



About TSG

Tactical Solutions Group provides an array of integrated systems that facilitate secure, real-time, and interoperable communications across different operational domains. These platforms are designed to support critical sectors such as government, military, financial, public utilities and the mining industry, where seamless coordination, security, and reliability are paramount.

MineLink

Underground Communications

Mission-critical communications and personnel tracking for underground rescue and confined-space operations

The **TSG MineLink** Communications System is a ruggedized underground emergency communications and tracking platform designed for mining rescue operations, confined-space response, tunnel operations, and other high-risk industrial environments. Built around a portable digital command-and-control architecture, the system creates a rapidly deployable wireless mesh network that enables continuous communications between rescue teams underground and command personnel on the surface.

The system combines a portable command base station, wireless mesh relay nodes, rugged handheld radios, team tracking and monitoring, fiber optic and wired backhaul options, and emergency SOS and personnel localization capabilities. **MineLink establishes a self-forming digital wireless network** underground where conventional communications systems often fail.



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YEARS SOLVING

INTEGRATION AND INTEROPERABILITY
CHALLENGES

MineLink Feature Offerings

CORE SYSTEM COMPONENTS	• Portable ruggedized command base station • Wireless mesh relay nodes — self-forming network • Rugged handheld radios • Team tracking and personnel monitoring • Fiber optic and wired backhaul options • Emergency SOS and personnel localization capabilities
COMMUNICATIONS FEATURES	• Digital voice communications with team-based calling • Command broadcast and individual/group calling • Surface-to-underground coordination • Multi-team operations on separate channels • Real-time node health and signal monitoring • Optional data transmission alongside voice
TECHNOLOGY & TRACKING	• Self-forming wireless mesh network — no complex setup • Smart node placement algorithm for optimal coverage • Signal-based underground personnel localization • Directional tag-search mode for rescue operations • Device status, battery, and signal strength monitoring • Multi-path: wireless RF, fiber optic, dedicated telecom
DEPLOYMENT & RUGGEDIZATION	• IP54/IP67 environmental protection rating • Extended battery life with portable battery modules • Shock-resistant field hardware • Ruggedized suitcase-style base station for rapid deployment • Unlimited rescue teams with centralized command oversight • Adaptable to mission-specific operational requirements