

# WCT400 Specifications

## 1. Measurement Performance

Conductivity Range	0 - 10,000 $\mu$ S/cm (microSiemens/centimeter)
Conductivity Resolution	1 $\mu$ S/cm
Conductivity Accuracy	10 - 10,000 $\mu$ S/cm $\pm$ 1% of reading 0 - 10 $\mu$ S/cm $\pm$ 20% of reading
Temperature Range	32 - 158°F (0 - 70°C)
Temperature Resolution	0.1°C
Temperature Accuracy	$\pm$ 1% of reading

## 2. Electrical: Input/Output

<b>Input Power</b>	100-240 VAC, 50/60 Hz, 8A Fuse: 1.0 ampere, 5 x 20 mm
<b>Input Signals</b>	
Conductivity electrode	1.0 cell factor, 10K thermistor
Flow Meter (optional)	Isolated, dry contact closure required (i.e. relay, reed switch)
Flow Switch (optional)	Isolated, dry contact closure required (i.e. reed switch)
<b>Outputs</b>	
Mechanical Relays	Pre-powered on circuit board switching line voltage 6 A (resistive), 1/8 HP All relays are fused together as one group, total current for this group must not exceed 6A
4 - 20 mA (optional)	Internally powered Fully isolated 600 Ohm max resistive load Resolution .001% of span Accuracy $\pm$ 1% of reading
<b>Agency Approvals</b>	
UL	ANSI/UL 61010-1:2004, 2 <sup>nd</sup> Edition*
CAN/CSA	C22,2 No.61010-1:2004 2 <sup>nd</sup> Edition*
CE Safety	EN 61010-1 2 <sup>nd</sup> Edition (2001)*
CE EMC	EN 61326 :1998 Annex A*

Note: For EN61000-4-6,-3 the controller met performance criteria B.

\*Class A equipment: Equipment suitable for use in establishments other than domestic, and those directly connected to a low voltage (100-240 VAC) power supply network which supplies buildings used for domestic purposes.

## 3. Mechanical

Enclosure Material	Polycarbonate
NEMA Rating	NEMA 4X
Dimensions	8.5" x 6.5" x 5.5"
Display	2 x 16 character backlit liquid crystal
Operating Ambient Temp	32 – 122°F (0 – 50°C)
Storage Temperature	-20 – 180°F (-29 – 80°C)
Graphite electrode pressure rating	150 psi
Stainless steel electrode pressure rating	150 psi
High pressure electrode & flow switch manifold pressure rating	300 psi
Flow switch manifold pressure rating	150 psi
Flow switch manifold connections	3/4" NPTF

## 4. WCT Variables and their Limits

		Low Limit	High Limit
<b>Conductivity menu</b>			
	PPM Conversion Factor	0.200 ppm/ $\mu$ S/cm	1.000 ppm/ $\mu$ S/cm
	Interval Time (sampling)	5 minutes	24:00 hours
	Duration Time (sampling)	1 minute	59 min: 59 sec
	% Calibration Range	-50	+50
<b>Temperature Menu</b>			
		No variables	
<b>Bleed Menu</b>			
	Set Point	0 $\mu$ S/cm	10,000 $\mu$ S/cm
	Dead Band	5 $\mu$ S/cm	500 $\mu$ S/cm
	Bleed Limit Time (set in hours/minutes)	1 minute	8 hrs: 20 min (enabled) 0=unlimited (disabled)
<b>Feed Menu</b>			
	Feed Lockout Timer (Mode A)	1 second	99 min: 59 sec
	Percent of Bleed (Mode B)	5 %	99 %
	Feed Time Limit (Mode B)	1 minute	99 min: 59 sec
	Percent of Time (Mode C)	0.1 %	99 %
	Feed Cycle Time (Mode C)	10 minutes	59 min: 59 sec
	Time per Contact (Mode D)	1 second	59 min: 59 sec
	÷ Contacts by (Mode D)	1 contact	100 contacts
	Time Limit (Mode D & E)	1 minute	99 min: 59 sec
	Time/Vol (Mode E)	1 second	59 min: 59 sec
	Vol to Initiate Feed (Mode E)	1	9,999
	K Factor (Mode E)	1 pulse/vol	20,000 pulses/vol
<b>Totalizer Menu (WCT410 only)</b>			
	Gallons per Contact	1 gal/contact	500 gal/contact
	Liters per Contact	1 L/contact	500 L/contact
<b>Biocide Menus (WCT410 only)</b>			
	Pre-Bleed (0 disables pre-bleed)	1 $\mu$ S/cm	9.999 $\mu$ S/cm
	Lockout	0 minutes	9 hrs:59 min
	Add Time		
	Daily Adds	0 minutes	144 minutes
	All other modes	0 minutes	1440 minutes
<b>4-20 mA Menu</b>			
	4 & 20 mA Settings	0 $\mu$ S/cm	10,000 $\mu$ S/cm
<b>Access Code Menu</b>			
	New Value	0	9999
<b>Alarm Menu*</b>			
	High & Low (set to zero to disable)	1%	50%
<b>Datalog Menu (Optional)</b>			
		No variables	
<b>Config Menu (Optional)</b>			
		No variables	
<b>Upgrade Menu</b>			
		No variables	

\*Note: The Alarm relay is non-programmable. Refer to the Main Menu diagram on page 16 for the list of error conditions that trigger the alarm relay.

#### 4. Model Code

WCT400	-	1	4	5	N
WCT410	-				
		Voltage	Output	Sensor	USB

#### VOLTAGE

1 = 120 VAC, prewired

5 = 100-240 VAC, hardwired, cable glands

#### OUTPUT

N = No data output

4 = Isolated 4-20 mA output

#### SENSOR

N = No electrode

1 = PP/Graphite electrode & tee, 20ft. (6.1m) cable (for in-line or submersion mounting)

2 = PP/Graphite electrode & flow switch manifold mounted on PP panel, 5 ft. (1.5m) cable

4 = High pressure electrode (up to 300 psi), 20 ft. (6.1m) cable

5 = High pressure electrode & flow switch manifold on PP panel, 5 ft. (1.5m) cable

6= PP/SS electrode & tee, 20 ft. (6.1m) cable

7= PP/SS electrode & flow switch manifold on PP panel, 5 ft. (1.5m) cable

#### USB FEATURES

N = Software upgrade capability only

U = Integrated datalogging, event/reset logging, and configuration file import/export