



CLIMATEWORX
INTERNATIONAL

MISSION CRITICAL Air Conditioning Systems

M52/WEB Interface Startup Manual



RJ45 Network

A 10/100 BaseT Ethernet connection is available to connect the Web Interface on a local area network. Use a crossover cable (shipped with the hardware; blue cable with yellow ends) for initial connection and configuration. The default settings are as follows:

IP Address: 10.0.0.188
Subnet Mask:
255.255.255.0

EIA-RS485 Port

Port 1 connects to an EIA-RS485 network. A grounded shield contact is provided for connection to shielded cable. If the shield contact is used, verify the power connector is properly grounded and there is no voltage potential between units on the network. The EIA-485 port is set to 8 databits, no parity, and 1 stop bit (8, N, 1).

WEB INTERFACE

The Web Interface network connection allows users to configure and view current information from the hardware. When logging on to the Web interface, navigate to the unit's IP address in a Web browser. A prompt will ask for a username and password. Enter in the appropriate information.

Default Settings: IP:
10.0.0.188
Username: fds
Password: -
none/blank-



Figure 1: Log in Page

Once you login using the default IP settings, you can assign a new IP address if required.

Configuring Communication: The Web interface will not communicate over a user's network the first time it is connected to the network. At the factory, the Web interface is set with a default IP address of 10.0.0.188 and Subnet Mask: 255.255.255.0

You must change this default address to an IP address that corresponds with your network before the Web interface can communicate over the network.



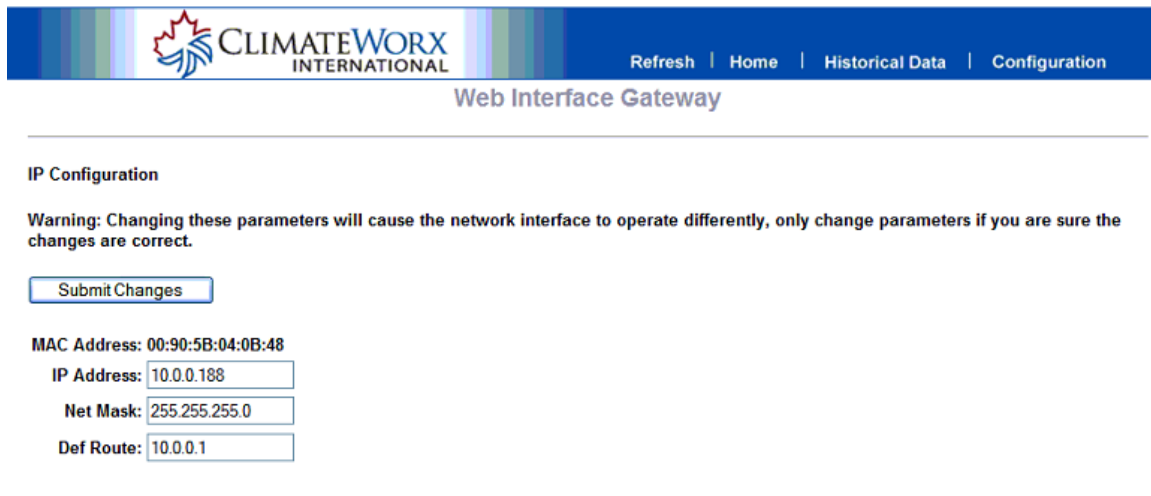
Unless you are familiar with setting the IP address, consult your IT department before attempting this procedure.

To use a Web browser to set the Web Interface's IP address:

1. Plug a crossover network cable into the laptop or workstation that will be used to configure the Web Interface.
2. Write down the computer's current IP address and Subnet Mask.
IMPORTANT you will need to change the computer's IP address and Subnet Mask back to the original settings after changing the IP address and Subnet Mask for the Web Interface.
3. Change the IP address and Subnet Mask of the computer from its existing address to one that will allow it to communicate with the Web Interface, such as 10.0.0.180.
Note: It may be beneficial to set the IP address to one that is one number different from the Web Interface IP address. Consult the computer's manual or your IT department before attempting this procedure.
4. Connect the other end of the network cable to the Ethernet port on the back of the Web Interface.
5. Access the Web Interface through a Web browser by typing the IP address (10.0.0.188) into the location bar.

To change the IP Address Go to Configuration -> Network Settings

Enter New IP Address; Net Mask and Def Route -> **Click on submit changes**

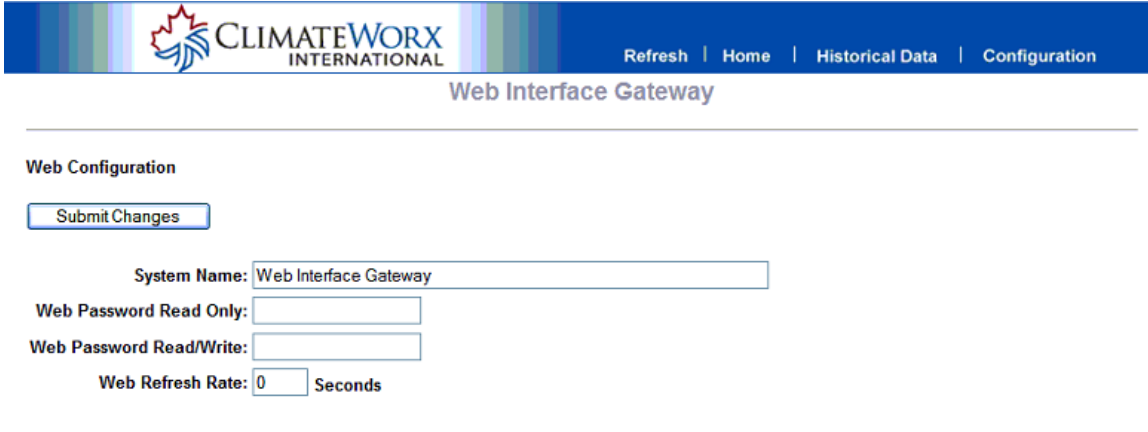


The screenshot shows the 'Web Interface Gateway' page. At the top, there is a navigation bar with the ClimateWorx International logo and links for 'Refresh', 'Home', 'Historical Data', and 'Configuration'. Below the navigation bar, the page title is 'Web Interface Gateway'. The main content area is titled 'IP Configuration'. A warning message states: 'Warning: Changing these parameters will cause the network interface to operate differently, only change parameters if you are sure the changes are correct.' Below the warning is a 'Submit Changes' button. The current network settings are displayed as follows:

MAC Address:	00:90:5B:04:0B:48
IP Address:	<input type="text" value="10.0.0.188"/>
Net Mask:	<input type="text" value="255.255.255.0"/>
Def Route:	<input type="text" value="10.0.0.1"/>

Figure 2: ClimateWorx Network Settings page

Web Configuration:



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Refresh | Home | Historical Data | Configuration

Web Interface Gateway

Web Configuration

Submit Changes

System Name: Web Interface Gateway

Web Password Read Only:

Web Password Read/Write:

Web Refresh Rate: Seconds

Figure 3: ClimateWorx Web Settings page

System Name: You can give a name to the Web Interface.

Web Password Read Only: An alphanumeric value of 16 characters maximum. Enter a password so you can access the Web interface and view the conditions.

Web Password Read/Write: An alphanumeric value of 16 characters maximum. Enter a password so you can view the conditions and make changes to the Web interface configuration.

Web Refresh Rate: This integer value represents how long the system waits until it updates the Web interface with current data. To change the rate, click in the field and type the desired amount of time (in seconds). The default refresh rate is set to 0, which means the Web interface will not refresh at all. If you want the system to automatically refresh, set the refresh rate to a positive number greater than 0. **The minimum recommended refresh rate is five seconds. A slower rate could cause errors that prevent the system from functioning properly.**

Clock Configuration: Go to Configuration -> Clock Configuration
Enter Date; Time and Day -> **Click on submit changes**



CLIMATEWORX
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Web Interface Gateway

Clock Configuration

Submit Changes

Date: 03/14/13

Time: 10:37:39

Day: THU

Figure 4: ClimateWorx Clock Configuration Page

To configure ClimateWorx units, click on ClimateWorx unit's link as in figure 5.



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Web Interface Gateway

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[Temperature Display Units](#)

[Network Settings](#)

[Web Settings](#)

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[NTP](#)

[Clock](#)

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Figure 5: ClimateWorx Configuration Page

The ClimateWorx configuration screen allows you to set the parameters for each unit and up to a maximum of 8 units.

ClimateWorx Configuration

 EIA-485 Comm Type: Satchwell Modbus

 EIA-485 Baud Rate: 1200 2400 9600 19200

 Serial Master Poll Timeout: (1 - 10) Seconds

 Serial Master Poll Interval: (250 - 2000) mS

 Comm Loss Alarm Timeout: (1 - 30) Minutes

Unit #	Address	Duty Unit	Series	Label
<u>1</u>	1	1	Series 9	S9-1
<u>2</u>	2	2	Series 9	S9-2
<u>3</u>	3	1	Series 6	S6-1
<u>4</u>	4	1	Series 6	S6-2
<u>5</u>	5	1	Series 8	S8-1
<u>6</u>	6	1	Series 8	S8-2
<u>7</u>	0	1	Series 9	(Blank)
<u>8</u>	0	1	Series 9	(Blank)

Figure 5: ClimateWorx Unit Configuration Page

Select the EIA- 485 Comm Type and set EIA- 485 Baud Rate to “9600”

Note: To avoid the timeouts on the labels, you can set the Serial Master Poll timeout to more than 3 seconds, Serial master poll interval when left at 0 defaults to 250ms. You can set the Comm Loss Alarm timeout on the ClimateWorx Configuration page to 1 or greater.

Click on the number below Unit# to assign the values/ text and hit submit changes. Return to the configuration screen pick the next Unit# and continue the steps to assign the values/ text for the rest of the units.

Unit #
<u>1</u>
<u>2</u>
<u>3</u>

Click on the number below Unit# to get the below screen – Figure 7.1

Figure 7.0: ClimateWorx Unit Configuration page

ClimateWorx Configuration

Address: (0 = disabled)

Label:

Duty Unit #:

Unit Series:

- Series 6
- Series 7
- Series 8
- Series 9
- Series 11
- Series P

Assign the ClimateWorx unit address (Network Address)

Assign a Text label to ClimateWorx unit i.e. CRAC 1 or AC1

Assign the Duty unit number

Pick the ClimateWorx series – Series 6 or 8 or 9 or P from drop down

Figure 7.1: ClimateWorx Unit Configuration page

Network Address: The RS485 address ClimateWorx will use to identify a unique unit in a BMS network. Must be 01 to 63. Please refer to M52 user manual to set the address on the machine(s).

Temperature Units

To change display Temperature Units - Go to Configuration -> Temperature Display Units. Selectable deg °C or °F and **Click on submit changes** to take effect.



[Refresh](#) | [Home](#) | [Historical Data](#) | [Configuration](#)

Web Interface Gateway

Temperature Display Units

Temperature Display Units: Celsius Fahrenheit

Figure 8: ClimateWorx Temperature Units

When all the units are assigned with the addresses, go back to Home page and click on the ClimateWorx units link you will see the summary of all units with the unit text label as in figure 9.

The summary page gives us a snap shot status of the units.

To view data of each specific unit click on the unit label and this takes you to new screen where you will see the mapped points with values from this specific unit label as in figure 10 and 10.1.

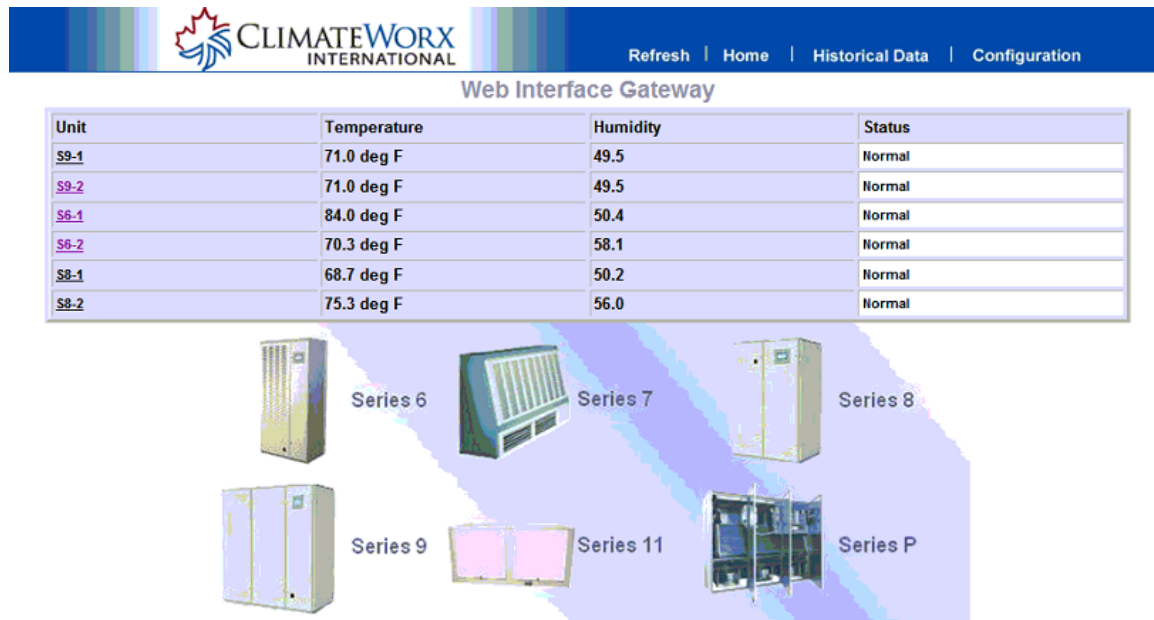



Figure 9: ClimateWorx Unit Summary Page

Web Interface Gateway

S9-1		Satchwell Table.Offset	Age (mm:ss)
Site Temperature (deg F)	70.7	6,0	00:35
Site Humidity	49.5	6,2	00:35
Local Temperature 1 (deg F)	60.6	6,4	00:35
Local Temperature 2 (deg F)	99.5	6,6	00:35
Local Humidity 1	49.6	6,8	00:35
Local Humidity 2	10.1	6,10	00:35
No. of Duty Unit	1	5,1	00:31
Temperature Setpoint (deg F)	71	5,2	00:31
Humidity Setpoint	50	5,5	00:31
System On/Off Status	1 (Unit is on)	16,0	00:30
Heating Stages	3	14,0	00:28
Cooling Stages	0	14,1	00:28
Humidification Stages	0	14,2	00:28
Dehumidification Stages	0	14,3	00:28
Heating Percentage	100	10,0	00:27
Cooling Percentage	0	10,1	00:27
Humidification Percentage	52	10,2	00:27
Dehumidification Percentage	0	10,3	00:27
Fan Overload	0 (off)	11,0	00:32
Low Airflow	0 (off)	11,1	00:32
Boiler Dirty	0 (off)	11,2	00:32
Heater Overheat	0 (off)	11,3	00:32



[Temp/Humidity Settings](#)
[On/Off Settings](#)
[View Runtimes](#)

Figure 10: ClimateWorx Unit Data Page

[Return Home](#)

ClimateWorx Runtimes Unit #1: S9-1

S9-1		Satchwell Table.Offset	Age (mm:ss)
Fan Run Time (hrs)	1	15,0	01:54
Compressor 1 Run Time (hrs)	1	15,18	01:00
Compressor 2 Run Time (hrs)	0	15,24	01:00
Heater 1 Run Time (hrs)	2	15,2	01:54
Heater 2 Run Time (hrs)	0	15,4	01:54
Heater 3 Run Time (hrs)	3	15,6	01:54
Humidifier Run Time (hrs)	1	15,8	01:54
Dehumid. Valve 1 Run Time (hrs)	1	15,12	01:54
Dehumid. Valve 2 Run Time (hrs)	0	15,14	01:54
Scr Heater Run Time (hrs)	1	15,16	01:00
Pump Run Time (hrs)	----	15,30	60:37
Address: 1 DutyUnit:1 Series 9			

Figure 10.1: ClimateWorx Unit Component RunTime Data Page

Alarms: Active alarms are displayed on the data point view screen as below as in figure 11.

S9-2	
Site Temperature (deg F)	60.6
Site Humidity	49.7
Local Temperature 1 (deg F)	81.5
Local Temperature 2 (deg F)	11822.5
Local Humidity 1	49.4
Local Humidity 2	4.8
No. of Duty Unit	1
Temperature Setpoint (deg F)	71
Humidity Setpoint	50
System On/Off Status	1 (Unit is on)
Heating Stages	3
Cooling Stages	0
Humidification Stages	0
Dehumidification Stages	0
Heating Percentage	100
Cooling Percentage	0
Humidification Percentage	56
Dehumidification Percentage	0
Fan Overload	0 (off)
Low Airflow	1 (on)
Boiler Dirty	0 (off)
Heater Overheat	0 (off)

Figure 11: Active Alarm Page

Alarms: Value represents the alarm status as follows:

No Alarm:	Low Airflow	0 (off)
Active Alarm:	Low Airflow	1 (on)
Active Alarm Acknowledged:	Low Airflow	2 (on)

Figure 11.1: Active Alarm Point Value

Email Configuration: Use the SMTP configuration section to set up the Web interface's communication to email recipients. The Web interface can send email to up to four recipients. Recipients can include an exchange server using a distribution list, an email account, or a cell phone. The Web interface can also communicate via ESMTP (Authenticated) to mail servers requiring a login name and password. Sample screen for reference as in figure 12.

E-Mail Configuration

Access Type: None LAN

Primary DNS Server:

Secondary DNS Server:

Mail (SMTP) Server:

Mail Sender Address:

Mail Subject:

Mail Recipient (1):

Mail Recipient (2):

Mail Recipient (3):

Mail Recipient (4):

Smtp Authentication: None Plain Login (Do not enable this unless instructed by your ISP or IT dept!)

Smtp Username: Smtp Password:

Figure 12: ClimateWorx Unit Email Configuration Example Page

Email Text of Active Alarm: Will send out email with Unit tag as assigned, Date and Time Alarm logged with the Alarm description.

Web Interface Gateway
AH007-24905-ALM -02/06/13 14:12:48 CRAC-2 Filter Dirty

Web Interface Gateway
AH006-14902-ALM -02/06/13 11:51:19 pseries Low Airflow