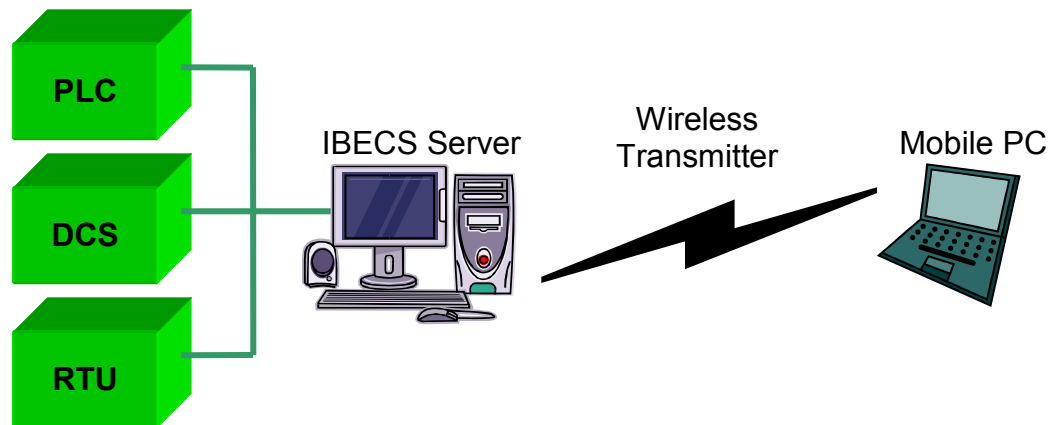


Wireless Communication for Advanced Operator Interfaces

Early digital control systems relied on proprietary, hard-wired communication between controllers and the operator interface (HMI). These older, “closed” systems are rapidly giving way to new systems based on Open architectures. Since the mid-1990s, the availability of powerful, low-cost personal computers has made the use of Windows based HMI software the standard for most applications. This trend continues in the use of highly reliable, low cost components to build wireless plant networks for monitoring and control.

There are many advantages to using wireless technology. To control costs, many plants are requiring operators to perform multiple functions. This requires the operator to get out of the control room and into the plant production areas. Up until now, operators have had to rely on alarm lights and audible signals to alert them when attention was required. Even then, the operator would need to return to the control room to determine the exact situation and take corrective action. With wireless technology, the operator can always stay in touch with the process, and if need be take corrective action to keep the plant running safely. Additionally, the operator can make adjustments to equipment and instruments in the field and immediately see the results of his action.

CSE provides an advanced plant control system called IBECS™. The heart of the IBECS system is an HMI packaged based on VTS from Trihedral Engineering. VTS is a very powerful platform on which to build applications. It features client-server architecture for both data and configuration, along with on-demand trending and bullet-proof security found on much more expensive systems. These features make it possible to build a secure and reliable wireless plant communication system. A typical system layout is shown below.



CSE has designed and installed a number of wired and wireless plant HMI systems. We can supply one to match any need. Let us show you how this technology can help improve your plant operation.