

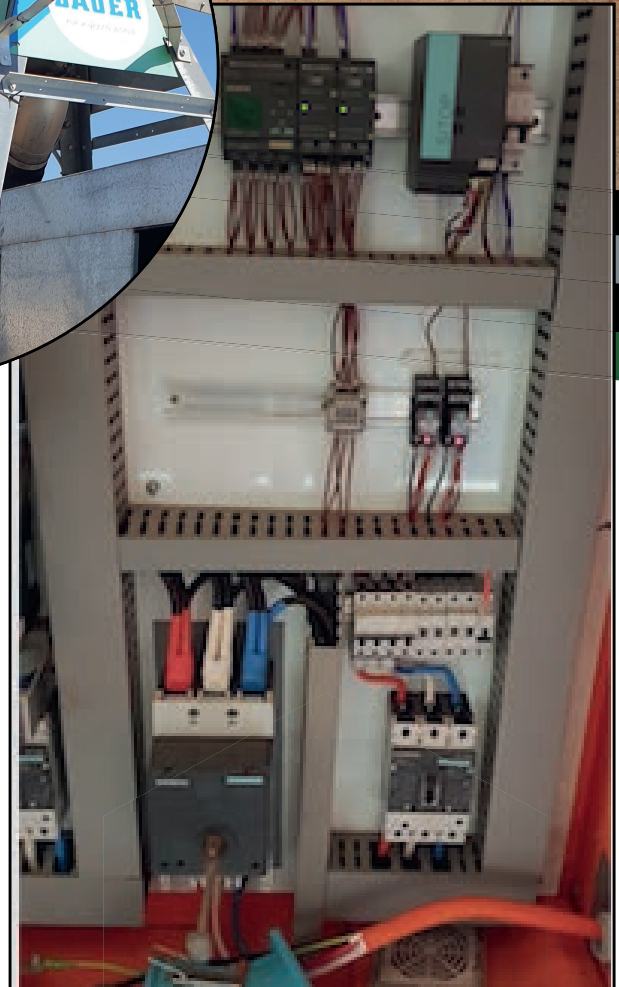


## Engine and Pump Monitoring and Control

Having the security of knowing the status of your pump is critical for efficient operations. MAC Systems remote engine/pump monitoring and control solution provides access to the state of your engine and pump via our web interface. This gives you the confidence of knowing what is happening at all times, especially if a problem arises. Should the pump shut down if there is a problem, you will be notified via SMS, email, or both.

### The MAC Systems DataNodes allow users to:

- Remotely start and stop pumps
- Monitor the run state of the pump and receive alert on shutdown - via SMS, email, or both
- Monitor associated sensors (such as flow, pressure, and water level) and raise alerts on conditions out of the normal operating range
- Record historical data for immediate and future reference





## Solutions for diesel and electric pumps

- Suitable for diesel and electric pumps
- Remote control and monitoring
- Monitor diesel level in tanks, record usage, and receive alerts when low
- Link tank level sites to pump sites for automated refilling (hardwired or wireless)
- Solutions for large or small pump installations
- Standalone watchdog options with remote monitoring of pressure, flow, run state, and alert on fault and shutdown
- Integration with variable speed drives on electric pumps such as ABB and Zenner
- Connection to diesel engine control panels such as Kensho for remote viewing, control, and alert notifications
- Remote emergency stop function
- Connection to a wide range of complimentary sensors such as flow, pressure, water level, rain gauges, and more
- Expandable with cost effective plug in I/O modules for additional monitoring and control functions if required

## System Features

### • Cost Effective Telemetry Upgradability

The existing DN radio network is modular and can therefore be unplugged and replaced. This allows us to alter the backbone of the local area network (LAN) over time and allows clients to cost-effectively take advantage of changing technology

### • Self-Healing Mesh Technology

Our existing radio frequency LAN can consist of various nodes all communicating with each other and to a Gateway connected to the internet. If a single DN failure occurs, the system can maintain communications for all other units by finding other routes through the network

### • Output control

This configuration allows users to automatically or manually switch connected devices such as pumps and irrigation equipment, or any electrically switchable operating system for light industrial clients

### • Realtime Interaction

Update rates can be altered in the web interface where clients have a specific need to improve the "realtime" response of the system

### • DataNode Condition Monitoring

The system can provide a health check and notify you if there is a looming problem with backup battery capacity or poor solar panel performance

### • Alerts

Notifications are available via any or all of the web interface, email, and SMS

For further information or to be directed to your nearest authorised reseller, please call or email:

0438 393 002

[info@macsystems.com.au](mailto:info@macsystems.com.au)

## Device Details - B1 Shed - Run State

