



Schneider Electric has used the OEM Serial Port Adapter provided by connectBlue as this device is developed for industrial application requiring high reliability and may be used in combination with external antennas for mounting in metallic casing.

Reference Application

Wireless access to pole mounted RTUs

Schneider Electric is a worldwide supplier of products and services for Power and Control. Schneider Electric UK has developed a Bluetooth® management system for operators to simplify and manage pole mounted RTUs used in the distribution of electrical energy.

Key components of the system

- Nu-Lec RL27 pole mounted switches fitted with Talus RTUs incorporating Bluetooth modules
- User PC; fitted with a PCMCIA Bluetooth card
- Schneider Electric RTU software; providing diagnostic, configuration and re-programming of the pole-top units

Decreased down time

Instead of shutting down the power line before climbing up the pole and connect a configuration PC, the operators connects a PC supporting Bluetooth technology to the RTU, which integrates a Bluetooth Serial Port Adapter. The operator can make software upgrades, re-configure the RTUs, and make diagnoses of the distribution of electrical energy on site using their PC from a distance up to 100 meters.

Increased safety

Operation of an 11kV electrical distribution network is potentially lethal to utility personnel; to minimize this risk the utility decided to place the switch control cabinets above the no climb guard and deploy wireless communications to control the RTUs. The Bluetooth solution provides galvanic

isolation between the PC and the RTU, which increases the personal safety for the operator.

Additional features

Instead of reconfiguring the 11kV network, creating an outage and taking customers off supply, utility engineers can now safely maintain the RTU with a connection from a configuration PC, the operators connects a PC supporting Bluetooth technology to the RTU, which integrates a Bluetooth Serial Port Adapter.

Maintenance efficiency is also improved as there is no need to climb the poles and thus the work time will decrease. The risk for not having the correct cables or a defective cable is removed as Bluetooth technology provides a cable free connection to the RTU.

The Bluetooth modems have been configured as non-discoverable which means that the RL27 switches are protected from wireless hacking through a 48-bit software encryption key, managed by the Schneider Electric Ltd software utility.



connectBlue's Bluetooth module is developed for industrial application requiring high reliability.

About connectBlue

connectBlue is a leading provider of wireless solutions for demanding applications in segments like industrial automation, medical, instrumentation, diagnostics, logistics / transportation, vehicles and point of sales. Based on Bluetooth technology WLAN and ZigBee, connectBlue provides ready-to-use products and modules as well as custom design solutions in both hardware and software. www.connectblue.se

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