

# StrataConnect™ DigitalBRIDGE™

BRIDGING POWER & DATA TO THE EDGES OF YOUR MINE

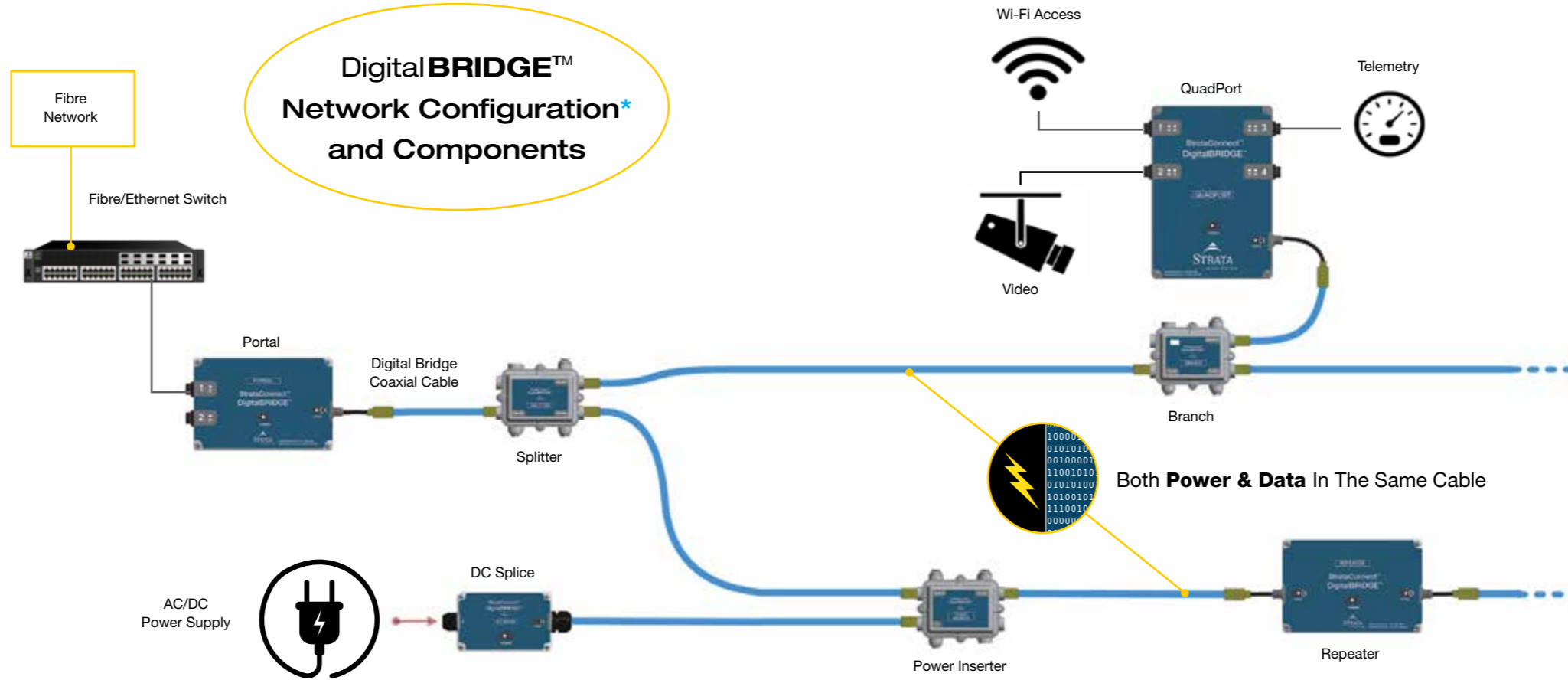
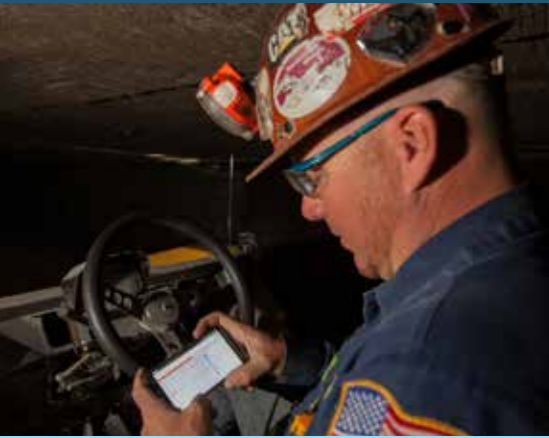


**POINT-TO-MULTIPOINT PoE DISTRIBUTION**



**POWER | CONNECTIVITY | DEPLOYMENT**

Powered by **RFI Technology Solutions**



DigitalBRIDGE™  
Network Configuration\*  
and Components

\*This network diagram is for illustrative purposes only. Networks can be configured many ways and are completely customisable.

**Components:**

- **Portal** - Bridge between the existing network and DigitalBRIDGE.
- **QuadPort** - Four (4) Power-over-Ethernet (PoE) ports to supply power and data backhaul for the inclusion of PoE end-point devices.
- **Power Inserter** - Places DC power onto the coaxial cable for operation of system components and end-point devices.
- **Repeater** - Digitally regenerates the data signal enabling cable segments to be extended indefinitely.
- **DC Splice** - Adapts regular DC power cable to coaxial cable format. Protects the power supply from short circuits and excessive voltage.
- **Branch** - Taps a portion of the power and data signal to enable a QuadPort to be spliced into the line.
- **Splitter** - Evenly divides the coaxial cable so the system can proceed down multiple headings.

**Specifications:**

**PoE Cable:**

- Low Smoke Zero Halogen (LSZH) sheathing designed for underground applications
- Flooded cable for reliable long term operation in wet or in humid environments
- Ultra-low resistance cable (ULR)
- Transient protection

**Connectivity 10/100/1000 Ethernet**

- VLAN & QoS Support
- LLDP / CDP
- AVB / PTP Support

**Power**

- PoE & PoE+
- Direct Current (DC): 24 to 60 volts DC



### POINT-TO-MULTIPOINT PoE DISTRIBUTION

StrataConnect DigitalBRIDGE™ is a point-to-multipoint Power-over-Ethernet (PoE) digital network for underground applications. It delivers both power and high speed data over a single coaxial cable to any location where digital end-point devices are desired. DigitalBRIDGE™ provides data speeds and capabilities comparable to fibre and can be used for Voice-over-IP (VoIP) communications, Wi-Fi and cellular access, video, telemetry, tracking, tele-remoting and more.

### Power and Connectivity where you need it, when you need it.

DigitalBRIDGE™ is simple to install and maintain, and is fully recoverable. Network management can be completed by on-site personnel, without the need for specialised technicians. Utilising off-the-shelf tools and standard procedures, personnel can cut and splice the coax cable to install or remove PoE end-point devices anywhere along the network.

DigitalBRIDGE™ is an ideal solution for extending digital coverage beyond the reach of fibre, with the option to travel in multiple directions. It can also be used as a stand-alone system.

CAPABILITIES	BENEFITS
<ul style="list-style-type: none"> <li>• Wi-Fi access - VoIP</li> <li>• LTE / 5G cellular</li> <li>• Voice communication</li> <li>• Environmental monitoring and remote control (pumps, fans, sensors)</li> <li>• Gas detection</li> <li>• IP cameras</li> <li>• Backhaul from ore drive to surface</li> <li>• Tele-remote operation</li> <li>• Fleet management</li> <li>• Refuge station connectivity</li> <li>• Cisco Discovery Protocol (CDP) Support</li> <li>• Damaged fibre replacement</li> </ul>	<ul style="list-style-type: none"> <li>• Power and data in single cable*</li> <li>• Flexible and changeable cable lengths – no premium for short runs</li> <li>• Up to 2000m without a repeater or dedicated power source</li> <li>• Power injected at any point and travels in both directions</li> <li>• Flexible placement of end-point devices</li> <li>• Simple to reconfigure layout and change end-point device locations</li> <li>• Not proprietary to specific brands of end-point devices</li> <li>• No need for specialised technicians – fully manageable by on-site personnel</li> <li>• Save time in basic planning, easy installation and low maintenance</li> <li>• Fully recoverable</li> </ul> <p>* Direct Current (DC): 24 to 60 volts DC Up to 1 Gbps physical layer speed; typical end-to-end TCP throughput = 400-700 Mbps</p>



#### SOUTH AFRICA

Unit 15, Saligna Business Park  
3 Saligna Street, Boksburg, 1459  
T: +27 12 450 0960  
F: +27 86 721 4738  
info@strata-safety.co.za

#### USA

8800 Roswell Road, Suite 145  
Sandy Springs, GA 30350 USA  
TF: 800-691-6601  
T: 770-321-2500  
F: 770-321-2520  
info@strataworldwide.com

#### AUSTRALIA

Unit 1 /8 Channel Road, Mayfield West  
NSW, Australia, 2304  
T: +61 2 4960 9705  
F: +61 2 4960 9938  
info@strataproducs.com.au