

6.5.6.1.2 Alarm Status

If a leakage alarm occurs, check the following to determine the cause for the alarm:

1. Points of entry into the cabinet. Are lines or conduits leading into the cabinet still sealed tightly?
2. Open the cabinet and inspect points of exit at openings within the cabinet.
3. Check points of entry to and exit from each component (sensor, controller, accessory) for leaks.

If a communication alarm occurs, check:

1. Condition of wiring from each electrode to the controller. Have wires been dislodged or damaged in any way? If no obvious problem can be determined, call ABB for assistance.

Once a leak alarm has been eliminated at the source, press the Reset Leak button to reset detection.

REAL CONTROLLER PRO

REALTECH

HOME HISTORY DEVICES CONFIGURATION HELP

System-Graph Spectrum DilutionSystem LeakDetectSystem

Current State

Leak State Valve State

Data Alarm

Name	Current State	Last Alarm	Counter	Reset All
Communication		2019-Oct-16 08:47 AM	540	Reset
Leakage		N/A	0	Reset

ADMIN 16 Oct 2019 08:47AM

6.5.6.2 Dual Feed

The Dual Feed screen provides configuration for the Dual Feed unit while in 'Scheduled' mode (Timer) or through Digital Input (DIO Port Only). The screen allows you to change both the full cycle time, and the purge time. Press the appropriate 'Apply' button after making any changes to these values.

The Set Stream 1/2 buttons allow the user to override the scheduling and switch dual feed streams at any time.

The Rinse Mode Control provides a check on instrument fouling. There should be little absorbance of light when rinse water is running through the flow cell. If the absorbance shows a higher value, this may indicate a fouling of the flow cell.

REAL CONTROLLER PRO
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HOME
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System-Graph
Spectrum
SL2000
DilutionSystem
CleanSystem
RealDualFeed

State: Stream1

Controls

Set Stream 1
Set Stream 2

Dual Feed Cycle Time
Cycle Time: 8 minutes
Stream-1 Duty Cycle: 60 %
Purge Time
Purge Time: 1 minutes
Purge time must be less than half of cycle time

Cleaning Options
Force Schedule Cleaning Off
Hold One Sample After Cleaning Off
Force Schedule Intake Purge Off

Rinse Mode Control
Rinse Mode Correlation Off

Options
External Control On
Timer Only
DIO Port Only
Stream 2 Control
Stream 2 is Rinse On

ADMIN 18 Oct 2019 11:21AM

6.6 Configuration

The configuration tab provides four screens: Login, Export, Admin, and Console.

6.6.1 Login

The Login screen provides for two levels of system access: User and Admin. Users can view all pages but cannot edit the settings. A User that selects the Configuration>Admin page will see the page banner and menu at left, but the content of the page is blank. A user with Admin privileges has full access to all pages in the system.

The default Admin password is r34lr34l, and the default User password is r34l.

REAL CONTROLLER PRO REALTECH

HOME HISTORY DEVICES CONFIGURATION HELP

Login Export Admin Console

User Name Admin

Password Admin Moderator

Login Password Reset Logout

ADMIN 17 Oct 2019 03:47PM

6.6.2 Export

The Export box allows logged measurement data and raw sensor data and alarms and events to be exported to a USB thumb drive or network drive. To export a particular time, period, or event, select the start and stop dates, select the drive letter for the export drive, select the data by checking the checkboxes corresponding to the data you would like to export and press the button “Export Current Selection”. To export all data ever recorded simply press the “Export All files” button.

The screenshot displays the 'Export' section of the REAL CONTROLLER PRO web interface. The top navigation bar features the 'REAL CONTROLLER PRO' logo on the left and the 'REALTECH' logo on the right. Below this, a horizontal menu contains five buttons: 'HOME' (with a house icon), 'HISTORY' (with a bar chart icon), 'DEVICES' (with a person icon), 'CONFIGURATION' (with a gear icon), and 'HELP' (with a question mark icon). On the left side, a vertical sidebar contains four buttons: 'Login', 'Export' (highlighted), 'Admin', and 'Console'. The main content area is titled 'Export' and contains the following elements:

- Start Date:** A date and time selector showing '10/11/2019 8:36:19'.
- Stop Date:** A date and time selector showing '10/11/2019 8:36:19'.
- Change Time:** Two buttons, 'Selected Up' and 'Selected Down'.
- Data Selection:** A list of checkboxes for 'UV Data', 'Raw Data', and 'System Data'.
- Drive Letter:** A dropdown menu.
- Ready to export:** A status indicator.
- Data older than 1 month will be archived**
- Files older than 18 months will be deleted**
- Export Current Selection:** A button.
- Archives:** A section containing the **Export All Files** button.

The bottom of the interface features a dark blue footer bar with the text 'ADMIN 15 Oct 2019 09:03AM' on the right side.

6.6.3 Admin

The admin tab has four screens, Devices and Sensors Configuration, COM-Port Setting, Program Control, and IoT Settings. The current screen will be underlined in blue.

6.6.3.1 Admin: Devices and Sensor Configuration

This screen allows for adding or removing ABB accessories, sensors, and external sensors. The remaining boxes are factory configured and should only be changed upon ABB's recommendation. Contact ABB for assistance.

See Section 6.5, Devices for an explanation on adding and removing accessories or sensors to a system.

The screenshot displays the REAL CONTROLLER PRO Admin interface. At the top, a dark blue header bar contains the text "REAL CONTROLLER PRO" on the left and the "REALTECH" logo on the right. Below this is a navigation bar with five tabs: "HOME" (house icon), "HISTORY" (bar chart icon), "DEVICES" (circular arrows icon), "CONFIGURATION" (gears icon), and "HELP" (question mark icon). The "DEVICES" tab is currently selected and highlighted in blue.

Below the navigation bar is a sub-header area with four tabs: "Devices and Sensors Configuration" (underlined in blue), "COM-Ports Setting", "Program Control", and "IoT Settings". A "Logout" button is located on the right side of this sub-header.

The main content area is divided into several sections:

- ML-Sensors:** Contains an "Add Sensor" button, a dropdown menu, and "Edit Sensor" and "Remove Sensor" buttons.
- Configurations (Master Controls):** Contains an "Add Sensor" button, a dropdown menu, and "Edit Sensor" and "Remove Sensor" buttons.
- Smart- Sense Correlation:** Contains an "Add" button, a dropdown menu, and "Edit" and "Remove" buttons.
- Real Accessories:** Contains an "Add Device" button, a dropdown menu, and "Edit Device" and "Remove Device" buttons.
- Real Sensors:** Contains an "Add Sensor" button, a dropdown menu, and "Edit Sensor" and "Remove Sensor" buttons.
- Record External Sensor Log:** Contains a "Save Log Globally" checkbox (set to "Off"), a "Every 1 Minutes" input field, and an "Apply" button.
- System Settings:** A vertical column on the right containing four toggle switches: "Spectrum" (On), "Sampling Mode" (Off), "DIO Port" (Off), and "Dual Feed" (Off). Below these is a "Booster Pump 420mA Control" toggle switch (Off).

At the bottom of the interface, a dark blue footer bar displays the text "ADMIN 15 Oct 2019 09:07AM".

6.6.3.2 Admin: Com-Ports Setting

The COM-Port Setting screen displays various configuration boxes. These are factory set and should only be changed upon manufacturer's recommendation. Contact ABB for assistance.

REAL CONTROLLER PRO
REALTECH

HOME

HISTORY

DEVICES

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HELP

Login
Export
Admin
Console

Devices and Sensors Configuration
COM-Ports Setting
Program Control
IoT Settings

Logout

Real Sensor Serial Controller

NONE

NONE is running

Start

19200

Baud Rate

Even

Parity

Stop

Master Control

COM2

COM2 is running

None

Parity

9600

Baud Rate

Two

Stop Bits

Data Bits

☐ 7
 ☒ 8

13

Timer In Second

TCP

100.0.0.1

Host Address

0

Port

5

Timer In Second

Start

Stop

Spectrum Serial Control

COM Port Select

Send Serial

Start

COM1

COM1 is running

NONE

NONE is running

Stop

Slave Control

Connection Type

☒ Socket
 ☐ TCP

1

Slave ID

Start

Stop

TCP

0

Port

Serial-RTU

NONE

NONE is running

None

Parity

9600

Baud Rate

One

Stop Bits

Data Bits

☐ 7
 ☒ 8

ADMIN 16 Oct 2019 09:20AM

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6.6.3.3 Admin: Program Control

The Program Control page displays various security and user configuration boxes. These are factory set and should only be changed upon manufacturer's recommendation. Contact ABB for assistance.

REAL CONTROLLER PRO

REALTECH

HOME

HISTORY

DEVICES

CONFIGURATION

HELP

Login

Export

Admin

Console

Devices and Sensors Configuration

COM-Ports Setting

Program Control

IoT Settings

Logout

Change Password

Security Level

None

User Name

Password

Confirm Password

Save

Clear

Export File On Timer

Off

Drive Letter

C:\

Update (Min)

1

Apply

Remote Logging

Off

User Name:

SPL_12_P0407109

Password:

Update (Min)

30

Apply

Program Control

Save Config

Close Program

Record Console to File

Off

0.0.0.2

ADMIN 16 Oct 2019 09:22AM

6.6.3.4 Admin: IoT Settings

This page contains settings and information for Internet communication. At a glance, you can determine if MQTT and Internet are connected.

REAL CONTROLLER PRO
REALTECH

HOME
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Devices and Sensors Configuration
COM-Ports Setting
Program Control
IoT Settings
Logout

MQTT
Enable MQTT: On
Apply

Server: Liquid AI

Broker URL: iot.liquidai.ca

Device Id:

Access Token:

Topic: Temp

Root Certificate: C:\otdevices\certificate.crt
Load

Device Certificate: C:\otdevices\certificate.pfx
Load

Transmit
Start Date 10/15/2019 9:29:29
Stop Date 10/15/2019 9:29:30
Change Time
Selected Up
Selected Down
Transmit

Status
Pending Messages: 0
Overflow Strategy: DropNewMessage
MQTT: Connected
Internet: Connected
Update Information

Spectrum Alarm Alert
Off
Email Address: imran@realtechwater.o
Update (Min): 30
Apply

SMS Notification Control
123456789
123456789
123456789
123456789
Save Settings

ADMIN 16 Oct 2019 09:24AM