

# Petrol Pump Contingency Control

## The Untold Story that keeps the Economy Flowing...

Few drivers know, when they step up to a petrol pump to refuel, that they are dealing with a very advanced machine. Not only does it dispense fuel accurately according to the customer's request, it also tells them how much to pay and communicate with the operator inside the service station. A petrol pump has to be safe and reliable.

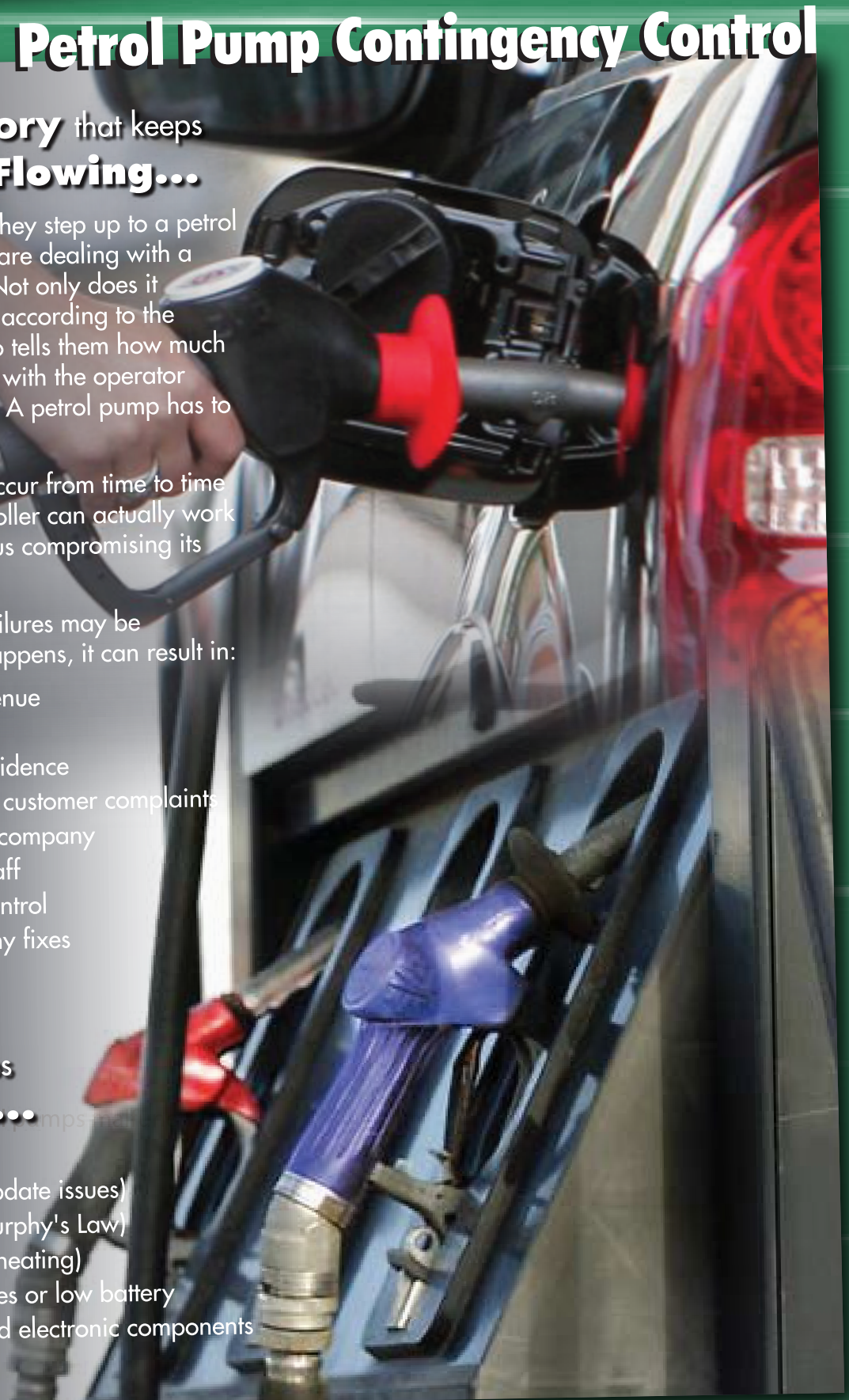
Nevertheless errors do occur from time to time and a petrol pump controller can actually work too hard for too long, thus compromising its performance.

Although petrol pump failures may be infrequent but when it happens, it can result in:

- Loss of company revenue
- Loss of customer time
- Loss of customer confidence
- Serious and frequent customer complaints
- Bad publicity for the company
- Stressed company staff
- Need for damage control
- Expensive and lengthy fixes

## Why petrol pumps malfunction...

- Systematic faults (design/software/update issues)
- Random failures (Murphy's Law)
- Environmental (overheating)
- Power surges, glitches or low battery
- Aging of sensors and electronic components



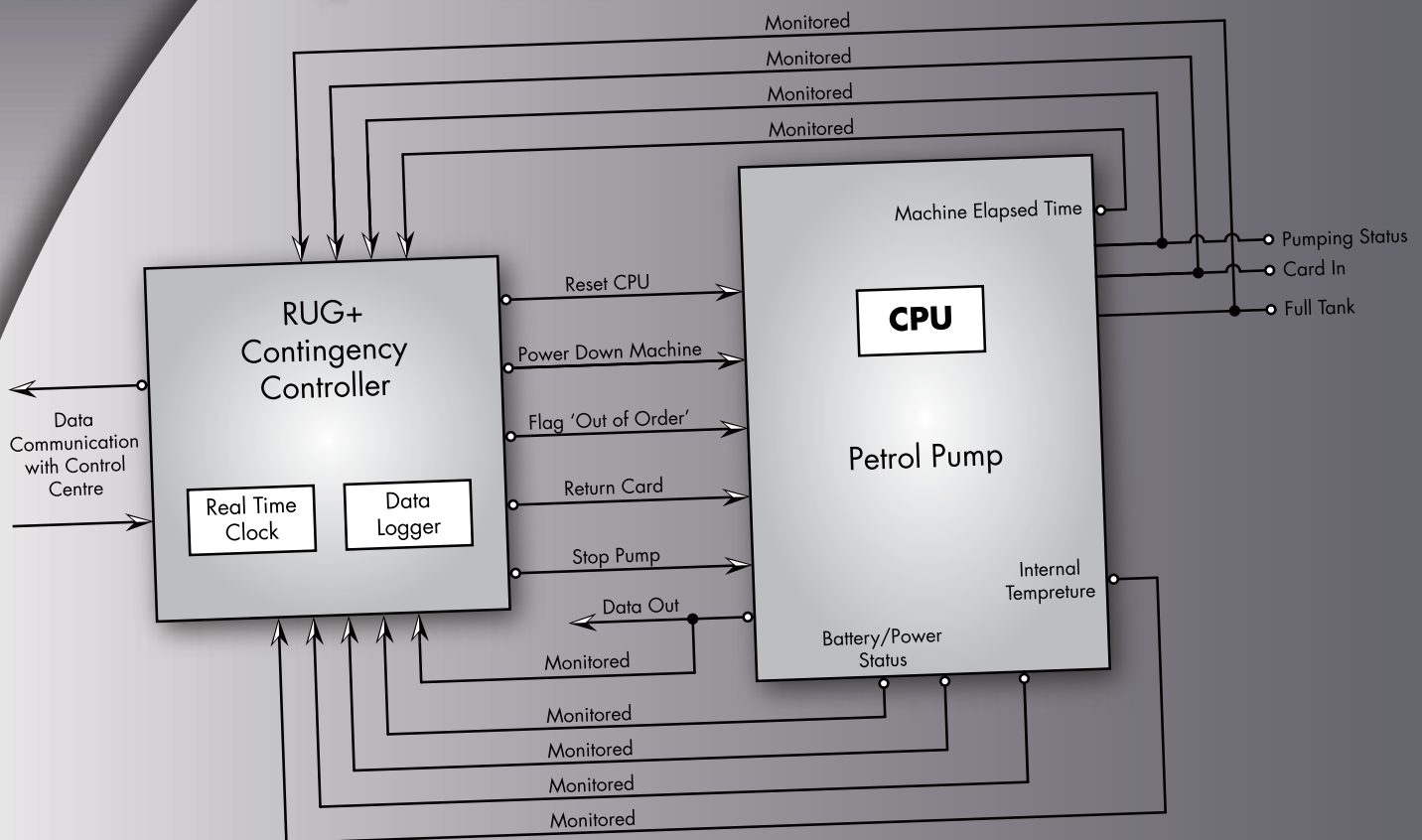
## Contingency Control

The straight forward answer is to install two machine controllers and to regularly replace the controllers. However that is not only expensive, it doesn't overcome problems such as overheating as both controllers can be too hot at the same ambient temperature, or software update issues as again both controllers will be affected.

### There is an easy and effective way of reinforcing ticket machine reliability – by RUG+

- Reliably detecting inputs/outputs/dacom malfunctions
- Intelligently handling alarms/time outs
- Accurately recording all fault conditions
- Promptly communicating with the control centre about any faults
- Faithfully executing supervisory commands from the control centre

## Petrol Pump Contingency Control



**RUG+ is a RUG3 RTU specially adapted to the contingency control of ticketing machines. RUG+ has the unique features of:**

- Multiple monitoring inputs and control outputs
- LCD command/data display and keypad
- 2MB date/time stamped data logger
- 145 logic control functions
- Battery voltage and internal temperature logging
- Industrial standard data communication (Modbus)
- Very small size and light weight
- -40 degree C to +85 degree C operating temperature
- 2mA @ 12VDC very low power consumption



## why trust RUG+

**You can trust RUG+** to be your contingency controller because it is designed and made in the USA by RUGID Computer, Inc. and technically supported by Neuplex' knowledgeable and experienced application engineering team.

We can assist you in integrating, installing, programming your projects and we can train your technicians on controller interfacing and troubleshooting.

We commit to addressing effectively any technical questions by same day or next morning and service turn round of 3 days or less.

For all the benefits to your company and the customers, RUG+ is competitively priced from US\$330.



## Neuplex Automation's Background

Neuplex was founded in 1994 and has successfully developed numerous products markets and projects, including a 1,400 analogue channel data acquisition system to India, 72 wind monitors in Singapore's container terminal and solar pumps in remote China.

Neuplex prides itself being the most helpful technical supplier in the region with same day/next morning responses to any technical questions before and after sales and typical problem solving time of less than 10 minutes on the phone, free. Because of its excellent service, Neuplex is an approved supplier to the Australian Department of Defence and NATO.

## Contact Us

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## Rugid Computer's Background

For over 20 years Rugid have been manufacturing a complete line of quality low-cost programmable logic controllers (PLCs) and remote terminal units (RTUs) for remote monitoring, data acquisition, control and telemetry applications. RUGID products range from ultra low-power RTUs to highly expandable PLCs. The new WiSI wireless sensor interfaces has won the Design News 2011 Golden Mousetrap Award for Best New Product.

