

Control and Monitoring of a Heat Distribution Network

The Challenge

Prazska Teplarenska a.s. (Prague District Heating Company) supplies heat to more than 265,000 homes and businesses in Prague, the capital and largest city of the Czech Republic. The distribution network includes some 664 kilometers of pipeline and 49 heating plants. Operators must monitor and control key system points like boiler rooms and heat transfer stations, and the remote heat meters at customer locations must be able to report their data to the invoice processing software in the central office.

But some parts of the pipeline and its associated customers are located in areas where wired connections are impractical, due to issues ranging from physical barriers to complications involving estate ownership and the close proximity of controlled technology. Prazska teplarenska a.s. needed a wireless solution.

The Solution

B&B Electronics subsidiary Conel s.r.o, experts in cellular data transmissions and control solutions, solved the problem with its ER75i routers. Each ER75i router can connect up to 30 heat meters using a single M-bus (Meter Bus) loop and transmit the data to the company's central server via the regional cellular network. Using a built-in Ethernet 10/100 interface, the routers can also connect local Ethernet networks in boiler rooms and heat transfer stations to the command and control system in the central office.

Why B&B Electronics?

B&B knows that there's more than one way to move data, and that every project has different requirements. In this case we solved our customer's problem by making use of the existing cellular telephone network. Choose B&B Electronics to make network installation and maintenance easy and affordable.

The Product

ER75i Wireless Cellular Router

Standard equipment includes a USB port and Ethernet 10/100 interfaces. Optional ports are available. -30 ° C to +60 ° C (-22° F to 140° F) operating temperature

Two SIM card ports – Users can use alternate cellular providers for system redundancy.