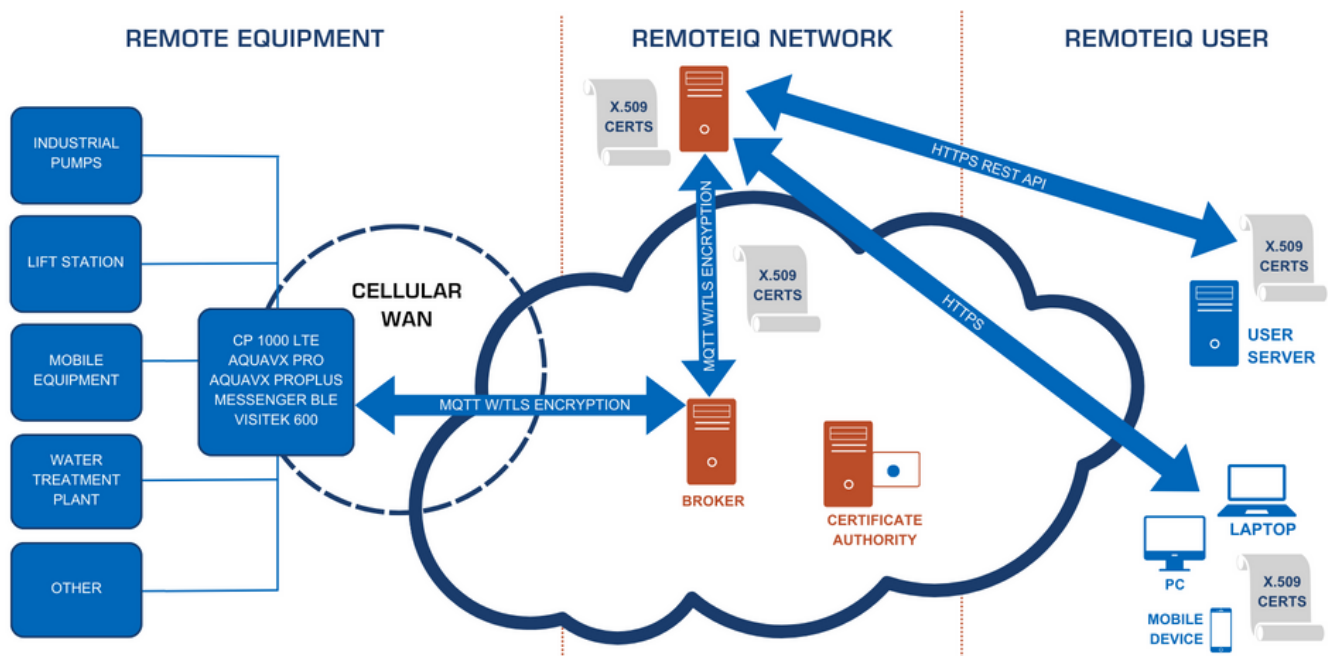


REMOTEIQ™ SECURITY OVERVIEW

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.



CONNECT. CONTROL. PROTECT.

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 RemoteIQ Subscription Management Portal.

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

REMOTELQ NETWORK DOMAIN

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

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

REMOTELQ USER DOMAIN

The RemoteIQ User Domain provides any supported computing device access to the RemoteIQ 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 RemoteIQ web-based application is accessed via a web browser utilizing HTTPS, an authenticated and secure connection. The RemoteIQ 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.

