

## Gas Tank Level Monitoring

## Leading Gas Supplier Automates Cylinder Replacement

### The Need

One of Australia's primary industrial compressed gas suppliers provides over 100,000 kilograms of LPG to their network of commercial customers throughout the Brisbane area each month.

The gas supplier's previous process for customer replenishment was managed one of two ways dependent on customer preference. The customer could either call the gas supplier when their supply was low or depleted and receive same-day delivery/exchange, or the customer would agree to a fixed re-supply schedule in which their gas tanks would be manually checked and exchanged regardless of supply level.

While adequate, this process was time-consuming and less than efficient for both gas supplier and customer alike. An alternative solution was sought to automate this process.

### The Solution

The gas supplier implemented a fleet of 200 Captis Multi devices across their commercial supply network. The flexibility of the device meant that it could be installed either directly to the manifold cylinder pallet or fixed customer side, dependent on the customer's requirements.

Connected to analog pressure sensors, the fleet of Captis Multi devices were configured to record pressure levels every six hours, in addition to alerting low threshold events which would indicate a cylinder pallet was approaching empty. Captis Multi's GPS capability also provided the gas supplier with customer/cylinder pallet location. Each morning a report would be generated to create a route for the day's cylinder pallet replacements dependent on priority (lowest gas tank levels) and geo-location.

In place of the previous fixed schedule and "as needed" replacement processes, the gas supplier was able to automate their process and proactively manage their customer's industrial gas needs. As a result, the gas supplier has reduced replacement operating costs and improved customer satisfaction. The automated process is now also a key selling point for the gas supplier when speaking to potential new commercial customers.



**AUTOMATED ROUTE  
MAPPING**



**SIGNIFICANT COST &  
TIME SAVINGS**

# Solution & Application



## Captis Multi

200 devices are installed on cylinder pallets with 6 hourly data logging intervals for gas pressure levels



## Multi Sensor Interface

Chosen for its multi sensor interface that can connect to existing infrastructure and hydrostatic pressure sensor

## Remote Access

The NB-IoT cellular technology enables data to be transmitted from remote locations easily and reliably



## Rugged Hardware

The IP68 rated enclosure can withstand extreme temperatures and weather events



## GPS Functionality

Chosen for its multi sensor interface that allows for GPS monitoring to alert the gas supplier of the customer/cylinder pallet location



## Data Logging with Captis Cloud

Data logged in a central hub with pre-defined rules and alarms to ensure real-time data and accuracy