

Customer Solution Profile

MPC Kinetic

Industry Focus: Mining

Kinetic Logging Services (KLS) is a geophysical logging service provider to the mining industry and part of a larger group MPC Kinetic. KLS acquires data by lowering and retrieving instrumentation down the drill holes. They run a fleet of vehicles with high output 14V 220A alternators on the engine that provides DC power for our 230VAC inverters, electric winches, DC powered hydraulic power units, multiple air conditioning and hydraulic cooling thermo fans, computers and ancillary equipment.



Customer Problem

The systems on dual alternator equipped vehicles consume a high level of current of between 110A-300A+ (particularly the hydraulics up to 190A). Failure of one alternator can lead to the vehicle shutting down as the batteries are required to provide the additional current required and they become depleted. The loss of an alternator prevents KLS from operating reliably and leads to lost revenue.

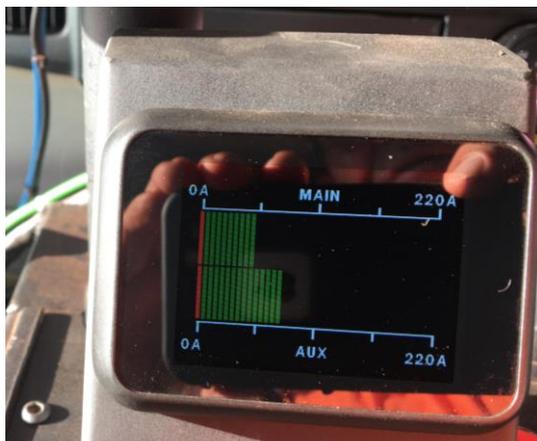
KLS needed a monitoring system to allow the vehicle operator to monitor the alternator operation and detect issues immediately.

Raztec Sensors Solution

KLS mounted two Raztec RAZFL-504MMCG sensors on the alternator output cables to monitor alternator current.

KLS used a programmable display with two analogue inputs, a 12VDC to 5VDC converter for the RAZFL-504MMCG supply and two RAZFL-504MMCG Moulded Current Sensors for the pair of 12V 220A alternators on the vehicle.

The display output was scaled to reflect the 0-220A out of each alternator. The new system has already been used to diagnose a faulty alternator.



"Our Raztec sensor equipped display allows our operators to rapidly diagnose alternator faults saving time and money"

*Peter Bloomfield
Engineering Manager
Kinetic Logging Services
MPC Kinetic Pty Ltd*



Raztec Sensors
NEW ZEALAND LTD

Custom Current Sensing Solutions

RAZFL Product Data

High performance, compact cable mounted current sensor for installation into rugged environments where a fully sealed product is required to assure reliability. The device is available in ratings up to 1000A, cannot be damaged by overload and is compatible with computer systems with its single 5V supply requirement.



Parameter	Symbol	Value	Unit
Operating temperature	T _A	-40 to +100	°C
Storage temperature	T _{stg}	-65 to +110	°C
Supply voltage	V _s	6	V
Output sinking current	I _o	10	mA
Measured current	I _m	Limited only by conductor	A

About Raztec

Raztec Sensors was formed in 1992 and since then have been designing, manufacturing and supplying Hall Effect current transducers to some of the world's most critical and demanding users.

Over the past twenty-plus years many millions of our current transducers have been designed into failure intolerant applications where Raztec's refusal to accept anything other than the very highest standard of manufacturing excellence (ISO9001:2015 approved) has resulted in a reputation that is the envy of companies significantly larger and perhaps better known.

Need a custom solution?

Raztec are specialists in designing customised Hall Effect current sensors to suit almost any type of application. A large proportion of the products we sell are customised towards our customers' needs. If you have a particular need that an off-the-shelf sensor just can't meet, then contact us about designing a current sensor to meet your requirements.

Who are our customers?

Raztec Sensors are recognized by many of our customers for our ability to provide top-quality performance at a very effective market price.

We work with clients such as Dunkermotoren/AMETEK, Siemens, Wrightspeed, Komatsu, Panasonic Electric Works, Marinceo, Techna-Tool, Metropolitan Pumps, Dynamic Controls. This has provided us the opportunity to engineer solutions that are specific to our clients' application.

This has resulted in a current transducer that provides exactly the output required for perfect control of the customer's specific application - at the most competitive price possible.

