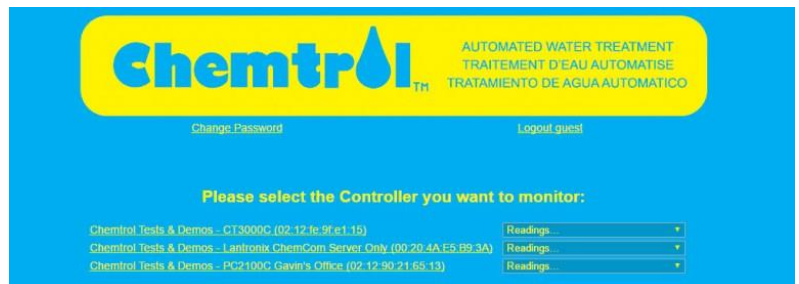


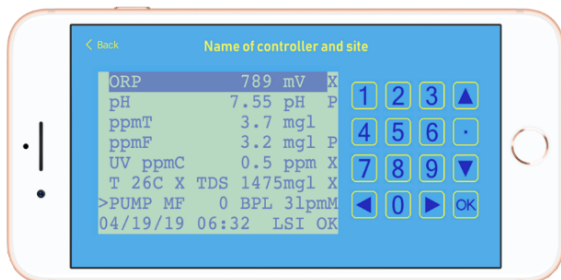
## Remote Monitoring with CHEMTROL® web-server communication Web-access & communication options

We know that you need to control and monitor your facility 24/7, which is why our range of programmable controllers all have remote access capability. With the remote operation function any number of facilities can be controlled and monitored from your computer or via mobile app.

Smart web-server technology offers true duplex operation with identical screens on both the controller and your computer. This is particularly useful for operator training and troubleshooting, as well as real-time control of all operating functions including status reports, trend graphs and automatic alerts by email or text messages.



### Remote monitoring with CHEMTROL® mobile app.








With your CHEMTROL® mobile app, you can control and monitor your facility 24/7. Real-time control of all operating functions with a true duplex operation technology that mirrors the controller display on your mobile screen.

### Download your CHEMTROL® app

Available for Android and Apple devices.

## The CHEMTROL® advantage

**Our waterproof cabinet have all your communication requirements in one box.**

-  Remote monitoring and control with our cloud base web-server via Ethernet port or WIFI interface
-  True duplex operation technology that mirrors the controller display on your PC/ or any mobile device
-  Wireless control using a router
-  4-20mA signal for monitoring display outputs
-  Building Management System (BMS) Communications

- ✓ Modbus IP
- ✓ Modbus RTU
- ✓ BACnet IP
- ✓ BACnet MSTP
- ✓ and LonWorks



*Our range of programmable controllers allow you to connect using a variety of wired and wireless technologies, to ensure you can connect and access your data 24/7.*

## 1. Wired connection:

Think of the controller as your own laptop, and by connecting it to a live Ethernet cable from your local network it has access to the internet. Plug the Ethernet cable into the Network socket of the controller (Picture - 1) and you are now connected to the Internet.

- ✚ Benefit 1 - There is no hardware cost.  
Network components are already embedded within the controller' electronics.
- ✚ Benefit 2- No annual subscription.
- ✚ Benefit 3 – Seamless solution, stable and reliable internet connection.



Picture - 1

## 2. Wireless Connection

If you have an active router on site, you can use it to establish an internet connection. In order to use this option CHEMTROL requires to install an additional component/ WIFI module (Picture - 2), the controller then communicates with the router via WIFI using the router' username and password.

- ✚ WIFI electronics module has to be installed.
- ✚ Benefit - No annual subscription.
- ✚ WIFI connectivity requires to be checked on site making sure a fairly strong signal is coming from the router.



Picture - 2

### 3. Wireless connection using a Router

Your controller can also be connected via a compatible 3G or 4G router with an Ethernet cable. In order to use this option we require to install a router within the controller (Picture-3) and place a sim-card from one of the local Australian Internet providers to establish web connection.

- ✚ Benefit – Seamless solution, stable and reliable internet connection.
- ✚ A router has to be installed.
- ✚ Annual subscription, sim-card has to be acquired.



Picture - 3

### 4. Shared Wireless Access + Control

A unique feature that allows multiple controllers in close proximity to piggyback and share a WIFI signal. The major benefit of this is you only have to connect for a single Sim-card subscription but still have full connectivity and control over all your controllers.

**How does it work?** Your main controller has an Ethernet cable connected with a 4G WiFi router (Picture-4) that accesses the internet. All your other controllers in close proximity simply use a WiFi device to share or piggyback off the main controllers WiFi signal. This way you can add multiple controllers without paying for multiple subscriptions and save.



Picture - 4

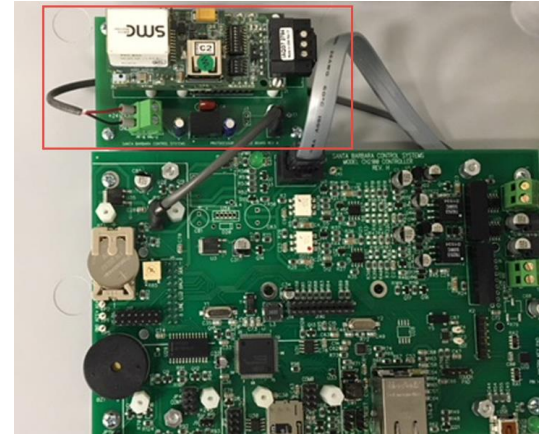
- ✚ Main controller: 4G WIFI router has to be installed.
- ✚ Secondary controller - WIFI electronics module has to be installed.
- ✚ Annual subscription, sim-card has to be acquired for to the main 4G router controller only.
- ✚ Benefit 1 – Seamless solution, stable and reliable internet connection for multiple controllers.
- ✚ Benefit 2 – Secondary controllers do not have annual subscription.

## 5. Building Management System (BMS) Communications

The CHEMTROL® programmable controllers range can be equipped to communicate to the facility Building Management System using a number of open protocol languages.

The most common of these languages being used today are:

- Modbus IP
- Modbus RTU
- BACnet IP
- BACnet MSTP
- and Lonworks



Picture - 5

The controller can be configured with any of these languages.

To enable this type of communication, BMS module has to be installed within the controller which will convert the language of the controller to the open protocol language required.

## 6. 4-20 mA Output Boards

There are several 4-20 mA Converter Boards available for the CHEMTROL® programmable controllers range. They all work essentially the same way. They provide two connection terminals for the output current.



Picture - 6

Its purpose is to convert the digital outputs of the controller into analog signals that can be used by analog monitoring and control equipment.