

Remote Management for SCADA

Introduction:

SCADA/DMS/EMS system is a whole set integrated solution for analysis, simulation and operation of electric power generation, transmission and distribution.

Here we take an example of a WIND MILL Service provider.

How RIM related to Windmill Management solution?

Wind turbine companies provide an excellent alternative to burning fossil fuels by harnessing kinetic energy from the wind and converting it into electricity. A typical wind farm may include over 80 wind turbines so efficient and reliable networks to manage and control these installations are imperative.

Each wind turbine includes a generator and a variety of serial components/
RS485/RS232:

- Water cooler
- High voltage transformer
- Ultrasonic wind sensors
- Yaw gear
- Blade bearing
- Pitch cylinder
- Hub controller
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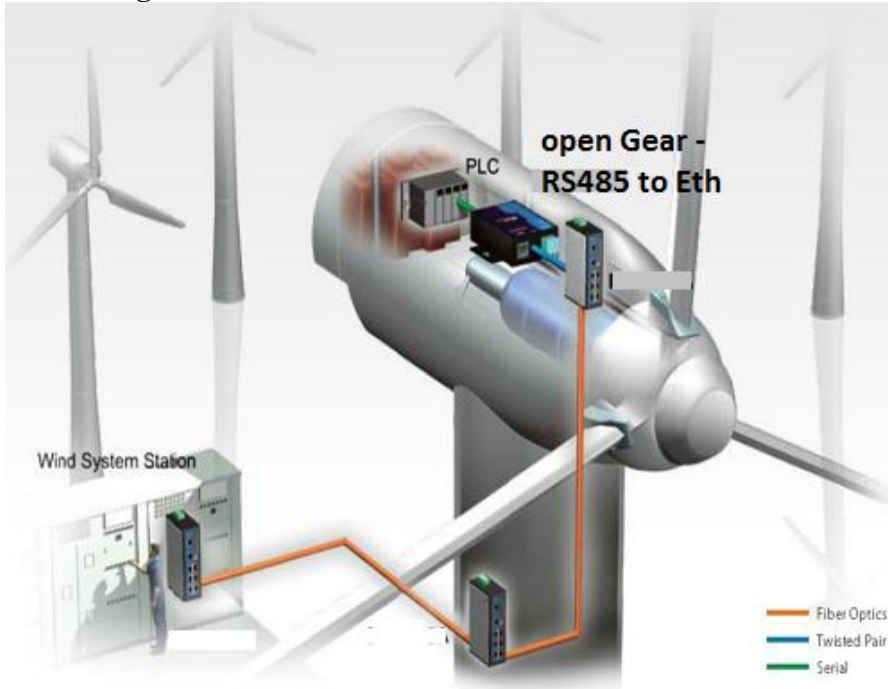
All of these components are controlled by a PLC and communicate with the ground host. Due to the total integration of these devices into an Ethernet network.

One of our customers in the wind turbine industry needed a serial-to-Ethernet solution that can operate reliably for years without interruption.

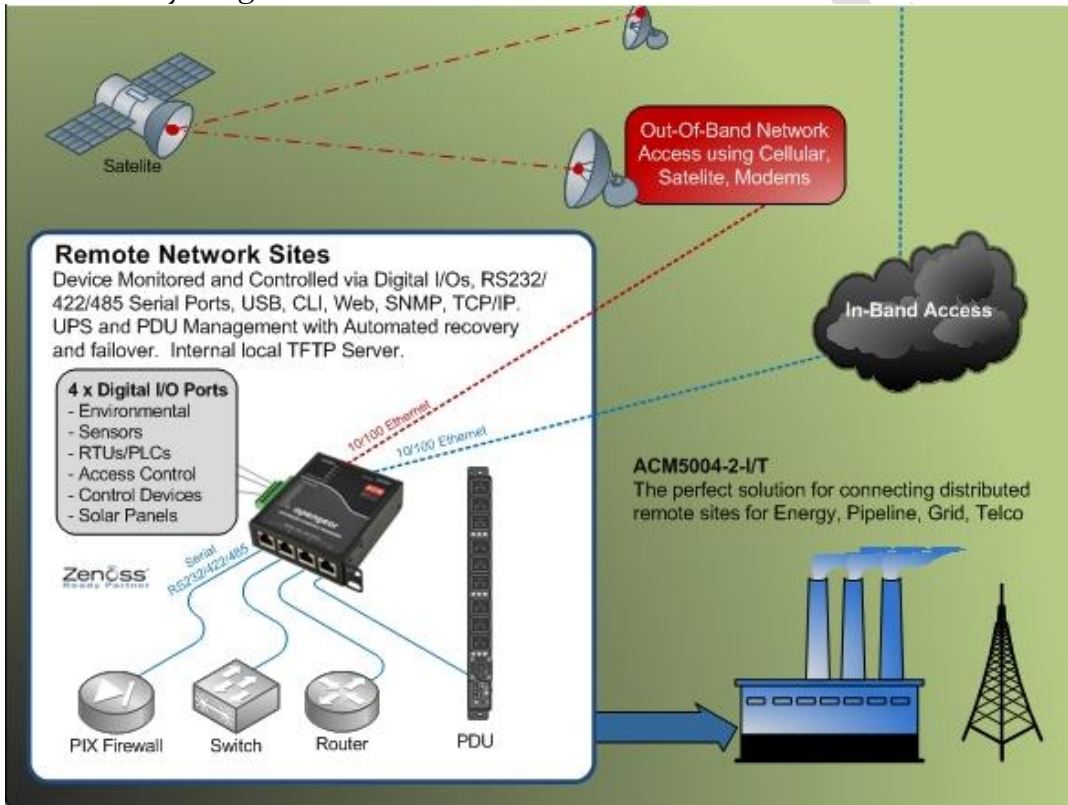
Solution to manage Windmills:

Our solution provides RS485/RS232 to eth and provides a centralized management and monitoring solution.

Block Diagram :



Connectivity Diagram:



Solution Benefits:

- Serial console ports, Software selectable RS232, RS422 or RS485
- 2 10/100 VLAN ports for management LAN isolation or auto failover
- 2 Gigabyte local FTP/TFTP storage for device configuration files
- Secure Shell (SSH V2 and V3)
- TACACS+ , RADIUS and LDAP authentication
- Per serial port user access lists



The industrial device servers provide a secure monitoring and control solution for managing all the IT infrastructure and edge devices in remote locations. The products feature rugged metal enclosures, captive power terminal blocks and the widest range of serial, USB or digital I/O interfaces.

Provides secure reliable and affordable local and remote access to the serial console ports on meters, SCADA appliances, PLCs, and sensors. Users can now monitor, access and manage these machines locally, or remotely through the Internet; confident their networks do not become a source of vulnerability.

The compact size of the device servers makes them the ideal choice for connecting RS-232/422/485 serial devices to an Ethernet network, making it possible for software to access serial devices anywhere on a local network.