

Case Study: Tank Farm

PLR580 I/O Extenders save thousands of dollars



Problem: Shealy Electrical's client needed to get three 4-20 ma signals and four digital inputs from a tank farm to their control room PLC, in order to read the level of the tanks. They also needed to send three analog and four digital output signals back to the tank farm to control tank levels. The distance from the control room to the pumping station was 4000 feet. To further complicate matters, 10 years earlier the customer had added a new facility with a parking lot that was constructed between the tank farm and the control room. Because they did not want to mix the analog and 120 volt signals in one conduit, they were considering trenching through the concrete parking lot to run cable tray or two underground conduits to the tank farm. Trenching would cost an estimate of between \$13,000 and \$15,000 for material and labor.

Solution: Shealy Electrical offered a Data-Linc alternative that would save thousands of dollars

and many man hours by recommending the PlantLinc PLR580 Spread Spectrum Frequency Hopping Wireless I/O. The PLR580 wireless I/O extender solution consisted of a Master station and a Remote station with eight Digital Inputs, eight Outputs, eight Analog Inputs and eight Analog Outputs. The radios, which can transmit up to four miles line-of-sight, saved time and money over the conduit or cable tray options.

(Diagram of PLR580DA connection details >>>)

PLR580DA/M (Master unit)

Discrete and Analog signal multiplexer with integral radio modem: 902 to 928 MHz license-free radio modem with 8 discrete Inputs and Outputs as well as 8 analog Inputs and Outputs.

PLR580DA/R (Remote unit)

Discrete and Analog signal multiplexer with integral radio modem: 902 to 928 MHz license-free radio modem with 8 discrete Inputs and Outputs as well as 8 analog Inputs and Outputs.



