



## Uninterrupted & Reliable 5G Connectivity for Petrol Pumps That Serves FIFA World Cup Qatar 2022

### Background

Qatar is now in a festive mood with the FIFA World Cup 2022, which is scheduled to take place from 20 November to 18 December. It has been long since Qatar hosted such a grand event, so all sectors of the country are now preparing for receiving football players and visitors around the globe.

It is widely known that Qatar thrives on its petroleum industry. Qatar Fuel (WOQOD) is an oil and gas company that is exclusively responsible for the distribution of fuel needs within this country. It owns over 100 petro stations across the country, serving 3 million residents. With a lot more vehicles running around during the World Cup, petro stations are expecting growing business while also concerned about whether existing networking facilities would be sufficient for continuous operation of each site. What if cameras, POS or other hand-held devices suddenly lose connection?

Although fiber connection has been installed in each petro station, in face of such huge prospective traffic, the company is seeking a backup plan that offers uninterrupted, always-online connectivity.



Qatar Fuel (WOQOD) is the leading fuel distribution and marketing services company in the State of Qatar. The company has the sole concession for distribution, and marketing of fuels to commercial, industrial, and government customers throughout the country, including Natural and Liquefied Gas, Jet A1 refueling for aircraft, and related services at all airports in Qatar.

## Challenges

- The 100+ petrol stations scatter around the country, each constantly receiving visitors from around the world. Thus, fast and reliable connectivity for POS machines and other hand held devices for staff on site is a top priority.
- Traditional connectivity relies on wired Internet access, and link failure can lead to business disruption and create losses to petrol stations
- Without enough IT professionals on each site, in the case of problems with onsite devices like fuel nozzles and liquidometers, the customer has to send technicians to the site, which is inefficient for operation and maintenance.
- Fueling process and staff operation on site need to be monitored, but video data transmission is often disrupted or delayed due to insufficient bandwidth.

## Solution



InHand Networks helps address the WOQOD's challenges with its Cloud-Managed Networking Solution, which consists of the **ER805** 5G edge router and the **InCloud Manager** SaaS.

At each petro station, fuel nozzles, liquidometers and POSs are connected to the **ER805** through high-speed Wi-Fi, enabling fast transactions and monitoring of onsite operation status. Onsite cameras are connected to the **ER805** via Gigabit Ethernet ports. On the other side, collected data from the site are then sent to the **InCloud Manager** for analysis and management. High-bandwidth, low-latency 5G networks of the **ER805** ensures stable data transmission, especially the video data, making it easier for technicians to monitor vehicle movement and staff operation.

The **InCloud Manager** offers IT staff a visualization interface to monitor the network status of each station in real time, identify problems accurately, and quickly deal with network failure. They can also remotely maintain cameras and nozzles of each station anytime anywhere.

## Features



### InHand Cloud-Managed Networking Solution

- Easy centralized management from the cloud
- High-speed wired/5G Internet access for different scenarios
- 2.4G/5G Wi-Fi concurrency, up to 1200Mbps, 5\*Gigabit Ethernet port
- Zero touch deployment
- Remote maintenance of onsite devices anytime anywhere
- Supports SD-WAN networking, dynamic switch between different links
- Real-time detection of link quality, prioritizes reliable links
- Visualization management and overview of the whole site
- Supports email alerts, and enables customers to quickly locate faults

## Benefits

### Stay at the forefront of the ultra-fast 5G era

The **ER805** 5G cellular router delivers unprecedented high-speed, low-latency connectivity to onsite applications, especially devices that consume large band-width (such as cameras). Transmission of videos and other large-size data are made easy, giving customers lag-free networking experience.

### Multiple redundancy mechanisms ensure "always-on" connectivity

The **ER805** is built with multiple uplinks and 600Mbps firewall throughput, applicable to a wide range of business scenarios. Dual-SIM failover, failover between wired and cellular networks reduce the risk of network failure, making reliable connectivity for WOQOD across stations.

### Remote maintenance made easier

The **ER805** can be remotely deployed and managed without having IT staff on site. With the cloud connection function, technicians can easily build a VPN tunnel to the station, carry out out-of-band management for devices behind the **ER805** (such as POS, cameras, nozzles, etc.) anytime anywhere without changing existing network architecture.

### Intuitive management & diagnostics

The **InCloud Manager** offers multi-dimensional visualization interfaces, giving IT staff more insights into the network operation status. Rich diagnostics functions including tcpdump, traceroute, icmp, etc. help IT staff quickly locate problems and shoot trouble.

## More Applications

The **InHand Cloud-Managed Networking Solution**, which consists of the cloud-managed edge router ER series and the **InCloud Manager**, is a product portfolio facing the ever growing need for management of distributed business branches. Featuring easy-to-use cloud management, SD-WAN connectivity, multi-dimensional security measures and high-speed 5G Internet access, the solution offers global customers fast, secure, simple and convenient networking services, creating unlimited possibilities for business growth. It can be widely used in retail, business branches and IoT applications.

Learn more: <https://inhandnetworks.com/solutions/cloud-managed-networking-solution.html>



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