

Companies have used SCADA systems for many years and many different purposes to monitor systems and maintain their infrastructure in real time. Many are now finding these **SCADA systems are too old** to meet modern, mission critical requirements and have high maintenance demands. These networks are rapidly coming to the **end of their effective lives!**

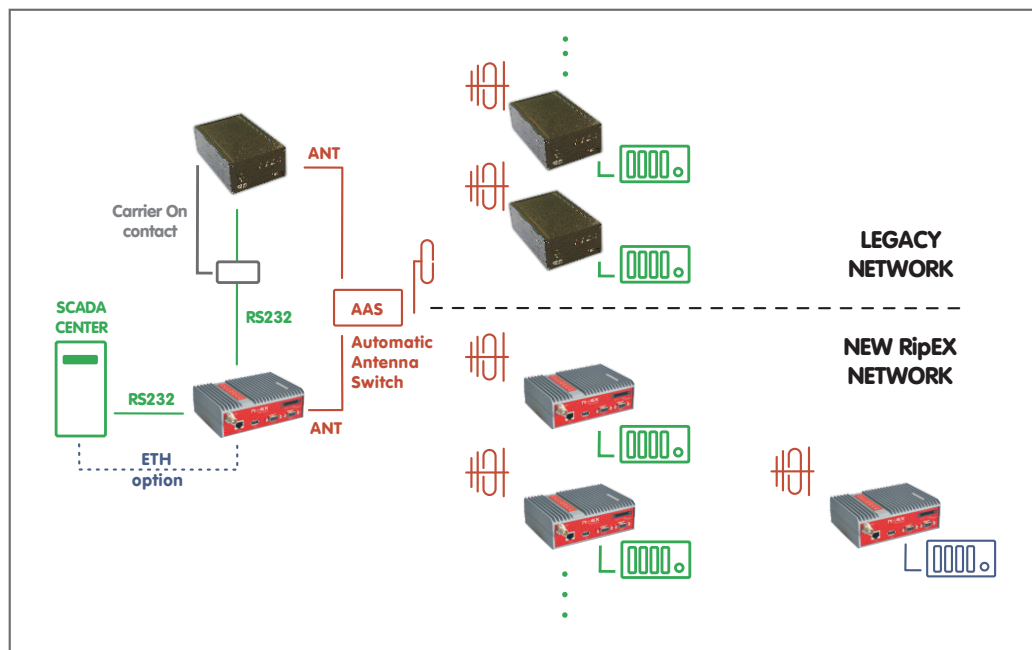
The optimal solution would be a **phased upgrade** to a modern, **future proofed** radio network using **staged funding** and **available manpower**. This would allow the scaled upgrade to be completed in a well-managed way with **no network outages** in the legacy network.

RipEX was designed to **handle just such a scenario**. Any RipEX unit can be used as a base station and routing tables are used to manage the traffic. Both of these factors enable migration **without** the need to buy expensive **temporary migration hardware**.

The RACOM Migration Solution works equally well for any scenario; whether existing polling or report by exception networks are to be migrated or expanded.

Customer benefits

- Standard RipEX units used - no expensive temporary migration HW required
- Budget investment directed where needed
- No network outage during migration
- Migration as part of regular maintenance
- Gradual one by one replacement
- Pay as you grow!



Radio modem & Router

- 166 kbps
- 1× ETH, 2× COM, 1× USB
- 0.1–10 watts, -40 to +70 °
- Sleep & Save modes
- Wifi management
- Fast remote access
- SW feature keys
- Native IP device

RipEX networks

- Future proofed
- Exceptional Data throughput
- Anti-collision RF protocol
- Unlimited RF design
- Backup routes
- Native IP environment
- 3 year warranty

Old network limitations

- Slow data speed
- Obsolete products
- RS232 connections
- Low reliability
- High maintenance costs
- Older protocols

New network demands

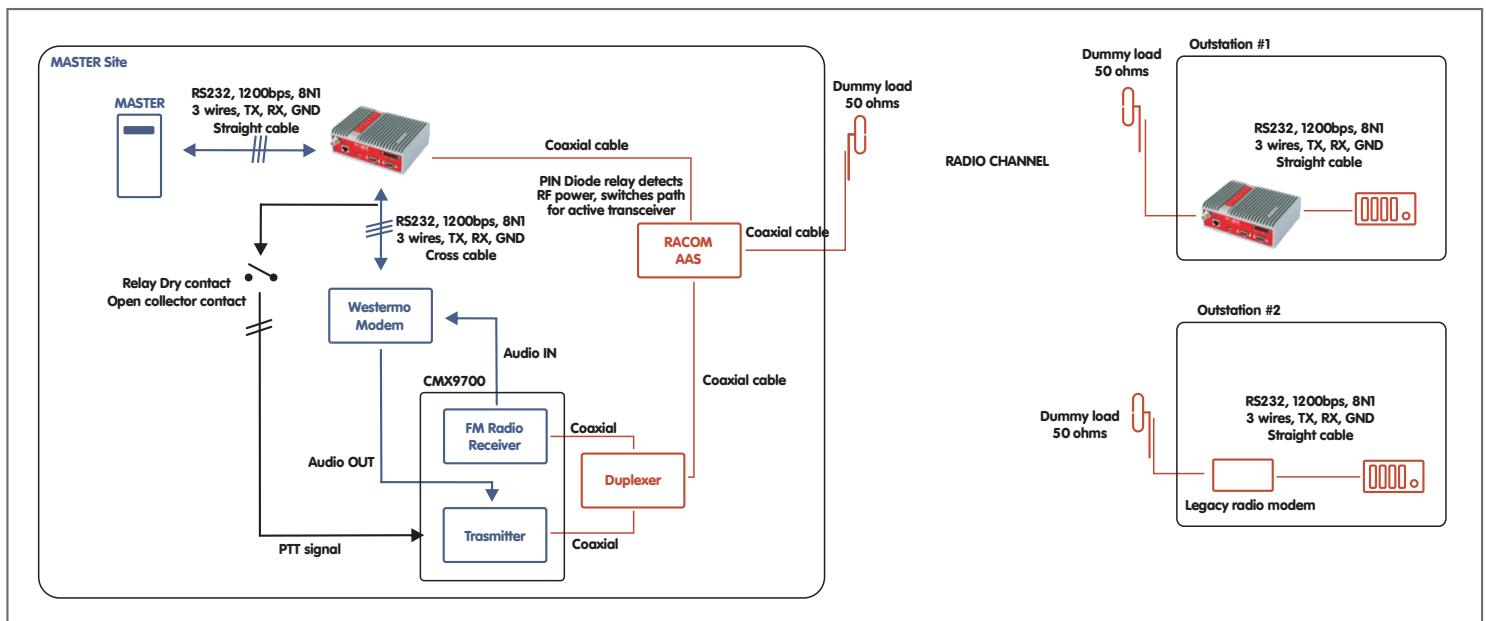
- High data throughput
- Future proofed products
- RTU's with Ethernet
- 99.9% uptime
- Low maintenance costs
- Modern IP protocols

Technical features

- Same frequency can be used for both networks
- AAS automatically manages antenna switching
- No changes to legacy network required
- RipEX routing table manages traffic for legacy and new network
- HW contact for 'Carrier On' legacy base station transmissions supported
- Reduced traffic load on legacy network offers improved performance
- Simultaneous SCADA upgrade - Serial and Ethernet RTU's supported

Bench test

RACOM was invited by a large European utility company to prove the durability of the RACOM Migration Solution. Bench testing was a unique opportunity for RACOM to prove its suitability.



Equipment used in the legacy network included: Clear SCADA SW from Schneider Electric in the centre, Westermo modem + RF datatech radio CMX 9700FD on base stations. There was RF datatech equipment on remotes: URT500 remote telemetry units and CMX9700FD radios with Westermo modems. Medina communication protocol was used for SCADA.

Conclusion

RipEX Migration Solution passed all bench tests successfully at the first attempt!

It was confirmed the RipEX Migration Solution would allow a scaled upgrade to be completed over time in a well-managed way, with no network outages in the legacy network.

RipEX is a best-in-class modem known for reliability, performance and quality, implementing all relevant state of the art concepts and is particularly suitable for systems requiring uninterrupted operation.