

General Information:

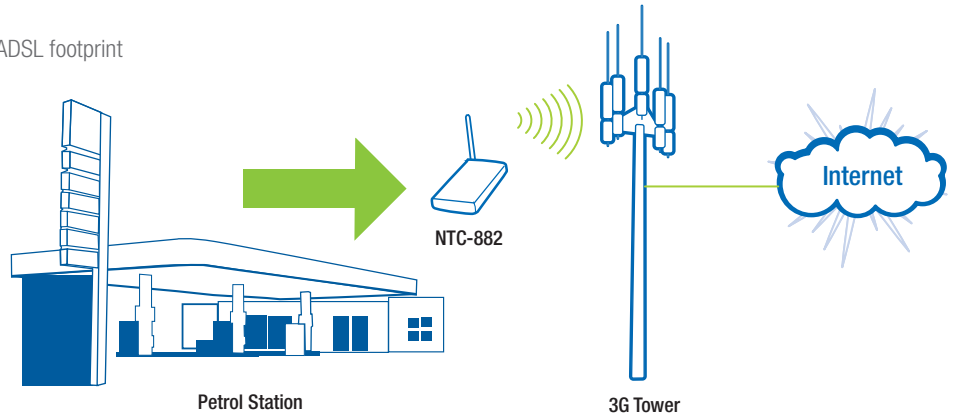
Issue: Provide a constant Internet connection for monitoring service station equipment.

Solution: Utilise 3G wireless Internet connection

Benefits:

- Provides an effective connection independent of ADSL footprint
- Can cover multiple equipment units
- Internal processing capacity

Hardware: NetComm NTC-882seu



In operations that rely on distributed arrays of sensitive equipment, monitoring maintenance and usage can be a critical but challenging task. A good example of this is a large petrol station business that needs to keep track of how much product is flowing through each pump in order to adhere to a maintenance schedule. Often this data needs to be communicated not to the on-site operator, but the manufacturer and/or leasor of the pumps themselves. Failure to meet the scheduled maintenance regime or to rectify a problem could result in commercial loss or even a threat to safety.

Manual inspection programs are one way to meet requirements. Obviously this entails a certain cost and variability in results, as well as the chance of outright failure. The data could also be transmitted by some sort of radio broadcast technology, such as microwave link. This though is expensive to install and in the case of a petroleum site, the risk of electrical discharge is a major consideration. By far the most common and cost-effective method of communication would be to use a broadband Internet connection.

However many sites such as petrol stations are situated on motorways or other regional routes away from appropriate telephone infrastructure. Installing dedicated communication lines to such sites is not always possible or economically feasible. Even if a telephone line is available, the site may be too far from an exchange to make an ADSL connection worthwhile. The sorts of operating environments that can be experienced by communications equipment at these sites can also be extreme in terms of temperature, vibration and humidity.

The solution is to use a 3G network accessed through a robust and dependable router. Connecting via a 3G network avoids the need for phone lines to be installed at a site or any concerns about being located away from the optimal ADSL footprint.

Being designed for adverse environments, the NetComm NTC-882seu is an ideal solution for this sort of deployment. Contained within a metal case and utilizing industrial strength components, its rugged build and its ability to operate in a wide temperature range (from -30°C to 70 °C) make it perfect for installation on dispersed outdoor sites.

The NetComm NTC-882seu also contains the processing capabilities to have tailor-made software incorporated. In the case of a petrol station, the operators could have a monitoring and communications device all in one.

The unit also has an integrated 'Keep Alive' system monitor that periodically checks the full status of the network connection by pinging an IP address. Should the unit determine that the connection has been lost, it automatically restarts itself to re-establish connection. No need to have a technician visit the unit and re-boot it. This feature removes the need for untrained service station staff to be responsible for maintaining such a vital link.

Whatever the environment and wherever it is, the NetComm NTC-882seu is a rugged and reliable means of ensuring that vital equipment truly becomes 'self-service'.