



The Wireless Cowshed - wireless IP Surveillance to manage milk production



“Our wireless solution means that we can easily monitor the entire operation, irrespective of where we are. We have four locations which are linked together wirelessly and with very simple equipment we can control the entire production from any location.”

Jakob Eriksen,
Land owner & farmer

Background – using technology to milk efficiently

When a cow is milked, it is not humans but machines that do the milking. Fully automatic robots have taken over the manual work and now the farmer need no longer be present in the cowshed when milking takes place.

Funen, a Danish dairy farm run by landowner and farmer Jakob Eriksen, looks after 270 dairy cows, all of which must be fed and milked every day. Denmark is one of the countries in Europe most advanced in agricultural technology. Automatic milking robots have become natural features in the Danish cowshed, and development is continuing rapidly.

Within a short time, the entire apparatus of milk production will be IP-based, enabling the monitoring, operation and maintenance of a modern farm to be remote-controlled from anywhere in the world.

The Challenge – how to stay in control of production

“We can see that there is rapid technological development in agriculture,” said Peter Søby, IT consultant at TNM Teknik (a company specialising in advanced IT solutions for agriculture). “At the same time, there is a need to make all processes more efficient in modern agriculture and that also means fewer employees to handle even large farms.”

Typically, a modern farm consists of many different buildings such as sheds, grain stores, and residential buildings spread over a large area. Having fewer employees to control large-scale production means it is important to be able to operate the farm using new technologies such as a wireless network.

At Funen, with distances of up to 400 metres between buildings, it was not economically viable to use a traditional cabled network. Alternatively installing a wireless network would save time and money: if all these units could be linked together wirelessly, the farmer would be able to control the milking robots and supply feed remotely from his own home.

The solution – using wireless and IP cameras to monitor cows

D-Link, in collaboration with TNM Teknik, developed a wireless solution that allowed remote control and monitoring of all agricultural production using IP cameras.

“Our wireless solution means that we can easily monitor the entire operation, irrespective of where we are. We have four locations which are linked together wirelessly and with very simple equipment we can control the entire production from any location,” explains Jakob Eriksen.

Benefits – a healthy herd means healthy production

TNM Teknik has also installed IP cameras with integral microphones in Jakob Eriksen's cowshed. This gives the farmer greater freedom and flexibility, allowing the herd to be seen and heard without the farmer being physically present. In particular, the sound is important if a farmer is to decide whether a cow is well.

“The IP cameras give us the opportunity to keep up with our cows' wellbeing, without necessarily being present in the shed. This gives great flexibility, e.g. if a cow is about to calve. Normally we would be out in the shed watching the cow until the birth begins, but now we can monitor her via the IP camera and only go out to the shed when something happens,” explains Jakob Eriksen.

TNM Teknik predicts that agriculture will continue to develop rapidly and in the future many farms will be adopting IP technology to control production. “There are many advantages for modern agriculture in IP-based solutions, and I am convinced that in the future we will see even more wireless farm production. The technology is available, and the farmer knows that this is what is needed if Denmark is to continue to be competitive in agriculture,” concludes Peter Søby



For More information : www.dlink.com

D-Link European Headquarters, D-Link (Europe) Ltd., D-Link House, Abbey Road, Park Royal, London, NW10 7BX. Specifications are subject to change without notice. D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries. All other trademarks belong to their respective owners. ©2014 D-Link Corporation. All rights reserved. E&OE