

## Project introduction:

Saigon water corporation (SAWACO) is monitoring the drinking water quality of the city of Saigon. There are 6 parameters measured:

- Temperature
- pH
- Salinity
- Transparency
- Conductivity
- Chlorine



Sensors are connected to 4 smart instruments (two of them are holding two sensors each).

The instruments have liquid crystal monochrome displays, where values of the measured parameters are shown. 3 of the instruments are more advanced and have both RS485/Modbus and analog signal (4-20 mA) retransmitting interface. But it turned out that via RS485/Modbus only one parameter can be transmitted at a time. The 4th instrument is simpler and has only analog output.

## The Challenge:

The sensors and the cabinet with the instruments are in the backyard of an archive warehouse in suburb of Saigon. Due to heavy traffic, the access to the instruments is time consuming. The site was visited sporadic by SAWACO employee, who was writing down the values on paper and reporting them when returning to the office.

Such information is very partial, not precise and practically useless.



## The Solution:

VUCICO – Reali Technologies distributor in Vietnam offered to SAWACO to connect the smart instruments to RealiteQ. This will provide continuous reading of all parameters in real time, as well as historical data in time-stamped tables and trends.

iCex model ICX-COMTOM-R10 was installed in the cabinet. RS485 network was built to read 3 of the parameters. The other 3 parameters were connected to analog inputs of iCex.

## The installation:

Wiring in the field, programming iCex and smart instrument, building Project tree in RealiteQ, checking the connection, reading and calibrating both instruments and analog inputs of iCex was done in the field in the morning for about 3 hours – by VUCICO engineer and technician. This was the first RealiteQ project for VUCICO, and their staff had no experience with the SCADA.

## The Results:

In the end of the installation the customer got a real time information with dashboards, graphs, trends, alerts... this information could be reached only by authorized Employees and managers in the control room, as well as from any device connected to the internet with no need to install any software or application.

