Claims

1. A connected faucet system, comprising

a plurality of faucets, each faucet associated with a presence sensor, a solenoid valve, a flow meter, a controller, and a manual actuator configured to place one or more faucets into faucet mode; wherein the presence sensors, the solenoid valves, the manual actuator and the flow meters are in electrical communication with the controllers;
wherein a flow meter is associated with a hot water source and positioned upstream of the solenoid valve; and
a control system comprising the controllers and a computing device,

wherein

the controllers are configured to communicate with the computing device directly or via a gateway;
the control system is configured to collect data from the presence sensors and the flow meters,
the control system is configured to determine a status of each faucet based on the data;
the manual actuator is configured to place one or more faucets into a thermal disinfection mode; and;
the control system is configured to instruct the one or more faucets placed into the thermal disinfection mode to perform a thermal disinfection cycle, wherein hot water is dispensed from the one or more faucets for a programmed period of time.

2. The connected faucet system according to claim **1**, wherein

the controllers are configured to be in wireless communication with the computing device and the gateway,
the gateway is configured to be in wireless communication with a cloud/server,
the cloud/server is configured to be in wireless communication with the computing device, and
the controllers are configured to communicate with the cloud/server via the gateway.

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3. The connected faucet system according to claim **2**, wherein the computing device and the cloud/server are configured to send instructions to the controllers, and the controllers are configured to initiate an action in response.

4. The connected faucet system according to claim **3**, wherein the computing device and/or the cloud/server are configured to send instructions to the controllers based on programmed instructions and/or data stored on the computing device or the cloud/server.

5. The connected faucet system according to claim **3**, wherein the computing device is configured to receive instructions from the cloud/server and to send the instructions to the controllers, and wherein the controllers are configured to initiate an action in response.

6. The connected faucet system according to claim **1**, wherein the status is selected from a leak detection, a slow drain, a faucet usage, a supply line water pressure, a battery life, and combinations thereof, and wherein the control system is configured to initiate an action based on the status.

7. The connected faucet system according to claim **1**, wherein the control system is configured to initiate an action based on the status, and wherein the action is selected from instructing the solenoid valve to open, instructing the solenoid valve to close, initiating a service ticket, adjusting a duration of time a valve remains open, monitoring usage of a bathroom, instructing an angle stop to close, sending a message to a technician, and combinations thereof.

8. The connected faucet system according to any of claims **1** to **7**, wherein the control system is configured to allow a technician to monitor the status of the faucets remotely via the computing device.

9. The connected faucet system according to any of claims **1** to **7**, wherein a technician may initiate an action remotely via the computing device.

10. The connected faucet system according to any of claims **1** to **7**, wherein the control system comprises a dashboard having visual modules and configured to monitor, display, and analyze the data.

11. The connected faucet system according to any of claims **1** to **7**, comprising a plurality of sinks associated with the faucets, wherein each sink is associated with a drain sensor configured to detect a slow drain.

12. The connected system according to any of claims **1** to **7**, wherein the manual actuator is configured to place one or more faucets in a faucet mode selected from a cleaning mode, an active mode, a sleep mode, and an auto-purge mode.

13. The connected system according to any of claims **1** to **7**, wherein the control system is configured to monitor the flow meter after the solenoid valve has been moved from an open position to a closed position, and to recognize a leak event if the flow meter indicates water flow above a threshold flow rate.

14. The connected faucet system according to any of claims **1** to **7**, wherein the control system is configured to analyze, aggregate, store, and log the data.

15. The connected faucet system according to any of claims **1** to **7**, wherein the control system is configured to monitor data selected from historical data, performance over time, bathroom traffic, faucet or sink usage, sanitary ware usage, and combinations thereof.

16. The connected faucet system according to any of claims **1** to **7**, wherein the control system is configured to provide a daily, monthly, or yearly status of an individual faucet or of the plurality of faucets.

17. A faucet system, comprising a faucet associated with a presence sensor, a solenoid valve, a flow meter associated with a hot water source and positioned upstream of the solenoid valve, a controller, and a manual actuator, configured to place one or more faucets into a thermal disinfection mode,

wherein the presence sensor, the solenoid valve, the flow meter, and the manual actuator are in wired electrical communication with the controller,

wherein the controller is configured to be in wireless communication with a computing device; and

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wherein hot water is dispensed from the one or more faucets placed into thermal disinfection mode by the manual actuator for a programmed period of time