



# russellsOne

## COLOR TOUCH SCREEN CONTROLLER

The russellsOne color touch screen controller is the most powerful state of the art chamber controller/microprocessor ever developed. Simple user interface with powerful data collection gives this controller faster screen access, faster programming and unprecedented flexibility. Under the hood is a world of data being collected for easy USB export. Combining off the shelf hardware and modern engineering makes this controller one of a kind. From benchtops to drive-in chambers, the “r1” is the only controller you need and is packed with features such as:



- 12.3” PixelTouch touch screen display
- High performance Intel Core i5processor, 2.4 GHz, solid state drive
- 4 channels of PID control w/product temperature control
- 1GB Ethernet via Wi-Fi 802.11ac, Bluetooth wireless and RJ-45
- User definable graphical trending & process data real time
- Data logging of up to 64 inputs (optional) with virtual unlimited file storage
- Data exported as .csv or .png image
- Up to 32 configurable digital inputs & outputs
- Settings for chamber systems monitor and preventative maintenance
- Server enabled remote control from Lab View or other custom programs
- Multiple mounting options
- Easily retrofitted to most existing chambers
- Password protection for multiple users



# technical products

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## SPECIFICATIONS

**CHANNELS:**

4 Process Variables

**PRODUCT TEMPERATURE CONTROL:**

Yes

**OPERATING SYSTEM:**

Windows 10 Pro

**PROCESSOR:**

Intel Dual Core i5 Processor

**DISPLAY:**

12.3", 2736 x 1824, 267 ppi  
High Density Display

**STORAGE:**

128GB SSD

**COMMUNICATIONS:**

1 GB Ethernet Via RJ-45  
WiFi 802.11ac

**USB:**

(1) 3.0 For Data Transfer

**POWER REQUIREMENTS:**

In: 100-240 VDC/50-60 HZ  
Out: 12V DC/2.5a

**OPERATING TEMPERATURE:**

5°C(41°F) to 40°C(104°F)  
8% to 85% RH @40°C Non-Condensing

**COMPLIANCE:**

CE

**ACTIVITY LOG:**

Logs Basic Events

**OPERATING MODES:**

Stop, Manual, Profile, Guaranteed Soak,  
Ramp, Loop, Wait.

**PROGRAM CAPACITY:**

999 Loops  
Program On The Fly

**DATA LOGGING:**

Logs up to 8 channels (up to 64 optional)  
User Definable for Trending Graph and Exporting  
(1 second intervals)

**GRAPHICAL TRENDING:**

Program and Process Data  
Real Time

**ANALOG INPUTS:**

64 Including Inputs Used By System  
+/-10V  
+/-20mA  
4-20mA  
T,J, or K type Thermocouples  
Optional: RTD (PT100)

**ANALOG OUTPUTS: (Optional)**

+/-10V  
0-20mA

**DIGITAL INPUTS: (32 depending on config.)**

24VDC

**DIGITAL OUTPUTS: (32 depending on config.)**

Contact: 2A Max. Resistive, 80VA Inductive

**PROFILE DELAY START:**

1-999 hours

**ALARMS:**

32 User Definable w/History