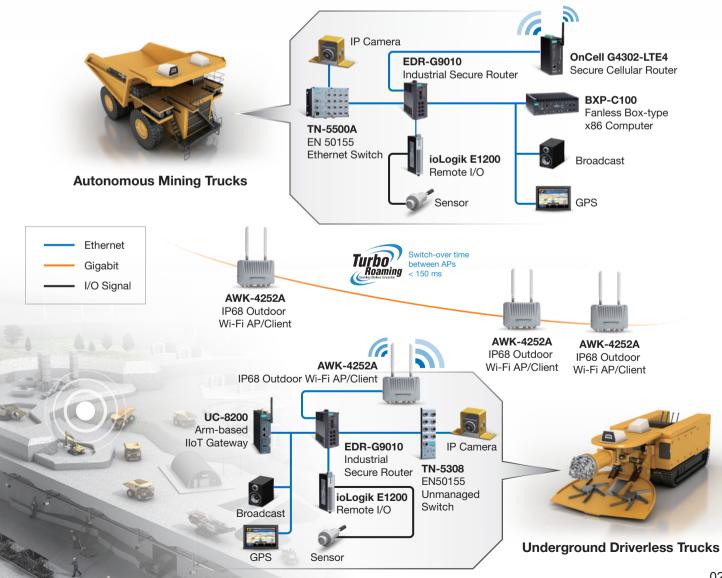
Strengthen cybersecurity in OT networks and comply with IEC 62443 for IT/OT convergence

> Energy Diversity

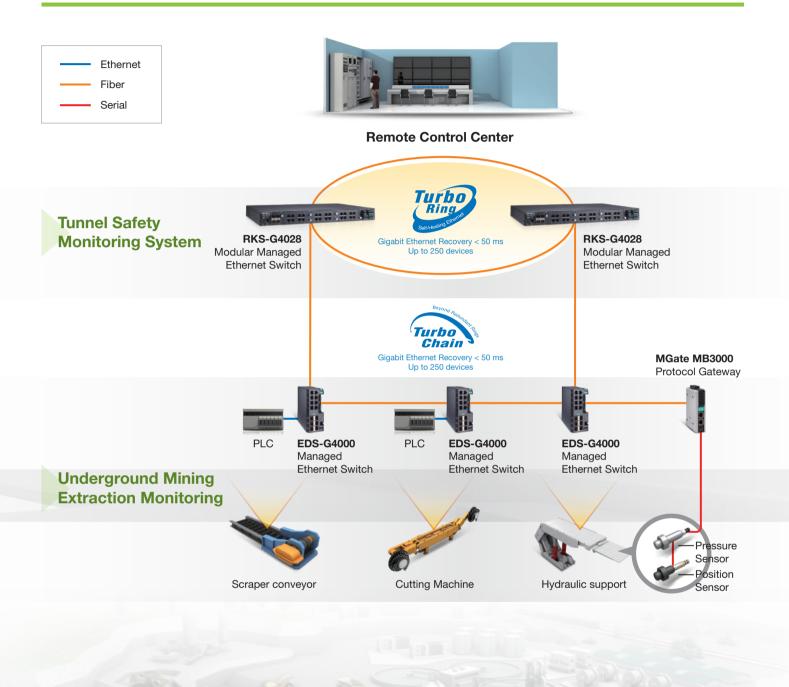
From renewable energy, energy storage to smart grids and microgrids, we are experts in critical infrastructure, empowering sustainable and hybrid power supply through stable communication



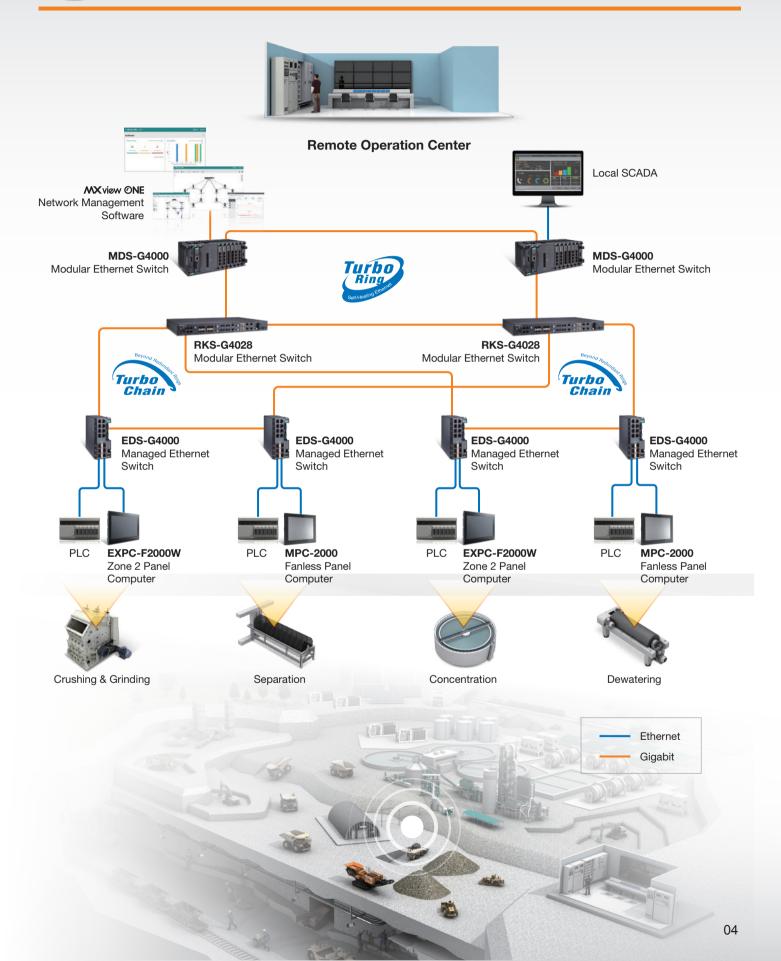
Autonomous Vehicle and Fleet Management



Robust Backbone Network for Underground Extraction and Environment Monitoring



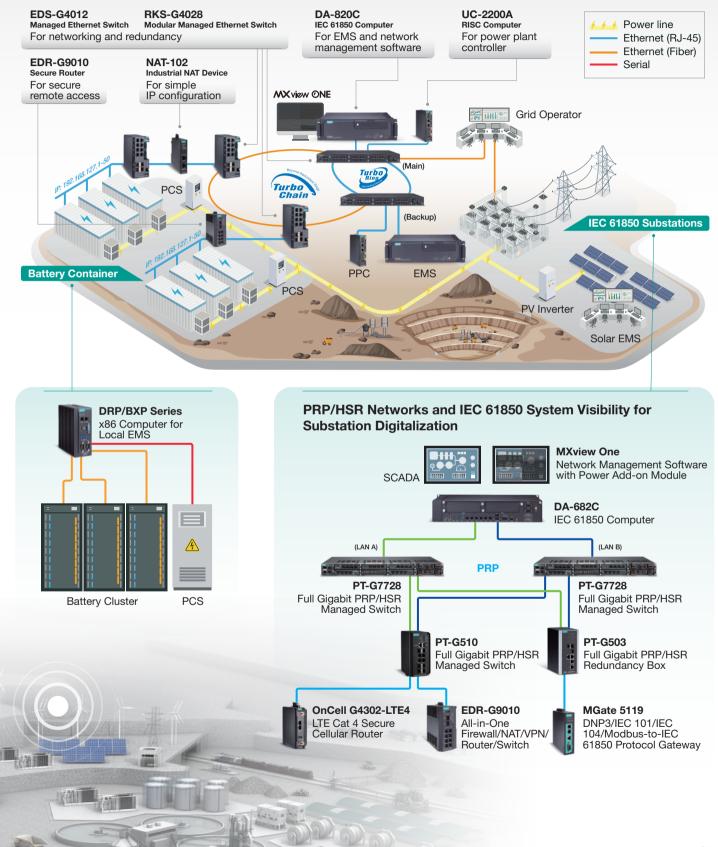






Accelerate Clean Energy Transition With Resilient Communication Networks

Moxa's Solutions for Grid-connected Battery Energy Storage Systems









MXview One

Efficient Daily Operation

Network Status At a Glance



Flash Backup and Restore



Timely Notification



OT/IT Convergence Made Easy



Firewall

Centralized Management

Unified Security Policy

Real-time Alert

VPN

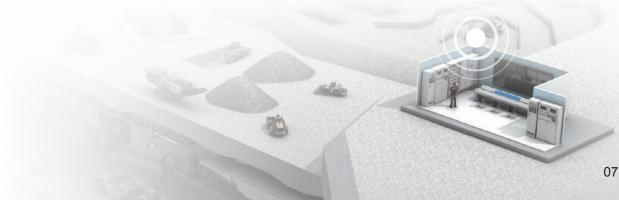
VPN

(IP)

NAT



Operation Center



MXsecurity

Enhanced Cybersecurity Protection

IPS

DPI

Visibility on Malicious Activities

Your One-stop Shop: **Addressing Diverse Connectivity Needs in One Go**

Ethernet Switches/PoE Switches

Support Turbo Ring, Turbo Chain, STP/RSTP/MSTP for network redundancy, and provide PoE/PoE+/PoE++ options



Rackmount/Modular/ Din-rail Switches RKS-G4028 MDS-G4000 EDS-4000/G4000



EN 50155 Switches **TN Series**

IEC 61850 Switches PT-G7728/G7828 PT-G510

Industrial Computers



Fanless x86 Computers NEW 11th Gen Intel[®] Core[™] Processors DRP-A100/C100 BXP-A100/C100

RKP-A110/C110





IEC 61850 Certificated DA-820C/682C/681C



Fanless Panel PC Zone 2 Certificated MPC-3000 EXPC-F2000W

Secure Routers



All-in-One Firewall/NAT/VPN/Router/Switch EDR-G9010

Industrial Network Address Translation (NAT) Devices NAT-102

Industrial IoT Gateways

4G, MQTT, built-in device SDKs for Azure/AWS cloud, Moxa Industrial Linux 10-year support



Arm-based Computers UC-5100/8200/2200A AIG-101/301

Network Management



Network Management Software MXview One with Power/Wireless Added-on Modules



Network Security Management Software **MXsecurity**

Protocol Gateways



MGate MB3000 MGate 5000

Remote I/O



Modular/Standalone ioThinx 4510 ioLogik E1200

IP Cameras



EN 50155 Certificated VPort Series

Industrial Wireless

Private 5G Cellular Gateways CCG-1500

Cellular Routers

OnCell G4302-LTE4

Outdoor 802.3ac AP/Client AWK-4252A

Your Trusted Partner in Automation

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things (IIoT). With over 35 years of industry experience, Moxa has connected more than 102 million devices worldwide and has a distribution and service network that reaches customers in more than 85 countries. Moxa delivers lasting business value by empowering industries with reliable networks and sincere service. Information about Moxa's solutions is available at www.moxa.com.



Book the Moxa Demo Ute for a free live demo of our mining solutions!



