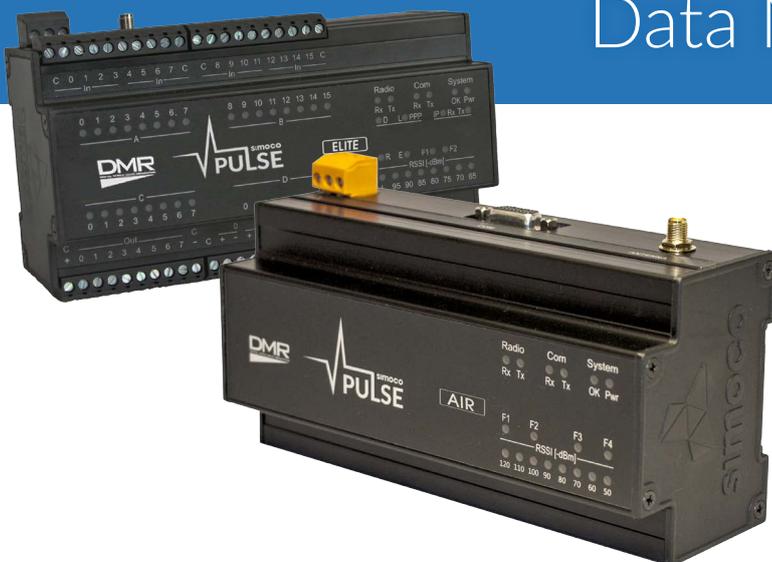


# Management & Control for Smart Grids & Smart Cities



Integrated RTU,  
Data Modem & Gateway



*Monitoring the Heartbeat of Mission Critical Networks*



## Simoco Pulse is a suite of products which enable organizations to deploy SCADA telemetry applications over narrowband PMR (private mobile radio).

**T**oday's utility and public service operators need to do more than just monitor and control operations across vast areas.

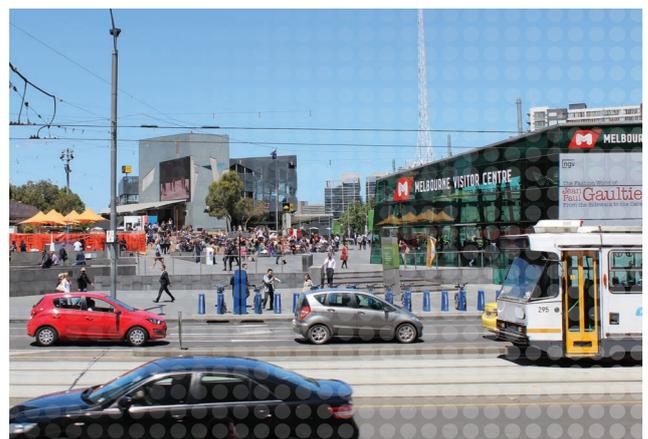
Automated and remotely delivered communications bring significant benefits such as: real-time monitoring, network optimization, delivery of proactive maintenance programmes and the remote implementation of commands and updates.

However setting up the communications infrastructure to support data transmission and control, as well as voice comms can be challenging. Cellular coverage can be patchy and intermittent, and installing wired networks has significant cost implications, especially where wide and remote areas are concerned.

Simoco Pulse is a suite of products which enable organizations to deploy SCADA telemetry applications over narrowband PMR (Professional Mobile Radio).

Using wireless radio infrastructure as the comms carrier, Simoco's Pulse solutions enable SCADA applications to be quickly and cost effectively deployed across operational areas.

In many instances, the wireless infrastructure is already *in situ*, enabling even faster deployment. Many organizations are benefiting from the operational and resource efficiencies brought by combining voice and data transmission across a single resilient and available radio network.



# • The Simoco Pulse Portfolio

## Pulse ELITE - Integrated RTU

For in-field deployments, Simoco has developed a fully integrated RTU (Remote Telemetry Unit) with digital and analog inputs for the collection of data and status information from plant equipment such as pumps, meters, switchgear and PLCs (Programmable Logic Controllers). The RTU also features digital outputs to enable wireless control or distributed automation of these remote devices via actuators.

The Pulse ELITE is available in a number of configurations depending on the digital and/or analog, input and/or output requirements. The product is further enhanced with the Pulse Gateway and a web based programming tool.

## Pulse AIR and AIR Pro Data Modem

For customers who already have RTUs either integrated into their equipment or have exiting RTUs deployed over unreliable unlicensed UHF or public networks such as 3G or GPRS, Simoco has developed a data modem product. The data modem directly interfaces with any RTU that uses standard telemetry protocols, and transport data back to the SCADA master using reliable digital over licensed VHF or UHF channels.

The Pulse AIR has been specifically designed to address the needs of customers who have equipment using only DNP3 protocol and the DNP3 Gateway has been integrated into the Simoco DMR Xd base station to provide the most optimized and cost effective solution.

The Pulse AIR Pro is a fully protocol featured Data Modem compatible with a large range of customer RTU equipment. The product is further enhanced with a web based programming tool.

## Gateway

To complete the solution, Simoco offers a range of Gateway products which enable the SCADA master(s) to seamlessly interface with the digital radio infrastructure. This makes the radio infrastructure transparent to the SCADA application and thus requires no customization or integration in order to deploy SCADA over radio. Systems can either be fully deployed over PMR or can be used to form part of mixed technology telemetry solutions.

Simoco's Pulse solutions meet the needs of a wide range of utility operations' electricity distribution; generation and supply; oil; gas and water. They also serve any sector where there is a requirement to acquire and control data from equipment and systems.



# Benefits

## Reliability

PMR reliability with fully resilient, distributed architecture using licensed frequencies

## Scalability

Fully scalable on DMR Tier III trunked system, designed for tens of thousands of devices

## Cost Effective

Low operating costs achieved through CAPEX investment and consistent dependability

## Improved Coverage

Wider range of coverage for the entire operational region keeping you constantly connected

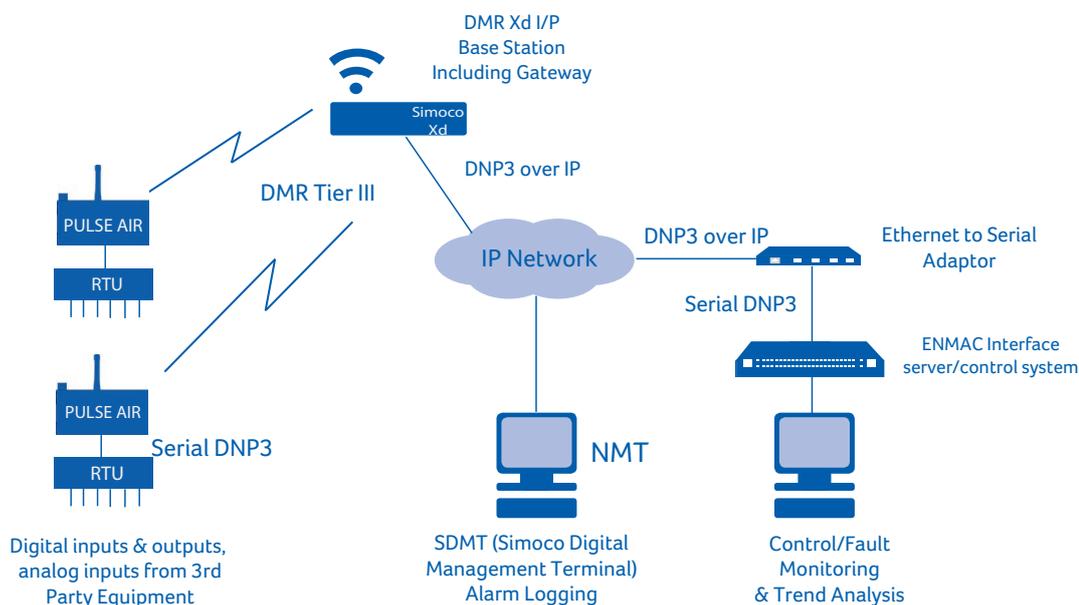
## Ease of Integration

RTUs can seamlessly share the DMR system with voice and other data users

## Industry Standards

Industry standard interface protocols; DNP3, IEC 60870-5-101, IEC 60870-5-105, Modbus

## Simoco Pulse Data Modem AIR



## Simoco Pulse Data Modem AIR Pro and Elite

