

Quantalytics Cyber Security Recommendations

Developed for
The Water and Waste
Industries

Quantalytics appliances are designed to be used independently,
or can be combined in packages to maximize cybersecurity effectiveness.
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Overview for:
The Water and
Waste Industries
OT (Operations Technology)

Control Center Components



Q-Box® The version of Nagios deployed in the Q-Box for monitoring includes the ability to monitor Modbus over TCP/IP. We recommend using 2 Q-Box appliances for failover and load balancing.

Q-IDS® This intrusion detection and prevention system built using Suricata. We recommend using 2 Q-IDS appliances for failover and load balancing. Suricata uses Snort definitions in addition to heuristics.

Q-VPN® Allows for the creation of VPN-to-VPN networks with extreme granularity of control over the TCP/IP devices at the substation.

Q-Vul® Recommended to monitor for vulnerabilities in the substations. Even if no patch is available, or deployed, knowledge of security holes is still very valuable. The vulnerabilities can be monitored so as to provide early breach warnings.

Q-NAC® (Network Access Control) provides full control over allowed devices and services. The Q-NAC can thwart a physical penetration of a substation, including providing protection against physical plugbots.

Q-Log® Is a log aggregation and analysis tool running the ELK Stack. (Elasticsearch, Logstash, and Kibana). It processes log entries and issues alerts. The Q-Log works in conjunction with all Quantalytics appliances plus any device that has a log and can output it, and integrates with any SIEM system. (e.g. Q-OSSEC®. Not shown.)



OT Connection

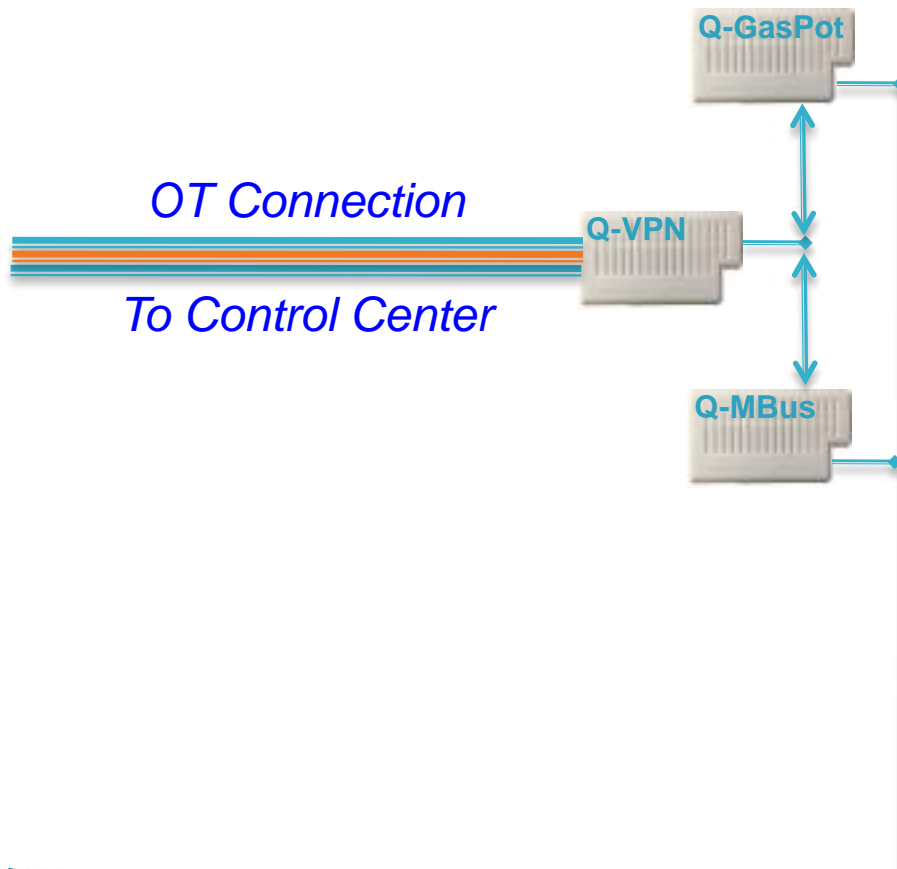
To Distribution Center(s)

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Overview for:
Power Substations
OT (Operations Technology)

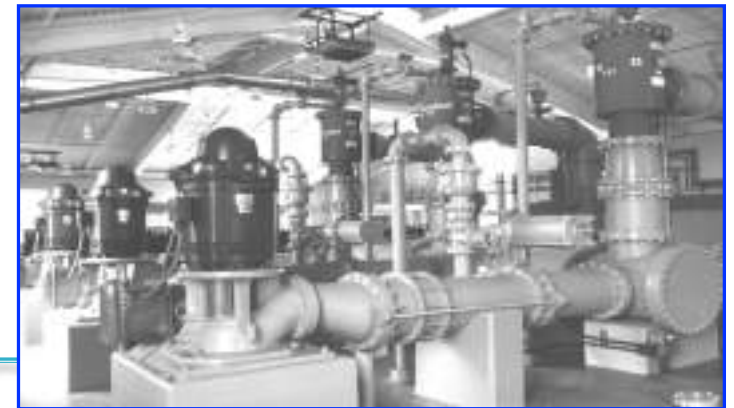
Distribution Center Components



The **Q-GasPot**® is a network honeypot solution built specifically to simulate Veeder- Root and other valves and Gauges. It runs on an extremely small form factor, low-power-consumption network appliance. The **Q-GasPot** was designed to randomize the gauges as much as possible such that no two instances look exactly alike. This makes it possible for the **Q-GasPot** to display literally hundreds of realistic attack surfaces (“decoys”) on a network, which, in turn, can help catch, and stymie, a hacking attempt.

Q-VPN® Allows for the creation of VPN-to-VPN networks with extreme granularity of control over the TCP/IP devices at the substation.

Q-MBus® Is the Quantalytics appliance that converts a serial Modbus connection to TCP/IP. This allows Modbus data to run over a VPN.



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For more information please visit our web site:

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We thank you for your interest and
look forward to your questions and comments.

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