

WHAT ARE THEY?

Ground Monitors, as defined in mining and industrial operations for electrical machines, continuously verify the integrity of the earth ground conductor found in the AC trailing cable for electrical equipment. In the 1970's MSHA mandated the U.S. coal industry to ensure the ground wire remains intact on all electrical machinery used on surface and underground mines. Since 1975, AMR has been a pioneer in ground monitor design and has over 40,000 circuits in use worldwide today.

In addition to traditional impedance style monitoring, AMR leads the ground monitoring industry with our unique "pilotless" approach to continuously monitor the integrity through the three phase conductors eliminating the unreliable pilot wire and providing a more robust monitoring solution.



GM-300

GM-150

GM-200

GM-250

AVAILABLE MODELS

- GM-105-XLD (*not pictured*) is a Ground Fault / Ground Check impedance monitor, for 480 VAC - 15 kVAC and cable lengths up to 6.5km (4 miles)*
- GM-150 is a pilotless, low-voltage, multi-circuit device capable of monitoring up to five 480 – 1000 VAC circuits
- GM-200 is a pilotless, single circuit, unit in the 480 – 1000 VAC range
- GM-220 (*not pictured*) uses the same GM-200 form factor, and adds Ground Fault for a comprehensive pilotless solution in the 480 – 1000 VAC range
- GM-250 is considered one of the most advanced ground monitors in the world for surface or underground environments with ranges from 1 kVAC up to 25 kVAC**, and is available for both pilot wire and pilotless applications
- GM-300 Ground Check system is designed for high voltage systems, such as substation to substation, using the pilot wire and is suitable for applications up to 25 kVAC**, including low and medium voltages.

* Distance may vary based on cable construction and manufacturer.

** For power systems over 25kV, contact AMR for recommendations.

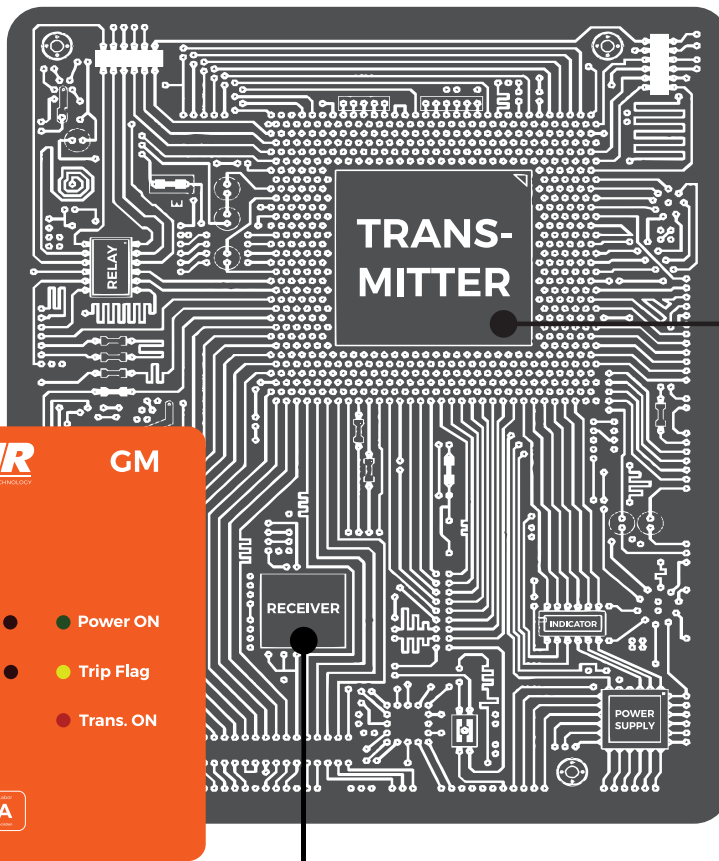
GROUND MONITORS



FEATURES AND BENEFITS

- Pilotless or pilot wire models available
- Continuity monitors with 45 or 75 ohm trip resistance
- 250 ms time delay reduces nuisance tripping
- Immune to high and low voltage conditions (+10%, -30%)
- Immune to DC and AC stray currents
- Easy installation and maintenance
- Integrated test switches
- Operate with all styles of arc suppressors
- Monitors coiled cables even if mounted on a reel
- Transient protection of all inputs and outputs
- Mid-to-High Voltage monitors approved to work with cable lengths up to 6.5km (4 miles)*
- Significant reduction of cable cost, repairs and production downtime
- Only MSHA-accepted high voltage pilotless ground monitors in the U.S.A.

BASIC GROUND MONITOR CIRCUIT BOARD LAYOUT

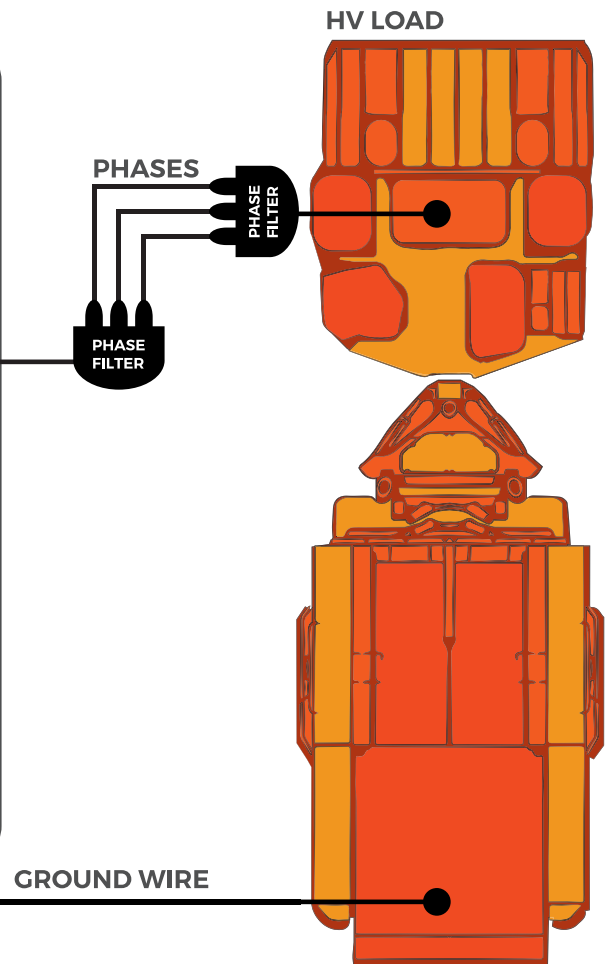


AMR GM
PROVEN PARTNER IN TECHNOLOGY

Flag Reset ● Power ON ●
Test ● Trip Flag ●
Trans. ON ●

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BASIC GROUND MONITOR APPEARANCE



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