Anybus® BY HMS NETWORKS

Case study:

Message displays

Solution: Anybus Communicator
Country: U.K.
Company: London Electronics Ltd.

Effects:

- Communication enabled between the RS485-based displays and PROFIBUS.
- Lowered costs and faster time-to-market compared to in-house development.
- Possibility to communicate on any other industrial network.

"We simply plug the Communicator in at the back of our displays and they are ready to go."

James Lees
Director at London Electronics

Making signs talk!

How London Electronics enabled their large message displays to communicate on PROFIBUS.

Real-time message displays are a great way to provide people with on-site live information — from the number of units produced today, to current temperature or percentage left until a certain goal is reached.

The information on the signs usually has to be gathered from some kind of high-level programming language or automation server. This can be tricky since different automation systems use different networks and communication standards. With the use of Anybus Communicator gateways, London Electronics has made their signs speak PROFIBUS – and also enabled them to communicate on any other fieldbus or industrial Ethernet network.

Getting live values from a production system

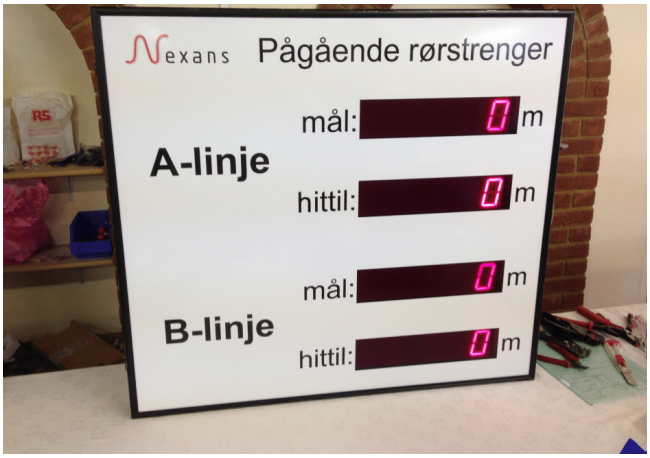
London Electronics Ltd. designs and manufactures large displays allowing their customers to measure and present any physical variable. Their displays communicate using serial RS485 communication while the input for the displays usually comes from a production system running some kind of industrial network. Consequently, this input needs to be "translated" in order to be understood by the displays. PROFIBUS is a common fieldbus which the displays must communicate with.

"We previously had our own PROFIBUS module inside our displays, but we realized that the overhead costs for producing the modules and staying on top of network communication were higher than buying a network communication gateway off the shelf," says James Lees, Director at London Electronics. "Now, we just order an Anybus Communicator from HMS whenever we need PROFIBUS communication, which is much more cost-effective."

Quick to get up and running

Getting started with the Anybus Communicator was a quick process for

Behind the display. *The Anybus Communicator in action inside one of London Electronics' displays, converting data from the PROFIBUS network to the display system.*



How much cable is produced? *Nexans is a global manufacturer of cables and cabling systems. This sign was delivered to one of their factories in Norway and displays how many meters of cable have been produced so far (hittil) compared to the goal (mål).*

London Electronics. The configuration between PROFIBUS and RS485 is made in the Anybus Configuration Manager software which is included in the product package from HMS. This means that no programming is necessary and the setup can be made in a matter of minutes.

"Since we now have the configuration files ready, we can re-use these configurations whenever we have a new PROFIBUS-based display," says James Lees. "We simply plug the Communicator in at the back of our displays and they are ready to go."

Enables communication with any network

With the Anybus Communicator concept in place, London Electronics can potentially connect their displays to any other fieldbus or industrial Ethernet network as well. The Anybus Communicator comes in 15 different network versions which means that London Electronics' displays can communicate with CANopen, CC-Link, EtherNet/IP, Modbus-TCP etc. by simply switching to another gateway.

Mutual benefits

By implementing the Anybus Communicator, London Electronics has been able to focus on what they do best, building state-of-the-art performance monitoring systems, instead of spending time on network communication. The partnership with HMS has been rewarding for both parties — HMS provides network communication, and London Electronics has become the favored partner for displays.

Tips to new users

After using the Communicator for some time, James Lees at London Electronics can warmly recommend the solution. "My advice is to use HMS as a communication partner. Send them your serial string to have it analyzed and optimized for use with the Communicator. Our experience is that you can save a lot of time by leveraging on their expertise."

Learn more on www.anybus.com or www.london-electronics.com

Anybus Communicator can connect almost any automation device with a serial communication interface to fieldbus and industrial Ethernet networks. The Communicator performs an intelligent conversion between the serial protocol of the automation device and the chosen industrial network.