

6.6.4 Console

The Console tab is accessed primarily for troubleshooting/diagnostic purposes.

REAL CONTROLLER PRO

REALTECH

HOME

HISTORY

DEVICES

CONFIGURATION

HELP

Login

Export

Admin

Console

Main : ☒ Show Console

10/15/2019 9:08:55 AM custom 166: 332 Pot:206

10/15/2019 9:08:55 AM custom 167: 334 Pot:206

10/15/2019 9:08:55 AM custom 168: 336 Pot:206

10/15/2019 9:08:55 AM custom 169: 338 Pot:206

10/15/2019 9:08:55 AM custom 170: 340 Pot:206

10/15/2019 9:08:55 AM custom 171: 342 Pot:206

10/15/2019 9:08:55 AM custom 172: 344 Pot:206

10/15/2019 9:08:55 AM custom 173: 346 Pot:206

10/15/2019 9:08:55 AM custom 174: 348 Pot:206

10/15/2019 9:08:55 AM custom 175: 350 Pot:206

10/15/2019 9:08:55 AM custom 176: 352 Pot:206

10/15/2019 9:08:55 AM custom 177: 354 Pot:206

10/15/2019 9:08:55 AM custom 178: 356 Pot:206

10/15/2019 9:08:55 AM custom 179: 358 Pot:206

10/15/2019 9:08:55 AM custom 180: 360 Pot:206

10/15/2019 9:08:55 AM custom 181: 362 Pot:206

10/15/2019 9:08:55 AM custom 182: 364 Pot:206

10/15/2019 9:08:55 AM custom 183: 366 Pot:206

10/15/2019 9:08:55 AM custom 184: 368 Pot:206

10/15/2019 9:08:55 AM custom 185: 370 Pot:206

10/15/2019 9:08:55 AM custom 186: 372 Pot:206

10/15/2019 9:08:55 AM custom 187: 374 Pot:206

10/15/2019 9:08:55 AM custom 188: 376 Pot:206

10/15/2019 9:08:55 AM custom 189: 378 Pot:206

10/15/2019 9:08:55 AM custom 190: 380 Pot:206

10/15/2019 9:08:55 AM custom 191: 382 Pot:206

10/15/2019 9:08:55 AM custom 192: 384 Pot:206

10/15/2019 9:08:55 AM custom 193: 386 Pot:206

10/15/2019 9:08:55 AM custom 194: 388 Pot:206

10/15/2019 9:08:55 AM custom 195: 390 Pot:206

10/15/2019 9:08:55 AM custom receive start

Publish DilutionSystem Flow Sensor Telemetry Data Start

Publish DilutionSystem Flow Sensor Telemetry Data Done

Modbus Master : ☒ Show Console

10/8/2019 8:28:29 AM: Modbus Master: COM2 4096 B

10/8/2019 8:28:29 AM: Modbus Polling timer: 13s

10/8/2019 8:28:29 AM: Modbus TCP master

Error: System.Net.Sockets.SocketException (0x80004005): The requested address is not valid in its context 100.0.0.1:0

at System.Net.Sockets.TcpClient..ctor(String hostname, Int32 port)

at

Real Tech.RealControllerPRO.ModbusMasterControl..ctor(RealControllerPro parent, String hostAddress, Int32 tcpPort, Int32 timer)

at RealTech.RealControllerPRO.Config..ctor(String configFile, RealControllerPro parent, Boolean createModbus)

10/8/2019 8:28:29 AM: Real Sensors: NONE The given port name does not start with COM/com or does not resolve to a valid serial port.

Parameter name: portName

10/8/2019 9:03:26 AM: The operation has timed out.

10/8/2019 9:14:56 AM: Function code 13 not supported.

10/8/2019 9:40:06 AM: Checksums failed to match 0, 254, 62 != 0, 254, 62, 192, 0

10/8/2019 9:55:56 AM: Checksums failed to match 0, 192, 0 != 0, 192, 0, 0, 0

10/8/2019 11:58:06 AM: Function code 124 not supported.

10/8/2019 12:31:57 PM: Function code 128 not supported.

10/8/2019 1:42:16 PM: The operation has timed out.

10/8/2019 2:08:46 PM: The operation has timed out.

10/8/2019 2:29:36 PM: Checksums failed to match 180, 241, 16 != 180, 241, 16, 206, 254

10/8/2019 5:23:26 PM: Checksums failed to match 0,

Modbus Slave : ☒ Show Console

10/8/2019 8:28:29 AM: Modbus Slave: NONE The given port name does not start with COM/com or does not resolve to a valid serial port.

Parameter name: portName

10/8/2019 8:28:38 AM: {"TimeZone":"America/New_York"}

ADMIN 15 Oct 2019 09:08AM

ABB Ltd

40

6.7 Help

The Help tab provides quick access to ABB contact information for support and service. This screen also displays an overview of each alarm icon that may be triggered on the Summary tab.

REAL CONTROLLER PRO
REALTECH

HOME

HISTORY

DEVICES

CONFIGURATION

HELP

Icon indicates that the device is working without any alarms or warnings.

Icon indicates a warning. Verify the warning message by clicking on the icon under the summary tab.

Icon indicates an alarm. Verify the alarm message by clicking on the icon under the summary tab.

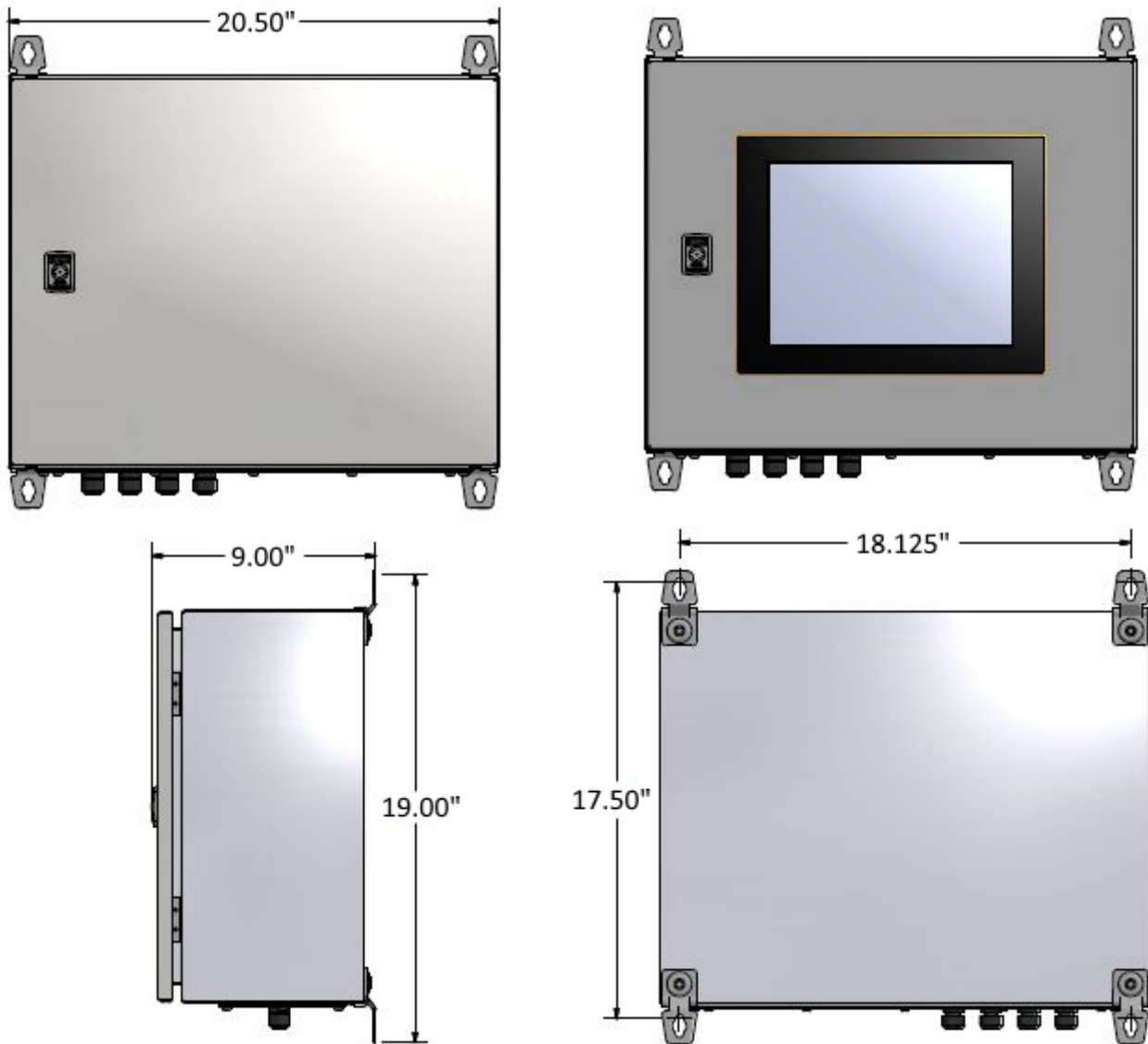
For Service : Contact Real Tech Inc.
Phone Number : 1-905-665-6888
Phone Number(Canada and US) : 1-877-779-2888
Email : service@realtechwater.com
Web : <https://realtechwater.com/contact-us/>

About

ADMIN 26 Nov 2019

7 Cabinet Clearance and Dimensions

The front, side, and back views of the cabinet are shown below to the nearest 1/8 inch. Two front views are shown: with monitor mounted inside and outside the cabinet. The back view gives the dimensions relevant for spacing of screws to mount the cabinet. Allow a clearance of 6 inches around the cabinet for unit connection and 2 feet out from the front of the cabinet to swing the door open comfortably.



8 UviTec Controller Pro Modbus Registers

ABB Ltd Spectrum Modbus Registers (Version 0.1)					
Coil/Reg #	Name	R/W	Type	Length	Description
Coils		WR			
1	Zeroing		Unsigned Integer	1	Set to 1 to zero to DI water (will automatically reset to 0)
2	Reserved		Unsigned Integer	1	
3	Reserved		Unsigned Integer	1	
4	Averaging		Unsigned Integer	1	0: Disable running average on UVT and UVA values 1: Enable running average (default: 0)
5	Clean Enable		Unsigned Integer	1	0: Disable automatic cleaning 1: Enable automatic cleaning (default: 0)
6	Force Clean		Unsigned Integer	1	0: Default position of Force Clean toggle 1: Force clean toggle on (default: 0)
7	Reserved		Unsigned Integer	1	
8	Reserved		Unsigned Integer	1	
Discrete Inputs		R			
10001	Humidity/Temperature		Unsigned Integer	1	Internal Humidity/Temperature high
10002	Leak Detection		Unsigned Integer	1	Leak detected alarm (recommended shut off water supply)
10003	Lamp High		Unsigned Integer	1	Lamp out of range high (recommended adjust potentiometer)
10004	Lamp Low		Unsigned Integer	1	Lamp out of range low (recommended replace lamp)
10005	Lamp Failure		Unsigned Integer	1	Lamp not turning on (recommended replace lamp)
10006	Cleaning		Unsigned Integer	1	Cleaning cycle currently running (takes approximately 10 to 12 minutes to complete)
10007	Reserved		Unsigned Integer	1	
10008	System Fault		Unsigned Integer	1	Internal malfunction

Coil/Reg #	Name	R/W	Type	Length	Description
Holding Registers		WR			
40001	Error enable		Unsigned Integer	1	Enable Error checking
40002	Warning enable		Unsigned Integer	1	Enable Warning checking
40003	Dry Contact setup		Unsigned Integer	1	Configure Dry contact
40004	Dual Feed Cycle Time		Unsigned Integer	1	The time it takes for a full dual feed cycle in minutes
40005	Dual Feed Purge Time		Unsigned Integer	1	The time between streams in minutes
40006	Clean Cycle Time		Unsigned Integer	1	The time between auto cleans in hours
40007	Clean Pump Time		Unsigned Integer	1	The pumping time in seconds (60-255)
40008	Averaging Length		Unsigned Integer	1	The number of samples to average (0-10)
40009	Base Potentiometer Value		Unsigned Integer	1	The base potentiometer value (0-255)
40010	Path length		Unsigned Integer	1	The path length of the flow cell in mm
40011	Flow Cell Ref Steps		Unsigned Integer	1	The number of steps out from the reference switch the flow cell needs to be
40012	Reference grating every		Unsigned Integer	1	Number of cycles before the diffraction grating is re-referenced
40013	Reference grating start		Unsigned Integer	1	The beginning of the referencing window for the diffraction grating
40014	Reference grating stop		Unsigned Integer	1	The end of the referencing window for the diffraction grating
40015	Select 4-20ma Channel		Unsigned Integer	1	Select the 4-20ma channel
40016	Select Correlation		Unsigned Integer	1	Select the correlation you would like to change
40017	Correlation Coef0		IEEE Float	2	Selected correlations coefficient
40019	Correlation Coef1		IEEE Float	2	Selected correlations coefficient
40021	Correlation Coef2		IEEE Float	2	Selected correlations coefficient
40023	Correlation Coef3		IEEE Float	2	Selected correlations coefficient
40025	Correlation Span		IEEE Float	2	Selected correlations span
40027	Correlation Offset		IEEE Float	2	Selected correlations offset
40029	Select Wavelength		Unsigned Integer	1	Select the wavelength you would like to change
40031	Correlation Weighting		IEEE Float	2	Selected correlations weighting on each wavelength
40033	Custom Potentiometer		Unsigned Integer	1	Potentiometer modifier for each wavelength
40047... 40053	Slave Based Sensor		IEEE Float	2	External Sensor value will pull from slave

Coil/Reg #	Name	R/W	Type	Length	Description
Input Registers		R			
30001... 30016	Spectrum Correlation Value [0-7]		IEEE Float	2	Value of the Spectrum correlation
30017... 30080	External Sensor Value [0-31]		IEEE Float	2	Value of the External Sensor
30081	Spectrum Temperature		IEEE Float	2	Current internal temperature of the Spectrum Sensor
30083	Spectrum Humidity		IEEE Float	2	Current internal % relative humidity of the Spectrum Sensor
30085	Spectrum UVA		IEEE Float	2	Current UVA measurement, of the selected wavelength from the Spectrum Sensor
30087	Spectrum Lamp		Unsigned Integer	1	Raw UV lamp sensor reading, of the selected wavelength from the Spectrum Sensor
30088	Spectrum Water		Unsigned Integer	1	Raw UV water sensor reading, of the selected wavelength from the Spectrum Sensor
30089	Spectrum Dark Current		Unsigned Integer	1	Raw sensor dark current, of the selected wavelength from the Spectrum Sensor
30090... 30121	Smart Correlations [0 -15]		IEEE Float	2	Current value of the Smart Correlation
30122... 30345	ML Series Sensors [0-7]		Custom	48	Structure for sensor UVA Stream1 (IEEE Float) UVA Stream2 (IEEE Float) UVT Stream1 (IEEE Float) UVT Stream2 (IEEE Float) Sensor Correlation Stream1 (IEEE Float) Sensor Correlation Stream2 (IEEE Float) Controller Correlation [0-7] (IEEE Floats)
30346.... 30505	UviTec Sensors [0-7]		Custom	20	Structure for sensor Alarm1 (Int16) Alarm2 (Int16) Warning1 (Int16) Warning2 (Int16) Correlation [0-7] (IEEE Floats)
30506... 30509	Status bar		Custom	4	Alarms(Int16) Warning(Int16) Cleaning(Int16) Reserved(Int16)

Detail First ML Series Sensor table:

Input register	Label	Length	Description
30122	UVA Stream1 (IEEE Float)	2	Value of UVA on Stream 1
30124	UVA Stream2 (IEEE Float)	2	Value of UVA on Stream 2
30126	UVT Stream1 (IEEE Float)	2	Value of UVT on Stream 1
30128	UVT Stream2 (IEEE Float)	2	Value of UVT on Stream 2
30130	Sensor Correlation Stream1 (IEEE Float)	2	Value of Sensor Correlation stream 1
30132	Sensor Correlation Stream2 (IEEE Float)	2	Value of Sensor Correlation stream 2
30134	Controller Correlation 0 (IEEE Float)	2	Value of Correlation0
30136	Controller Correlation 1 (IEEE Float)	2	Value of Correlation1
30138	Controller Correlation 2 (IEEE Float)	2	Value of Correlation2
30140	Controller Correlation 3 (IEEE Float)	2	Value of Correlation3
30142	Controller Correlation 4 (IEEE Float)	2	Value of Correlation4
30144	Controller Correlation 5 (IEEE Float)	2	Value of Correlation5
30148	Controller Correlation 6 (IEEE Float)	2	Value of Correlation6
30150	Controller Correlation 7 (IEEE Float)	2	Value of Correlation7

Detail First UviTec Sensor table:

Input register	Label	Length	Description
30346	Alarm1 (Int16)	1	Bitwise encoded alarms
30347	Alarm2 (Int16)	1	Bitwise encoded alarms
30348	Warning1 (Int16)	1	Bitwise encoded warnings
30349	Warning2 (Int16)	1	Bitwise encoded warnings
30350	Correlation [0] (IEEE Floats) (UviTec Probe Temp)	2	Value of Correlation0
30352	Correlation [1] (IEEE Floats) (UviTec Probe Parameter1)	2	Value of Correlation1
30354	Correlation [2] (IEEE Floats) (UviTec Probe Parameter2)	2	Value of Correlation2
30356	Correlation [3] (IEEE Floats) (UviTec Probe Parameter3)	2	Value of Correlation3
30358	Correlation [4] (IEEE Floats) (UviTec Probe Parameter4)	2	Value of Correlation4
30360	Correlation [5] (IEEE Floats) (UviTec Probe N/A)	2	Value of Correlation5
30362	Correlation [6] (IEEE Floats) (UviTec Probe N/A)	2	Value of Correlation6
30364	Correlation [7] (IEEE Floats) (UviTec Probe N/A)	2	Value of Correlation7

ABB Measurement & Analytics

For your local ABB contact, visit:
abb.com/contacts

For more product information, visit:
abb.com/measurement

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.