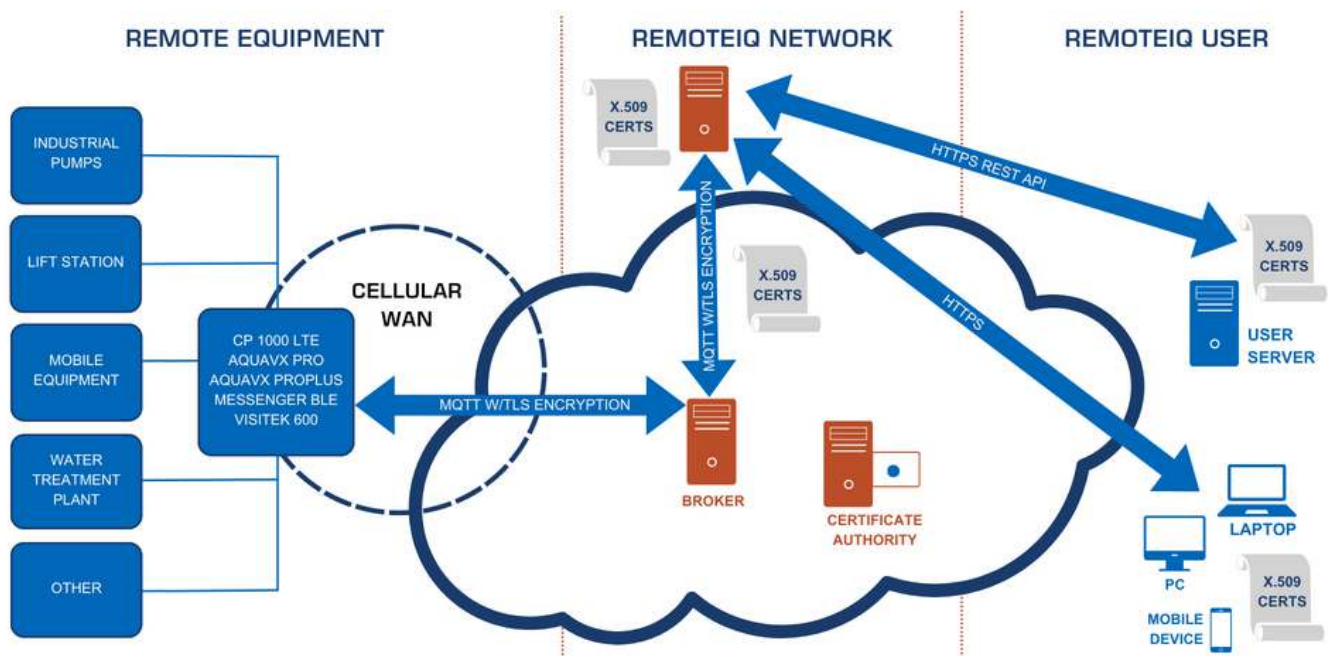


# REMOTEIQ™ SECURITY OVERVIEW

## FOR MQTT-ENABLED DEVICES

CANplus™ CP1000 LTE, Aquavx™ Pro and ProPlus, Messenger BLE and VisiTek™ 600

RemoteIQ™ provides security provisioning in three domains for customers using MQTT-enabled devices. This is, in part, to emphasize that Cattron IoT devices are never on a customer's network. Due to this separation of domains, malware or viruses cannot pass to or from Cattron devices by tunneling into them from a customer's network or vice versa.



# SECURITY FOR EQUIPMENT USING MQTT-ENABLED DEVICES

## REMOTE EQUIPMENT DOMAIN

The Remote Equipment Domain refers to the remote locations where a customer's equipment and the Cattron control and monitoring solutions reside. 4G LTE cellular data networks provide wireless access to Cattron instrumentation in the field. The cellular service provider authenticates the cellular modem using a unique SIM card for each device. The SIM card is installed at the factory and provisioned with the cellular provider. The device and its SIM card are activated and managed by the customer using the RemotelQ Subscription Management Portal.

The device leaves the factory with its unique x.509 cybersecurity certificates installed and active. Every time the device accesses the RemotelQ Broker, mutual authentication occurs, and end-to-end encryption is utilized. The device can only communicate with the RemotelQ Broker as an added security feature.

## REMOTELQ NETWORK DOMAIN

The RemotelQ Network Domain communicates securely over the Internet to provide connectivity from the RemotelQ Server to remote equipment in the Remote Equipment Domain and the PCs, laptops or mobile devices in the RemotelQ User Domain. The end devices in the RemotelQ User Domain are used to access the web application with a browser.

The RemotelQ Server uses its unique x.509 cybersecurity certificates to authenticate and encrypt all communications with the RemotelQ Broker and RemotelQ user devices. No other devices outside the RemotelQ Network Domain are allowed to access the RemotelQ Broker.

## REMOTELQ USER DOMAIN

The RemotelQ User Domain provides any supported computing device access to the RemotelQ Server. A supported computing device is any stationary or mobile device with internet connectivity running a supported web browser. It should be noted that the end user's PC/laptop/mobile device should have the latest software updates and security patches applied to protect against vulnerabilities completely.

The RemotelQ web-based application is accessed via a web browser utilizing HTTPS, an authenticated and secure connection. The RemotelQ web-based application uses a secure login to provide accessibility from any supported computing device, and login credentials are required to access the server.

Customers may implement additional security provisions on their respective IT networks and user devices.

[Learn more about RemotelQ at cattron.com](https://cattron.com)

