

Automated System Monitors Mining Operations for ROI

Smart Systems



Data logger manufacturer dataTaker helps users gather the critical information needed to make faster and smarter choices. These smart systems are equally suited to customers in the industrial, manufacturing, scientific, geophysical, engineering, mining and defense industries.

At CAS DataLoggers we distribute dataTaker systems and consult with our customers to develop an ideal turnkey system. Our systems help lower the total cost of rig ownership and also assist in managing and maximising your organization's performance and capabilities. Whether you need a monitoring system for water monitoring, weather data collection, or industrial use, dataTaker is a flexible choice for your application.

Monitoring Brakes on Mining Vehicles

Excessive or harsh braking in heavy mining vehicles can result in a higher frequency of brake pad replacement and engine component servicing. To save on these repair costs, a [smart dataTaker system](#) is in use as part of a brake monitoring system on a fleet of loaders at a mine site to log speed, brake temperatures, applications, gear level and other measurement values. This intelligent monitoring system helps to reduce wear and tear and to reduce the mine's ongoing maintenance costs.

Water Monitoring (Wastewater, Dewatering Pits, Rivers, etc.)

Equipped with universal analog inputs for connection with many different sensor types, dataTaker can also be used as a [water monitoring station](#) to assist mining sites in meeting their reporting requirements under government environmental regulations.

Installed in a remote location for a major salt mine, a [dataTaker Water Monitoring Station](#) automatically monitors water quality parameters. Now via the dataTaker's built-in 3G cellular modem, the customer can access and download real-time data collected from the station.

Dewatering Pump Bearing and Airflow Temperature Monitoring

A large coal mining company is currently using dataTaker to dewater a mining pit using two pumps located on floating pontoons. The dataTaker datalogger assists in the maintenance and longevity of the pump operation, monitoring the temperatures of bearings and pumps for both systems. Additionally, users have configured preset alarms to signal an alarm at the pump control point and to switch the pumps off automatically using the dataTaker's intelligent control capabilities.

Automatic Weather Stations

DataTaker has also supplied its dataloggers as automatic weather stations to an extensive network of mines located in Australia. Two of these stations are being used to collect data as part of an official Environmental Impact Study for a proposed uranium mine.



The dataTaker stations are configured to monitor onsite weather conditions as well as solar radiation levels. These particular models also include 3G modems allowing data to be remotely accessed in real time.

Air Quality Monitoring Stations

A leading environmental management company has deployed 25 dataTaker air quality/dust monitoring systems on mine and construction sites. These monitoring stations offer solar power, datalogging and 3G connectivity, allowing the management company to conduct unmanned (standalone) dust monitoring studies for their mining customers.

DataTaker's system also connects to wind speed and direction sensors allowing the company to assess the impact of wind on the mine site's dust levels.

Process Monitoring and Automation Systems

A dataTaker system can form the core of a customized monitoring and automation system designed specifically for your application. In fact another system was recently supplied to an iron ore producer for the monitoring and automation of iron ore hoppers during wagon loading. This system integrates with the producer's existing SCADA system and provides optimization of wagon capacity and increased accuracy for billing purposes.

The Data Logger Experts

The strength of dataTaker's ability in data logging applications is its ability to form custom systems with data logging capabilities to meet customer specific requirements. At CAS DataLoggers we can assist with the design, construction and commissioning of systems that are tailor-made for Oil & Gas, Water/Wastewater, Environmental Monitoring and more.

Our Inside Engineering Department can help you to choose the right monitoring system for your application. Our new website makes it easy to get started [here](#).

For more info on the [dataTaker Systems](#), or to find the ideal solution for your application-specific needs, contact a **CAS DataLoggers Application Specialist** at **(800) 956-4437** or visit our website at www.DataLoggerInc.com.