

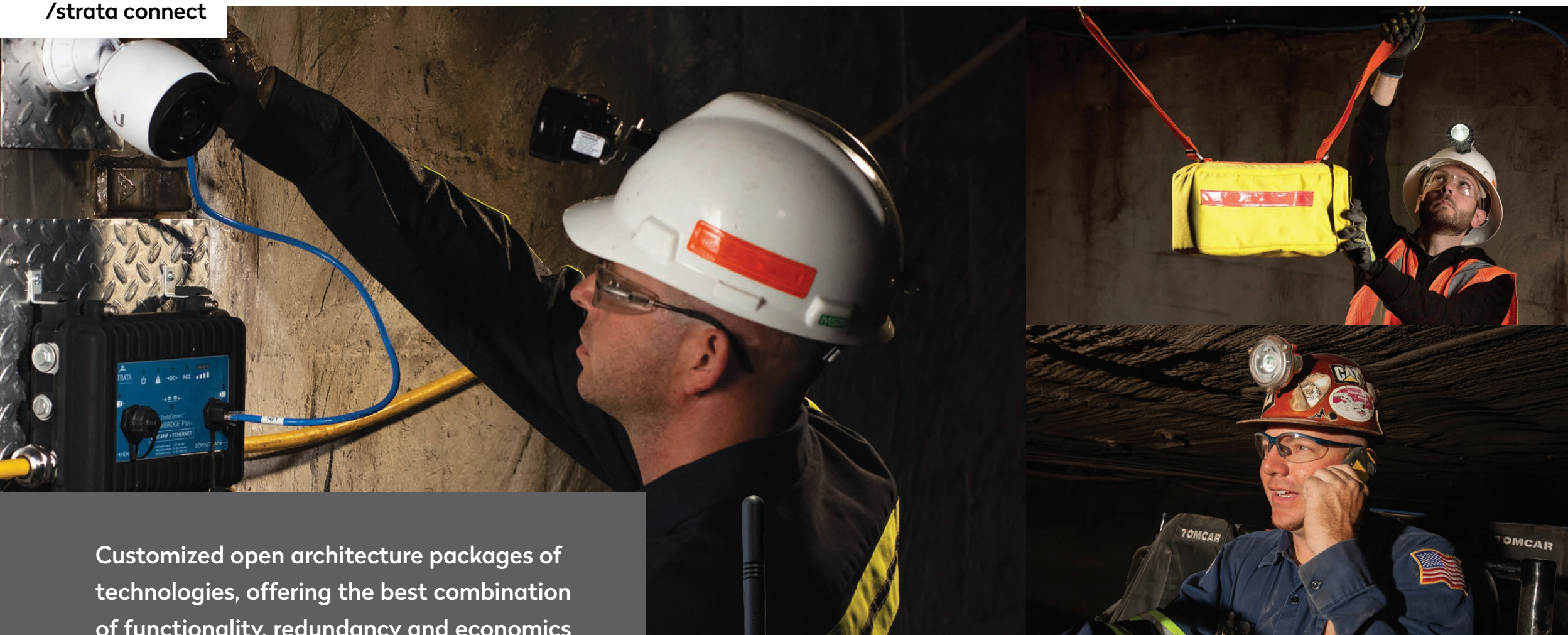
/strata connect



Communication, Networking and IoT in Mining

Tailored combination of wired and wireless infrastructures for surface and underground operations





Customized open architecture packages of technologies, offering the best combination of functionality, redundancy and economics

StrataConnect IoT Gateway

Supports open standard high-speed Wi-Fi®, Bluetooth® and LoRa® for underground communications, tracking and IoT.

StrataConnect IoT Gateway leverages existing infrastructures including fiber, Ethernet and DigitalBRIDGE Plus+ leaky feeder to establish a wireless coverage area of up to 2000m underground.

- Dual 802.11b/g/n 2.4 GHz Wi-Fi® radios
- Bluetooth®
- LoRa®
- 2x 1 Gbps Ethernet ports
- 802.3bt PoE in & Passive PoE Out
- 1Gbps SFP
- RS485/Modbus
- GNSS
- GPIO
- 900 MHz wireless mesh

StrataConnect DigitalBRIDGE Plus+

A combined fiber & leaky feeder backbone to support high-speed Ethernet data, voice, tracking, telemetry, and digitizing new or existing VHF leaky feeder networks

- Power-over-Ethernet (PoE) access for IoT field devices, cameras, Wi-Fi access points, tag readers, gas detectors and more
- High speed connectivity supports live camera feeds, communication, IoT, and connectivity to emergency refuge chambers
- DMR and LMR turnkey solutions for underground and surface



Tier 3 Trunked Digital Mobile Radio (DMR)

- Voice and data
- Secure, private conversations
- Clear voice quality with noise reduction
- Text messaging
- Location-based services for safety, warnings and vital information
- Call availability features for call priority, call timers and call queuing
- Intelligent voice and data organization
- SCADA and Telemetry
- Less FCC Licensing
- Intrinsically safe radios



More than a Supplier...

Strata maintains a successful track record by working closely with customers and fully understanding individual project needs. On-site and remote service capabilities provide ongoing support and troubleshooting and help to ensure system integrity.

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MINING

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StrataConnect™ DigitalBRIDGE Plus+™

ADDING ETHERNET TO LEAKY FEEDER



POWER | ETHERNET | RADIO

The diagram illustrates the DigitalBRIDGE Plus+ Network Configuration and Components. It shows a central StrataConnect DigitalBRIDGE unit connected to various components including Headend, Existing Line Amp, DigitalBRIDGE Plus+ Line Amp, DigitalBRIDGE Plus+ Line Amp with Ethernet, DigitalBRIDGE Plus+ Line Amp Ethernet Coupler, Fiber Switch, Fan Starter Panel, Telemetry, IP Camera, Refuge Chamber, and Wi-Fi Access. A yellow oval highlights the 'DigitalBRIDGE Plus+ Network Configuration and Components'.

* Ethernet can also be inserted at the Headend.

ADDING ETHERNET TO LEAKY FEEDER

Power | Ethernet | Radio

Leveraging the convenience and dependability of leaky feeder networks, DigitalBRIDGE Plus+™ integrates the power of DigitalBRIDGE™ technology to enable high-speed Ethernet data, DC power and a full spectrum of VHF radio frequencies to be transported over a single cable network.

Start where you are.

Upgrade an existing leaky feeder infrastructure with the simple inclusion of DigitalBRIDGE Plus+™

high-quality bi-directional line amplifiers or build from scratch the most sophisticated leaky feeder network on the market. Insert Ethernet at the headend, or underground by connecting leaky feeder to existing fiber networks via a DigitalBRIDGE Plus+ line amplifier with Ethernet. Ethernet end-point devices can be installed anywhere along the cable receiving power and data connection through the DigitalBRIDGE Quadport.

CAPABILITIES	BENEFITS
<ul style="list-style-type: none"> • Analog and digital radio, high-speed Ethernet and power distribution on a single cable • Wi-Fi access – VoIP • Environmental monitoring and instrument remote control (Pumps, fans, sensors) • Gas detection • IP cameras • Tele-remote operation • Fleet management • Refuge station connectivity • Compatible with proprietary network management systems 	<ul style="list-style-type: none"> • Single coaxial cable network – Power, Ethernet & VHF • Fully interoperable with existing leaky feeder components for improved performance • Ethernet access on existing leaky feeder network • Power end-point devices without separate power source using the QuadPort • Flexible placement of end-point devices • Simple to reconfigure and change end-point device locations • Power injected at any point along cable - travels in both directions • Auto level control for consistent gain management, regardless of the number of channels operating simultaneously • Multi-point distribution • Bi-directional diagnostics and voltage detection - segment by - segment problem location • Fully manageable by on-site personnel