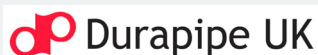


**Solution:** Anybus Communicator  
**Country:** UK  
**Company:** Durapipe  
**Summary:** Anybus Communicator allows Durapipe UK to signal the electric actuator and know that the actuator has responded accordingly.

### The benefits

- Requires no hardware or software changes to be made to the connected device
- Compatible with all PLCs with PROFIBUS support
- Saves machine builders and device manufacturers having to integrate a PROFIBUS interface



“The physical simplicity of the solution appealed to us, saving a lot of potential engineering work,”

#### KEVIN WILLIAMS

Technical support engineer at  
Durapipe

## HMS protocol converter gateways brings PROFIBUS capability to water industry valve actuators

Leading pipework and ancillary equipment manufacturer Durapipe has expanded its offering for the water and wastewater treatment industry with the capability for electrically actuated valves to be controlled over PROFIBUS. To provide a simple interface from the valve's standard RS232 protocol to PROFIBUS, Durapipe turned to HMS Networks and the Anybus Communicator AB7000.

Established in 1954 Durapipe was one of the first businesses to exploit the emerging thermoplastic industry, developing a range of pipe systems for a host of different industries. Over the years, it has continued to research different materials to develop innovative pipework products, and has added a host of ancillary items to its portfolio to provide complete flow control systems.

A principal area of business is the water and wastewater treatment industry where the pipework requirements can be complex and diverse – be it for the transfer of potable water, wastewater, reverse osmosis systems, slurries, ultra pure water or effluent treatment. Durapipe meets these requirements with high quality, fully matched plastic systems of pipes, fittings, valves and flow monitoring equipment.

“With such installations typically extending over extremely wide areas, fieldbus networks are common to minimise wiring and we had received increasing numbers of enquiries for electric valve actuators that could be controlled over PROFIBUS,” says Durapipe technical support engineer Kevin Williams. “It wasn’t something we had in





our portfolio, so we started looking around for simple way of integrating our valves onto a PROFIBUS network.

A chance conversation with engineers from HMS Industrial Networks at a trade exhibition highlighted an ideal solution in the form of the Anybus Communicator AB7000. This proven and trusted protocol converter gateway connects non-networked industrial devices and equipment to PROFIBUS, enabling the integration of serial RS-232/422/485 based industrial devices and equipment without the need for any changes to the device. Just connect, configure and you are done.

The Anybus Communicator performs an intelligent protocol conversion and presents the serial data to the Master PLC/controller as easily processed I/O data. As a simple add-on to existing serial devices, it provides an easy way of integrating equipment into today's fieldbus networks without the engineering headaches of having to embed a PROFIBUS interface within the device itself.

"The physical simplicity of the solution appealed to us, saving a lot of potential engineering work," says Williams. "Also, the configuration was easy: we're not performing complex functions – the valve needs to be either opened or closed. We're not looking at translating 4-20mA signals and monitoring the status of the valve at different positions. That's not what's needed in these particular water applications. We just need to send an 'open' or 'close' signal to the electric actuator, and know that the actuator has responded accordingly."

The Anybus Communicator is housed in a separate enclosure to the valve actuator, so no redesign of the actuator was required. An IP65 or higher environmentally protected enclosure ensures reliable operation in the outdoor locations typical for valves in water and wastewater treatment applications.

Durapipe is excited to be able to add these PROFIBUS-enabled electrically actuated valves to its portfolio, and is already looking at further developments. "At the moment we're just sending simple commands and monitoring that the valve actuator has responded accordingly," says Williams. "But for the future there is the potential to build in diagnostics capabilities which could aid in status monitoring and maintenance, all helping to minimise downtime and boost process productivity."



Learn more on [www.anybus.com](http://www.anybus.com) - [www.durapipe.co.uk](http://www.durapipe.co.uk)

The Anybus Communicator is a proven and trusted protocol converter gateway that connects non-networked industrial devices and equipment to PROFIBUS and other networks. The gateway performs an intelligent protocol conversion and presents the serial data to the Master PLC/Controller as easily processed I/O data. The Anybus Communicator is a slim stand-alone gateway designed for IP20 and DIN-rail mounting, requiring a 24-volt power supply.