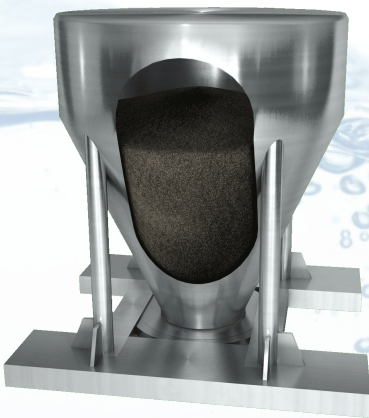
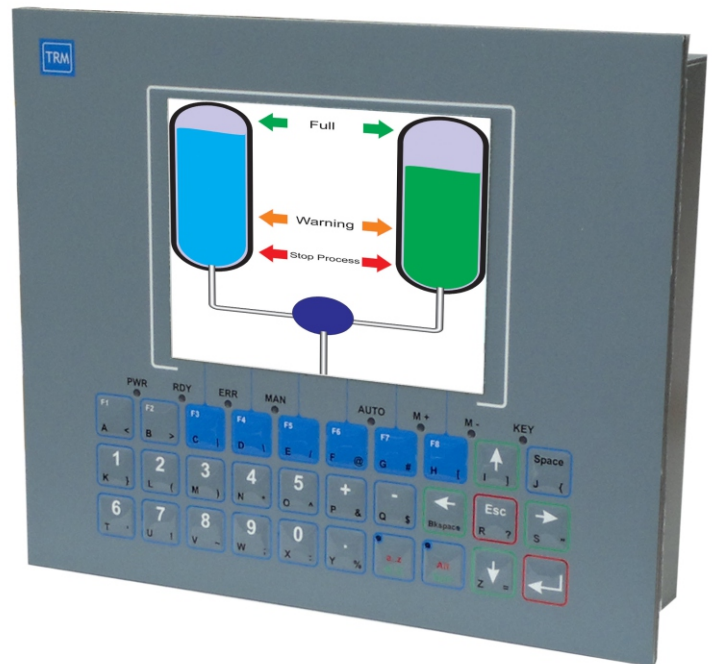


# ALC1000

## Tank Contents Control

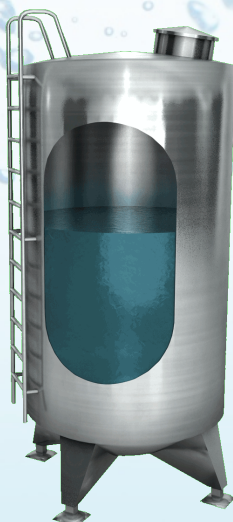
- *Cost Saving Design*
- *Ullage*
- *Digital and Analog I/O*
- *Alarms*
- *Pumping*
- *Dosing*
- *Hi-Speed Flow Meter Inputs*
- *Rugged Industrial Design*
- *Tank Levels*
- *Supports USB and CAN*



The new ALC1000 is a precision control system intended for accurate level control and/or monitoring.

The onboard HMI, digital inputs, outputs, ADC, serial port and USB, supported by ready to use software with advanced motion control makes this controller, the best and most cost effective solution for machine manufacturers and system integrators.

Using 4-20ma or voltage outputs from existing equipment makes connection a breeze.



- ◆ Hydrostatic Level Sensors
- ◆ Radar Sensors
- ◆ Ultrasonic Sensors
- ◆ Capacitance Sensors
- ◆ Load Cells
- ◆ Pumps
- ◆ Valves



UK Manufactured

### Processing Power

- ⊙ Freescale Version 2 Coldfire Microprocessor for Embedded Designs
- ⊙ High Processing Speed of 160 million instructions per second
- ⊙ 16 Mb Flash Memory
- ⊙ 2 Mb of Battery Backed 16 bit SRAM
- ⊙ 64 Mb of Double Data Rate High Speed RAM
- ⊙ FPGA design for high speed processing of IO, Encoders, Registration Inputs etc.
- ⊙ Low power consumption for battery run applications



### Operating System

- ⊙ Blackthorn OS for speed and stability developed by TRM
- ⊙ Design ensures minimal code size
- ⊙ Updates available via Pen Drive
- ⊙ Used throughout our range of controls
- ⊙ Interrupt driven architecture for stability
- ⊙ Designed for the embedded environment

### System Memory

- ⊙ 64Mb DDR
- ⊙ 2Mb SRAM
- ⊙ 16Mb FLASH
- ⊙ USB upto 8Gb
- ⊙ SD Card option

### Communications

- ⊙ USB 2 Host
- ⊙ USB On-The-Go (optional)
- ⊙ Controller Area Network (CAN)Port
- ⊙ RS232 Serial
- ⊙ RS485 Multidrop Serial



### PLC Support Services

- ⊙ **Alarms and events:** The system supports up to eight 'events', events are interrupts generated from change of input, timeout, position capture/match or keystroke. Events can be used as an alarm, emergency stop function, motion control manager, timer function etc.
- ⊙ **Timer:** Eight precision timers are supported
- ⊙ **Maths and calculations:** Comprehensive mathematics used throughout. From basic addition and subtraction to sine and cosine plus many more.

### I/O Services

- ⊙ **Inputs:** 16 Opto Isolated (PNP or NPN)
- ⊙ **Outputs:** 12 1A current limited sourcing outputs. Suitable for relay and contactor control etc.
- ⊙ **Control Outputs:** 4 Motion control outputs +/- 10VDC.
- ⊙ **Stepper Motor:** 4 Channels of Step & Direction
- ⊙ **Analogue Inputs:** 4 High Speed at 0 -10V
- ⊙ **High Speed Digital Inputs:** 2 for fast registration capture
- ⊙ **Encoder Inputs:** 4 channels per Axis plus upto 3 internal Jog/Velocitiy

