

“The ultimate pump management system”

Kwikstart™

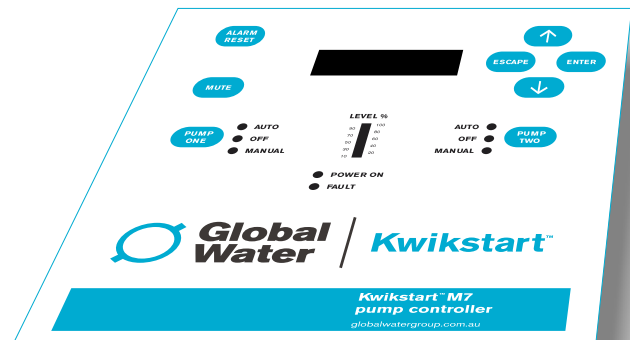
Engineered to withstand the harsh and diverse environments of pump station controllers, the Kwikstart™ M7 is purpose designed as a dedicated pump management system.

Combining many years of experience in the submersible pump station and control industry, the Kwikstart™ M7 incorporates a unique combination of features insuring total reliability, pump protection and control management.

The Kwikstart™ M7 is ideally suited for dual pump installations in a wide range of applications including sewage, effluent, storm water and portable water transfer.

Kwikstart™ M7 can be mounted on an internal door and built into a standard powder coated steel weatherproof enclosure, custom made aluminium or stainless steel enclosures or full municipal pump control centres.

Configurable for a wide range of level input signals including float probe, ultrasonic and pressure transducer, the Kwikstart™ M7's versatility covers a broad spectrum at commercial, industrial, municipal and domestic applications.



- **PRECISION ACCURACY**
- **GREATER PUMP PROTECTION**
- **SUPERIOR PUMP MANAGEMENT**
- **DIGITAL LIQUID LEVEL DISPLAY**
- **INCREASED STATION RELIABILITY**
- **TEXT FAULT DISPLAYS**
- **ULTIMATE CONTROL FLEXIBILITY**
- **SIMPLE TO OPERATE**
- **PUMP DIAGNOSTIC AID**

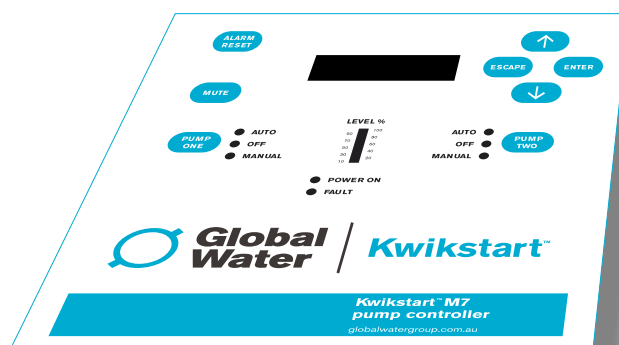
System features

Kwikstart™



- Configurable for Tank Fill or Tank Empty, 1 or 2 Pumps, and Single Pump alternating (sewage) or Dual Pumps (stormwater or tank fill) operational modes.
- System status and parameters including pump operational data and all faults displayed in user-friendly text on a 2 line back-lit display,
- Probe or float switch inputs - adjustable probe sensitivity, suitable for a wide range of liquids.
- User friendly push button operation for alarm reset, audible alarm mute, pump operation mode, and program.
- PIN number protection of configuration menus. Personalised PIN programmable.
- All fault inputs low voltage for safety. Programmable for either normally open or normally closed contacts.
- Every controller can be given its own ID number - facilitates site identification and fault diagnostics.
- Eprom logic allows future software upgrade.
- Power-on and fault LED indication.
- Pre-programmed default parameter settings for common applications to simplify set-up.
- Audible panel warning tone when in Manual or Program mode.
- Pump fault indication remains latched until fault is manually reset or pump is isolated.
- Time delay on starting second pump if other pump is running in Dual Pumps mode - prevents both pumps starting together when power restored after an outage.
- Maximum off time feature - will start a pump if no pumps have run during an adjustable preset time, providing there is liquid in the pit. Prevents septic sewage and maximizes storage volume.
- Inbuilt contactor surge suppressors.
- Optically isolated inputs and outputs.
- Plug in connection blocks.

“Featuring precision control with high reliability and superb pump management protocol”



System features

- Constant monitoring of all three phases of electrical supply to protect pumps from phase fail or under/over voltage.
- Anti-cycle protection timer to limit excessive starts to the maximum pump rating - protects pump motor and enables selection of smaller pit detention volumes.
- Dry-run protection in Manual mode - pump turns off automatically when there is no liquid in station. In addition, there is a special over-ride function that by-passes all level controls and pump protections to enable pit to be pumped dry - turns pump off automatically after 10 minutes.
- Pump diagnostics - records hours run and number of starts of each pump, and monitors motor temperature (thermostat or PTC100 thermistors).
- Pump Service Required indication - non-critical fault activates when pump running hours reaches preset figure.
- Hardware diagnostics test.

“The ultimate pump management system”

Operation and fault monitoring

- Pump operating status - LED and text indication of auto/off/manual mode and pump run status for each pump.
- Three text fault menu displays - Current, Present and Previous Alarms aiding accurate fault diagnostics.
- Critical faults activate red alarm light (Well glass) and audible alarm.
- Alarm fault light selectable flashing or steady.
- Audible alarm can be set for either manual mute or auto mute after adjustable time of up to 3600 seconds.
- High Level alarm - selectable latching or auto reset.
- Low Level alarm - turns pump off in Empty mode. Fault latches, but pumps able to run when level reaches Start
- Pump choke or reflux valve choke protection - automatically changes pumps in Single Pump mode on high level fault. Locks out pump if fault occurs three times sequentially.
- LED display of level regulator activation.
- Level Sensor fault monitoring - over-rides faulty sensor plus activates alarm. Auto resets.
- No Pumps OK fault output - ensures operator realises that neither pump is available.

Enhanced version - Kwikstart™ M7+

Kwikstart™

The Kwikstart™ M7 Pump Controller is available in an enhanced software version for municipal and building services installations requiring telemetry or remote monitoring capabilities, or where additional protection functions and accurate level monitoring have been specified.

Called the Kwikstart™ M7 PLUS, additional features include the following:

- Direct input from multi-sensor probe or 4-20mA signal from ultrasonic or pressure transducer.
- Emergency high level probe or float input to activate alarm and start pumps in the event of ultrasonic failure.
- Auto Well Washer output - programmable on both number of cycles and run time.
- PLC telemetry communication output of all system and pump status data including faults and liquid level, via serial data stream.
- All faults can be individually prioritized for Critical or Non-critical telemetry outputs, allowing non-critical faults to be transmitted during business hours, with or without local audible and visual alarm indication.
- Selectable upgrade of non-critical fault to critical fault output if both pumps fail.
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- 10-point LED visual and text display of station liquid level in pit or tank. Level spannable to show depth in mm in Analogue mode.
- Direct input from seal probe for detection of moisture entry into seal chamber. Selectable to either alarm only or isolate pump alarm and start standby pump.
- High pressure and no-flow protection alarm inputs for each pump with by-pass time delays.

