

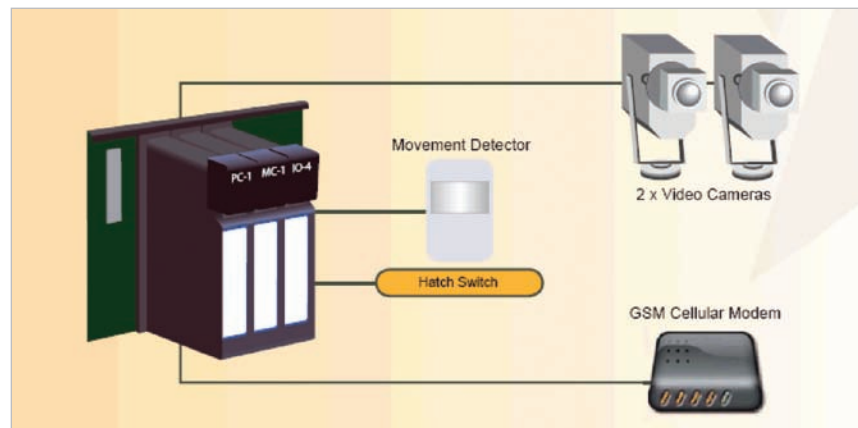


## Reservoir Monitoring Using Slow Scan Video Capture

### Monitoring

The Kingfisher Picture Display program and Kingfisher RTUs are used by South East Water Limited, a water distribution company that supplies 1.4 million people in the southeast region of Melbourne, Australia.

In this application, video cameras are mounted on top of water storage reservoirs and video capture is triggered by PIRs (infrared movement detectors) mounted at the top of stairwells and/or trip switches connected to reservoir hatches. When triggered, the RTU is set to capture and store 3 pictures at 2 second intervals. Pictures are transferred to the host SCADA system over the SCADA radio network or using GSM modems. Pictures are displayed and archived on the operator workstations using an ActiveX interface to the Kingfisher Picture Display program.



### Video Setup

The Kingfisher Picture Display program allows management of the capture, uploading, viewing and archiving of video pictures. The video settings menu allows setup of:

- **Input channel** For slow scan video capture applications, the RTU may support up to 4 cameras per CP/MC module (16 ports max. per RTU).
- **Picture size** Large (352x288 pixels, around 22kB/frame), medium (176x144 pixels, around 8kB/frame), small (88x72 pixels, around 3kB/frame).
- **Picture format** Modes include PAL or NTSC.
- **Colour space** Modes include RGB or greyscale.
- **Pixel format** Modes include 8 bit or 24 bit.

### **Picture storage**

The picture file manager allows setup of:

- **Picture files** Keep all pictures, keep last 'x' quantity of pictures, or keep pictures newer than 'x' sec/min/hr/day.
- **Data capture** Modes include, manual, continuous upload, periodic or event triggered uploads (eg. movement or audio trigger at the local RTU can initiate video capture by the RTU).

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