



# Critical Mining Connectivity for Safer & More Efficient Operations

For mining organizations and professionals in the world's most remote regions, Iridium® products and services offer on-the-move solutions for data collection, asset management, location tracking, safety compliance, and real-time voice communications.

## Iridium® Network Capabilities



**Truly Global Coverage:** The Iridium network is comprised of 66 cross-linked satellites with multiple overlapping spot beams to deliver reliable communications anywhere in the world.



**Signal Blockage Resiliency:** Iridium's cross-linked satellites provide multiple look angles, allowing the signal to reach open pit mines and mountainous terrains.



**L-Band Connectivity:** For critical systems enabling remote operations in harsh environments, L-Band provides reliable, weather-resilient connectivity.



**Reliable & Cost-effective Solutions:** Iridium works with a global network of Value-Added Manufacturers to provide products and services you can depend upon.

## Real-time Control

Iridium solutions help your operation increase efficiencies, streamline reporting, improve sustainability, and provide early warning systems for staff safety.

### Connecting to the Site

With speed capabilities ranging from 22 Kbps to 704 Kbps, Iridium Certus® is the only truly global mobile midband and broadband satellite service on the market. It enables rugged, rapidly deployable mobile voice and data solutions for mining organizations.



**Iridium Certus 700** offers the fastest L-Band speeds available and extends the use of mobile networks into remote areas, eliminating the need to deploy expensive ground-based infrastructure.



**Iridium Certus 100** allows flexible communications in lightweight, power-efficient products. Iridium Connected® solutions for this service class are ideal for Supervisory Control and Data Acquisition (SCADA) or machine-to-machine (M2M).



**Iridium Certus 200** offers the same proven capability and reliability in smaller, more cost-effective terminals.



## Connecting to the Site (continued)



**Sustainability:** Iridium's primary or backhaul satellite communications provide the foundational technology needed to minimize environmental impacts and help ensure that mines achieve your company's Environmental, Social, and Governance (ESG) compliance goals.



**Ruggedized Equipment:** L-Band connectivity is capable of handling extreme temperatures and weather conditions, while rugged, solid-state antennas withstand shock, vibration, dirt and dust.



**Efficient & Safe Operations:** Iridium satellite communications enable data, voice, and video-supporting applications that are essential to efficient and safe mining operations.



**Real-Time Visibility & Control:** With multiple speeds available, miners can take advantage of real-time analytics and operate more efficiently than ever before.



**Autonomous Mining:** Iridium satellites provide off-the-grid connections, high-resolution imagery, and precise geo-positioning services to aid autonomous mining.

## Connecting Things

Iridium Short Burst Data® (SBD®) and Iridium Messaging Transport™ (IMT™) services connect equipment and personnel in locations where basic land-based connectivity for communication and monitoring is unreliable or nonexistent.



**All-in-One Solutions:** From equipment health to shipment tracking, Iridium Connected IoT solutions allow remote asset management during any phase of the mining process.



**Cloud Native Technology:** Iridium CloudConnect enables alignment with industry standard protocols, cloud-powered platforms and best-in-class server-side solutions.



### Sensors:

- Alert mine operators when stability or air quality issues are identified.
- Assess equipment performance wirelessly using condition-based maintenance (CBM) software to help reduce failure risk and improve fuel consumption by managing the tire pressure of mining vehicles.

## Connecting People

Communication between mining personnel is critical for work optimization and safety.



**Iridium Satellite Phones:** provide reliable and real-time communications between workers and support staff.



Iridium Connected narrowband **smart personal protective equipment (PPE)** monitors worker health and warns of environmental hazards, while continuously uploading data to central software systems for collection and analysis.



**Iridium PTT:** Iridium Push-to-Talk provides critical group communications to facilitate worker safety and productivity.

Whether connecting sites, things or people, Iridium delivers high-availability communication solutions that are critical for the mining industry. Learn more about Iridium's mining solutions at <https://www.iridium.com/markets/mining/>

To learn more about Iridium's Mining Solutions:



Interested? Email us at: [sales@iridium.com](mailto:sales@iridium.com)