

MOBILITY FOR MINING



RFI
TECHNOLOGY SOLUTIONS



Optimise Your Mine Site Communications' Performance With Antennas Trusted By The Professionals

RFI provides a comprehensive range of products that service the mining sector for mobility applications. Spanning solutions that can be used in both above-ground and underground mining RFI products can be integrated into your fleet.







With over 40 years of experience designing and manufacturing antennas specifically for Australian conditions. Trusted by the professionals our antennas deliver unmatched performance and reliability. Our patented designs are engineered to withstand the toughest environments, ensuring you stay connected in critical situations.

Mining Mobility Antennas

Mining environments demand rugged antenna solutions capable of withstanding extreme vibrations, harsh temperatures, and chemical exposure. Selecting high-performance hardware is a critical decision that impacts both safety and operational uptime. From an RF perspective, our solutions are specifically engineered to overcome multi-path interference and meet the increasing requirement for low-latency connectivity in autonomous and remote monitoring applications.




VHF & UHF Mobility Antenna Range

In environments where connectivity is non-negotiable, VHF and UHF radios remain the definitive standard for reliable communications. As a long-standing radio antenna specialist, RFI engineers high-performance solutions designed to dominate the toughest RF landscapes.

CD29 Series	CD61 Series	CD51 Series	CD64 Series	LPU3847-N	CD30 Series
					
<ul style="list-style-type: none"> • 148–174 MHz or 118–136 MHz models • Ground Independent VHF Antennas • MBC Mounting • 3dBq Gain 	<ul style="list-style-type: none"> • Broadband design: 380–470MHz or 450–520MHz models • Ground Independent UHF antennas • MBC mounting or N-type bulkhead or N-type Male • 4dBq Gain 	<ul style="list-style-type: none"> • 13MHz tuneable bandwidth across the 380–520MHz range • Ground Independent UHF antennas • MBC Mounting or threaded stud mounting options • 4dBq Gain 	<ul style="list-style-type: none"> • Wideband antenna design: 450–470MHz • Ground Independent • MBC Mount • 6dBq peak gain • Flexible stainless-steel whip 	<ul style="list-style-type: none"> • Broadband UHF 380–470MHz range • IP67/IP69 rating • Low profile • Features an integrated N-type female connector • 2.5dBi Gain 	<ul style="list-style-type: none"> • Dual-band antenna: VHF 148–174MHz and UHF 400–470MHz • Ground dependent • MBC Mounting • VHF: 1dBi and UHF: 4.5dBi Gain



Cellular & GPS Range

Cellular and GPS connectivity have become the operational standard for modern mining. From real-time system diagnostics to the precision requirements of autonomous vehicles, high-bandwidth cellular links are now essential for maintaining peak production. This transition demands industrial-grade antennas capable of sustaining high-speed data flow in the most unforgiving RF environments.

CSM700 Series	Legion Series	GPS3 Series
		
<ul style="list-style-type: none"> • Wideband: 698–3800MHz • IP65 rating • 16mm stud mount • High Impact polycarbonate radome 	<ul style="list-style-type: none"> • Combination antennas with MiMo or SISO cellular, Wi-Fi & GPS antennas in one radome • Supports up to 9-in-1 configuration • Cellular 4G/5G: 617–7125MHz range, Wi-Fi: 2.4/5.0/6.0 GHz, GPS/GLONASS/BeiDou • Rated IP67/IP69K and housed in a UV-stable ASA radome 	<ul style="list-style-type: none"> • Multiple termination options (SMA, FME, SMC) • 1575.42 (GPS) & 1598-1606 (GLONASS) • IP69K-rated • 26–28dB active amplifier

ISM & Wi-Fi Range

Maintenance and monitoring are the foundation of operational uptime. As the industry shifts toward predictive maintenance and automated safety, the demand for high-accuracy sensor data is non-negotiable. Low-power ISM and high-capacity Wi-Fi solutions have become the technical standards for delivering long-range, reliable connectivity across modern mine sites.






CDR2795-ISM900	WF-MLP	CDM2406-WB
		
<ul style="list-style-type: none"> • Australian ISM frequency: 824–960MHz • Ground independent • Meander Printed PCB design for superior performance • Threaded stud with spring or Bulkhead mounting options • 6dBi Gain 	<ul style="list-style-type: none"> • 2-port MIMO • 2.4–2.5GHz and 4.9–5.9GHz • Compact and low profile • Industrial-Grade Adhesive mount 	<ul style="list-style-type: none"> • 2400–2500 MHz • Ground Independent • Meander Printed PCB design for superior performance • White Fibreglass radome on heavy duty Black Spring • 6dBi Gain

Mobility for Mining: Poynting Range

Poynting Antennas maintains a long-standing legacy in engineering specialist solutions for mining and tunnel communication systems. From deep-level underground shafts to expansive surface operations, Poynting delivers a technical standard in ruggedised Wi-Fi and cellular antennas. Built to withstand extreme mechanical stress, these antennas offer high vibration tolerance and are available in ATEX-certified enclosures for hazardous environments. This ensures consistent, high-bandwidth connectivity in the most demanding above and underground mining applications.





POYNTING

BEYOND A CONNECTED LIFE

MIMO 3 Series	MIMO 4 Series	OMNI-700 Series	EPNT-7	PUCK Series
				
<ul style="list-style-type: none"> Up to 7in1 combination antenna 2x2 or 4x4 MIMO LTE/5G (617 to 4200 MHz) 2x2 MIMO Wi-Fi (dual band 2.4 GHz & 5 to 6 GHz) GPS/GLONASS Ultra-wideband, includes 450 MHz IP67/IP69K rating Option for some models to have ATEX and IECEx certification on special request 	<ul style="list-style-type: none"> Up to 9in1 combination antenna 4x4 MIMO LTE/5G (617 to 4200 MHz) 4x4 MIMO Wi-Fi (dual band 2.4 GHz & 5 to 6 GHz) and GPS/GLONASS IP67/IP69K rating 6dBi peak gain 	<ul style="list-style-type: none"> Wi-Fi dual band antenna; 2.4 GHz and 5 GHz Highly rugged and low-profile design High pressure water and dust ingress protected enclosure (IP69K) 4.5 peak gain, omni-directional Wi-Fi antenna 	<ul style="list-style-type: none"> A rugged outdoor antenna-integrated enclosure for compact router Modules 4x4 MIMO dual-band 2.4 GHz and 5 - 6 GHz Wi-Fi antennas Powder-coated cast aluminium base for heat dissipation and vibration-resistant cable strain reliefs Rugged IP69K/IK08 rated housing for harsh industrial environments 	<ul style="list-style-type: none"> Up to 5in1 combination antenna 2x2 LTE/5G (617 to 4200 MHz) 4x4 MIMO Wi-Fi (dual band 2.4 GHz & 5 to 6 GHz) and GPS/GLONASS IP69K and IK10 6.5dBi Peak Gain

Cables & Connectors Mobility for Mining

Mining vehicles can present as a challenging environment. With high vibrations, chemicals and thermal stress selection of appropriate cable becomes extremely important. RFI offers a range of stranded centre conductor cables ideal for use in vehicle installations, including low loss shielded cables and LSZH options.

8058 Series	WF-MLP	CDM2406-WB	Connectors
			
<ul style="list-style-type: none"> Stranded centre conductor suitable for mobility assets Flexible and easy to install 	<ul style="list-style-type: none"> Stranded centre conductor suitable for mobility assets Double shielded for lower loss Flexible and easy to install 	<ul style="list-style-type: none"> Stranded centre conductor suitable for mobility assets Small cable for additional flexibility for tighter spaces 	<ul style="list-style-type: none"> RFI offers an extensive range of connectors including FME, SMA, N-type, and BNC to suite our full range of cables. Stranded centre conductor suitable for mobility assets Flexible and easy to install

Mounting & Accessories

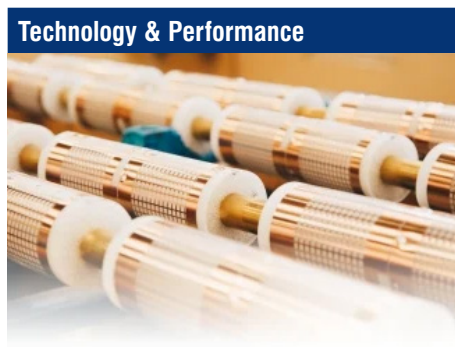
RFI's mounting accessories and Magnetic Mic systems are the technical standard for cabin ergonomics and equipment longevity in high-vibration mining environments. These ruggedised solutions ensure rapid, secure docking and precise antenna alignment to maintain mission-critical signal integrity.

Bull Bar Bracket	Boot Mount Bracket	Gutter Mount Bracket	Guard Mount Bracket	Wrap Around Bracket	Mag Mic
					
<ul style="list-style-type: none"> • Heavy-Duty Alloy / Black Powder-Coat or Stainless Steel • 16mm Antenna Hole • 4 positions from vertical to horizontal 	<ul style="list-style-type: none"> • Heavy-Duty Galvanised Steel • 16mm Antenna Hole • No holes to drill • Adjustable to several planes 	<ul style="list-style-type: none"> • High-Grade Stainless Steel • 16mm mounting hole • Dual-axis contour • Suitable for 4WDs, transport fleets, & service vehicles 	<ul style="list-style-type: none"> • High-Grade Stainless Steel • 16mm mounting hole • Contoured "Z" shape for seamless installation 	<ul style="list-style-type: none"> • Range of diameters • Heavy-duty alloy or stainless steel • 16mm mounting hole • Two-piece clamp design for flexible positioning 	<p>Return the mic with ease whilst avoiding taking your eyes off the road protecting you and your loved ones! Avoid the mic falling off in rough conditions causing possible injuries from an unsecure mic and getting in the way of vehicle operation.</p>

The RFI Difference



Since 1979, RFI has designed, developed, and manufactured high-performance antennas. Being the trusted brand of choice, all antennas are critically tested, ensuring that capability and quality standards are constantly met.



With state-of-the-art manufacturing facilities in Victoria and SA, RFI delivers an extensive range of high-performance antennas. Innovative patented designs like Meander® and Mopole® make RFI the trusted industry leader.



RFI antennas are used by critical infrastructure and emergency services networks across Australia and the globe. If a situation should ever turn critical, you can count on RFI antennas for the best in-class performance, quality and reliability.

