Mining Solutions

TRANSFORM OPERATIONS WITH MULTI-ORBIT SATELLITE SYSTEMS

SES Networks empowers the world's largest mining companies with next-generation, multi-orbit satellite network and communication solutions that improve mine productivity, efficiency, and safety – and benefit local communities.

High throughput, Geostationary Earth Orbit (GEO) and Medium Earth Orbit (MEO) satellite-enabled connectivity enables mine operators to transform legacy information and operations systems (IT/OT) into efficient ultra-intelligent smart mines that are future-proof. SES Networks' next-generation multi-orbit satellite solutions ubiquitously connect mining operations virtually anywhere on earth at up to 2Gbps. Fiber equivalent connectivity without the capital expense on infrastructure provides on- and off-site engineers and mining personnel with low latency, high-performance connectivity to reliably support high-quality voice and video communications (VoLTE/ViLTE/VoIP) and real-time monitoring, maintenance, and control capabilities across mining operations.

Why SES Networks for Mining?

- Accelerates an economical transition to ultra-intelligent smart mines with purpose built, next-generation multi-orbit, multi-band satellite-enabled low latency connectivity solutions
- Connects geographically distributed mining operations under a single management hub, without the pain and time delays of building network infrastructure
- Scales reliable, resilient mission-critical satellite communications and Industrial Internet of Things (IIoT) data transport from thousands of sensors and devices across the mining ecosystem

- Reduces IT and network infrastructure costs and lengthy deployments using an OPEX pay-as-you-go managed services business model, leaving teams to focus on optimised production and safety
- Provides end-users with an unrivalled Quality of Experience (QoE) by enabling full mine automation and performance improvements for business-critical applications like ERP, logistics fleet tracking, cloud based file sharing, and Office 365
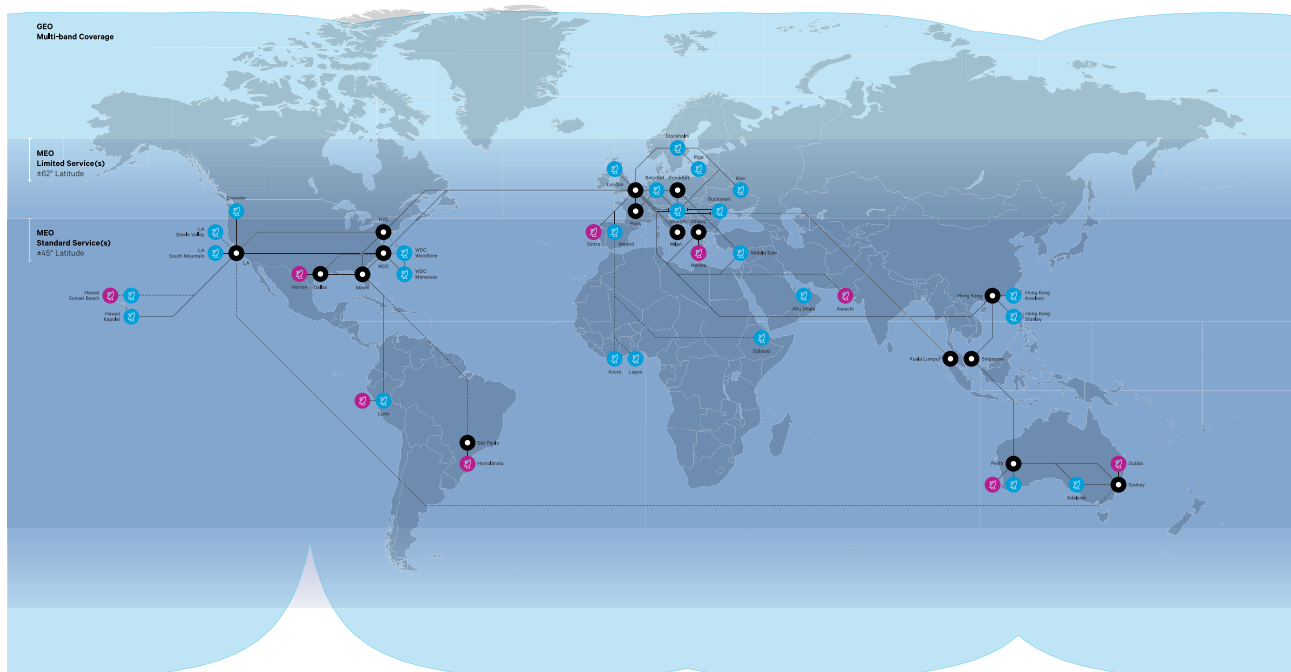
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Key Features

- Fully managed dedicated IP Transit for low latency, high performance satellite-enabled internet connectivity, traffic aggregation, 3G, and 4G/LTE backhaul
- Dedicated private, mesh, aggregation and backhaul connectivity available in multiple configurations
- Fully managed Ethernet Private and Virtual Private Line (EPL/EVPL) connectivity
- Up to 2Gbps + (uplink/downlink) with a satellite data round-trip latency of <150ms
- Multi-orbit (GEO HTS, GEO & MEO) hybrid connectivity with multi-band (Ku, C or Ka) options
- Supports multi-access integrated voice and data services including Voice over LTE (VoLTE) and Push-To-Talk (PTT) services
- Differentiated Quality of Service (QoS) support for cloud applications, HD video, VoIP, and Machine-to-Machine (M2M), Supervisory Control and Data Acquisition (SCADA), and IIoT systems connectivity and control
- Optional diversity and failover capabilities
- Compatible with MEF and 3GPP latency and reliability standards
- 99.5-99.9% guaranteed reliability and performance Service Level Agreements (SLAs)

Benefits

- Easily connect, control and streamline mining operations onto a single, ultra-intelligent smart mine network-as-a-service platform
- Improve mine productivity and efficiency, miner safety and site security
- Enable real-time automated collection and analysis of operational, IT and equipment data from across the mining ecosystem to gain insights (e.g. IBM Watson, GE Predix, etc.)
- Predictive maintenance, real-time monitoring and remote control of automated equipment and sensors keep machinery up and running around the clock, improving productivity and safety at a lower cost than having onsite staff
- Provides greater real-time cross-operational visibility for asset management, logistics and planning
- Eliminates risky infrastructure investments in technology that becomes quickly outdated
- Dynamically scales network connections up or down as needed across sites and the lifecycle

COVERAGE MAP

MEO gateway   GEO gateway   Point of presence (POP)   —— Existing link   ---- Future link

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Learn more about SES Networks' full portfolio of services and solutions.
Website: **ses.com/networks**