

Oil & Gas

Gas Processing & Liquefied Natural Gas



# Wireless Flow Meter Process Monitoring at Liquid Gas Facility in China Improves Safety and Efficiency

By

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## Background

The production of liquid gas fuel requires careful and frequent monitoring of the process. At the largest steel production facility in western China, PanGang Group, the technical team needed to patrol the site regularly to check meters and collect data from each site, a time-consuming and costly process in terms of both time and money. For peak production and critical monitoring and control, technicians assigned to central control were unable to obtain real-time data, so not only was production impacted, but also a preventative response to any problem or potential problems was delayed, raising safety concerns.

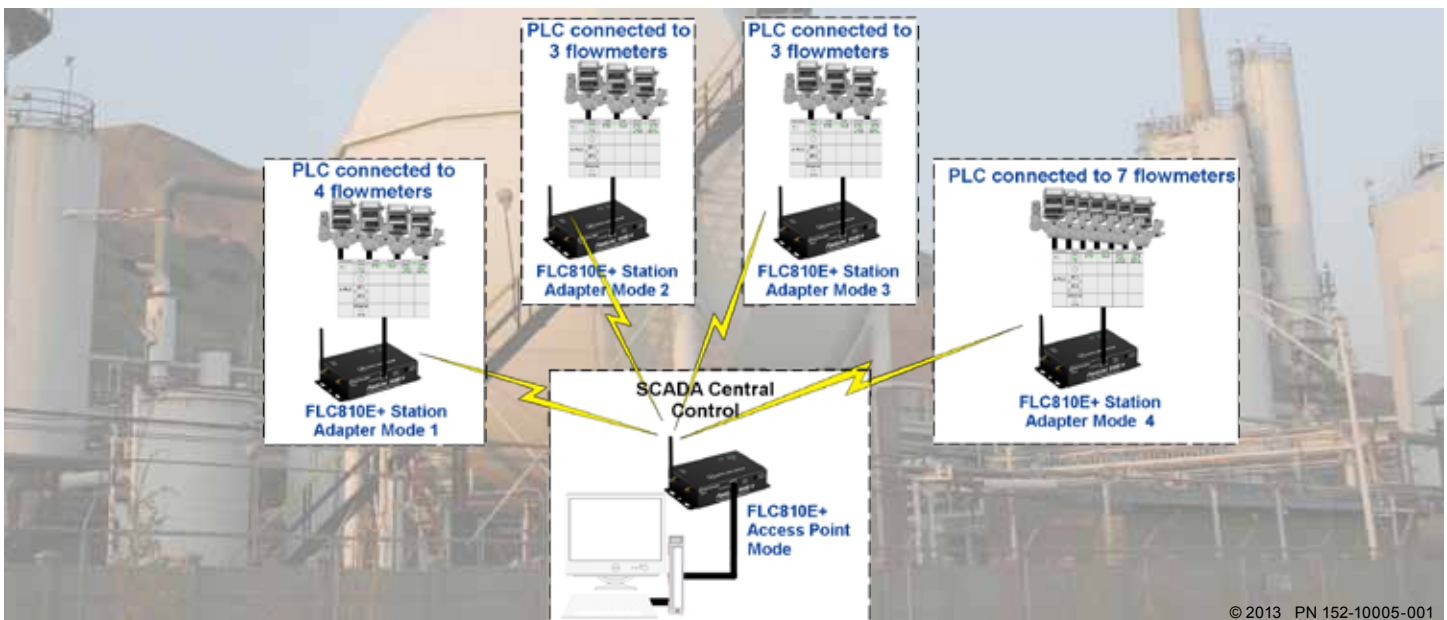
## The Plan

To improve plant safety and operation as well as to increase productivity, a wireless gas flow metering system was designed to collect and ensure the transfer of reliable data so the technicians could make accurate calculations regarding critical measurements such as pressure, temperature,

current, etc. Data-Linc, whose products are globally recognized for robust, reliable data transfer in harsh, industrial environments, was the data communication equipment manufacturer of choice.

## The Solution

The design for the PanGang installation consists of 17 flow meters connected to four GE VersaMax Micro PLCs located at four remote locations. Data-Linc's FastLinc FLC810E+ 802.11b modems in Station Adapter mode were connected to the PLCs to evaluate communicate with the Access Point modem at Central Control, and as expected, worked flawlessly. They were selected to provide the transfer of critical data from each flow meter to the control room. The technical team's patrol-time was now free, allowing them assignment to other high priority work. The SCADA system satisfied the real-time monitoring and processing requirement and allowed the plant to run more safely and efficiently.



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The Access Point FLC810E+ modem at Central Control transfers crucial liquid gas processing communicates with four GE VersaMax Micro PLCs connected to four corresponding FLC810E+ modems in Station Adapter mode.