



In every mine there is a chance that the Gases naturally occurring might build up to a high enough concentration to become explosive. The monitoring of these gas concentrations, therefore becomes a concern to maintain the safety of the mine workers. The key compounds of interest are Hydrocarbons in the C1 - C2 range and Carbon Monoxide and Carbon Dioxide. These light hydrocarbon gases have always been a challenge to separate. The development of capillary columns for light hydrocarbon separations has helped tremendously. The DPS Mine Safety GC System is configured with these latest designed high resolution capillary column and the sensitive FID, to quickly detect these potentially explosive compounds in less than 2 minutes. We have added a Vacuum Pump and Gas Sample Valve to fully automate the sample analysis. The fast heating and rapid cooling column oven in every DPS GC assures rapid sample turnaround. The fully integrated Mine Safety GC System is small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Available Configurations Include:

500-C2-091 - Companion 1 Portable Mine Safety GC Analyzer (FID, 30m)
Includes: 10-port Gas Sampling Valve, Valve Oven, Vacuum Pump, Methanizer, and "Ultra Quiet" Air Compressor



Companion 1 Portable GC

Mine Safety Gases

Peak	Component	Area	Conc
1	Carbon Monoxide	81.4	10.2
2	Methane	61.2	10.1
3	Carbon Dioxide	95.7	10.3

