

Dashboard features and configuration.

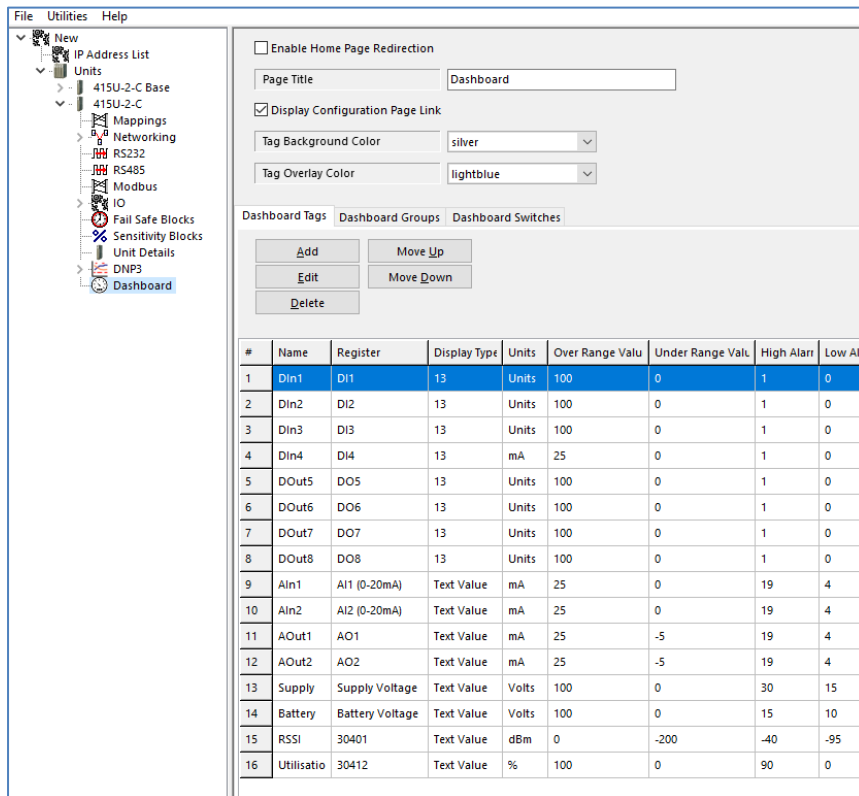
Introduction

Some of our Wireless I/O and Ethernet I/O products have an inbuilt dashboard for displaying I/O values and status information via a web-based interface which can be used for diagnostics purposes. (currently only available in the 415U-2, 415U-E, 925U-2, 215U-2 & 115E-2 modules)

The dashboard feature allows the users to remotely access and view the status of the device's I/O, statistical and diagnostic registers. Any authorized user can access the dashboard remotely via the LAN or from over the radio network. The modules all have a basic default configuration that can then be edited or adjusted to meet the required application. It is completely configurable and you can decide which registers will be displayed on the dashboard, and how they will be displayed.

To access the dashboard, use a Web-browser to browse to the device's IP address then select the "View Dashboard" link. The dashboard can be configured to redirect automatically so that when connecting to the module IP the Dashboard will be displayed instead of having to select it from the menu.

Configuration of the dashboard can be done using the configuration software and via Web page (215U-2 – See below for details on web config and display). Generally, when the module is configured using the Software it will configure some basic I/O and status registers which can be edited and saved and then tweaked via the Web page interface if required.



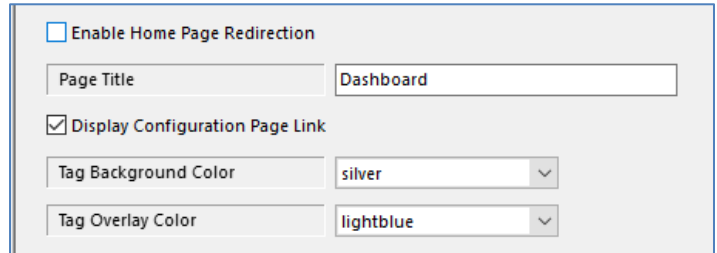
#	Name	Register	Display Type	Units	Over Range Valu	Under Range Valu	High Alarr	Low Ala
1	Din1	DI1	13	Units	100	0	1	0
2	Din2	DI2	13	Units	100	0	1	0
3	Din3	DI3	13	Units	100	0	1	0
4	Din4	DI4	13	mA	25	0	1	0
5	DOut5	DO5	13	Units	100	0	1	0
6	DOut6	DO6	13	Units	100	0	1	0
7	DOut7	DO7	13	Units	100	0	1	0
8	DOut8	DO8	13	Units	100	0	1	0
9	Aln1	AI1 (0-20mA)	Text Value	mA	25	0	19	4
10	Aln2	AI2 (0-20mA)	Text Value	mA	25	0	19	4
11	AOut1	AO1	Text Value	mA	25	-5	19	4
12	AOut2	AO2	Text Value	mA	25	-5	19	4
13	Supply	Supply Voltage	Text Value	Volts	100	0	30	15
14	Battery	Battery Voltage	Text Value	Volts	100	0	15	10
15	RSSI	30401	Text Value	dBm	0	-200	-40	-95
16	Utilisatio	30412	Text Value	%	100	0	90	0

Above is the typical default 415U-2 default dashboard.

Configuration

Using the configuration software, you will see there are some initial settings that can be seen when selecting the Dashboard tab. Web page configuration shows all of the following on the one page.

Enabling the “Home Page redirection” means when someone types in the IP Address of the Device they will be redirected to this dashboard rather than go to the main web page and have to navigate using the links. This is useful and less confusing for the end user.



Enable Home Page Redirection
 Page Title:
 Display Configuration Page Link
 Tag Background Color:
 Tag Overlay Color:

You also have the option to turn off the “Display Configuration Page” link which gives access to the modem’s configuration web pages, this makes it more secure and less likely that someone could navigate to the configuration pages from the dashboard. Access to the configuration page can then only be done by manually typing in the URL (<http://IP-Address/manager/hmicfg.asp>)

Next are some display colour options for the I/O tag background and overlay (Level indication).

Next, we see the Dashboard tabs (Tags, Groups & Switches) and the I/O table

The buttons allow you to Add, Delete, Edit and Move the entries up and down the table (web page position).

Dashboard Tags													
Dashboard Groups													
Dashboard Switches													
		Add		Move Up									
		Edit		Move Down									
		Delete											
#	Name	Register	Display Type	Units	Over Range Valu	Under Range Val	High Alarr	Low Alarm	Invert	Register Point	Register Point	Display Point	Display Point
1	DIn1	DI1	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
2	DIn2	DI2	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
3	DIn3	DI3	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
4	DIn4	DI4	13	mA	25	0	1	0	<input type="checkbox"/>	16384	49152	0	100
5	DOut5	DO5	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
6	DOut6	DO6	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
7	DOut7	DO7	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
8	DOut8	DO8	13	Units	100	0	1	0	<input type="checkbox"/>	16384	49152	0	100
9	AI1	AI1 (0-20mA)	Text Value	mA	25	0	19	4	<input checked="" type="checkbox"/>	16384	49152	4	20
10	AI2	AI2 (0-20mA)	Text Value	mA	25	0	19	4	<input type="checkbox"/>	16384	49152	4	20
11	AOut1	AO1	Text Value	mA	25	-5	19	4	<input type="checkbox"/>	16384	49152	4	20
12	AOut2	AO2	Text Value	mA	25	-5	19	4	<input type="checkbox"/>	16384	49152	4	20
13	Supply	Supply Voltage	Text Value	Volts	100	0	30	15	<input type="checkbox"/>	16384	49152	8	40
14	Battery	Battery Voltage	Text Value	Volts	100	0	15	10	<input type="checkbox"/>	16384	49152	8	40
15	RSSI	30401	Text Value	dBm	0	-200	-40	-95	<input type="checkbox"/>	0	100	0	-100
16	Utilisatio	30412	Text Value	%	100	0	90	0	<input type="checkbox"/>	0	100	0	100

The I/O table is where you can add or edit the I/O parameters to display the correct information, you can configure a maximum of 50 I/O points.

Configuration of the Dashboard Tag is done by selecting or adding the new tag and then configuring the parameters.

Name - Name that is displayed on the Web page tag.

Register - Is the register selection that will be used to display the value. Choose from the dropdown list or you can open the I/O selector by selecting the “...” which will allow you to choose a register using the I/O selector.

Display Type – (Future option), you can select Text or Graphical but at this stage is not used and only supports text.

Units - Is what units are displayed in the tag, can be any text.

Over Range Value – This will display “OVR” when the scaled value is greater than this value. Not used for Digitals or Counters

Under Range Value – This will display “UND” when the scaled value is less than this value. Not used for Digitals or Counters

High Alarm – For Analog data, will turn the Gauge red when the scaled value is greater than this value and for Digital data will turn the Gauge red when the signal is ON. Set to Zero to disable.

Low Alarm – For Analog data, will turn the Gauge red when the scaled value is less than this value and for Digital data will turn the Gauge red when the signal is OFF. Set to Zero to disable.

Invert - Inverts the digital data logic. Has no effect on numeric/analog values

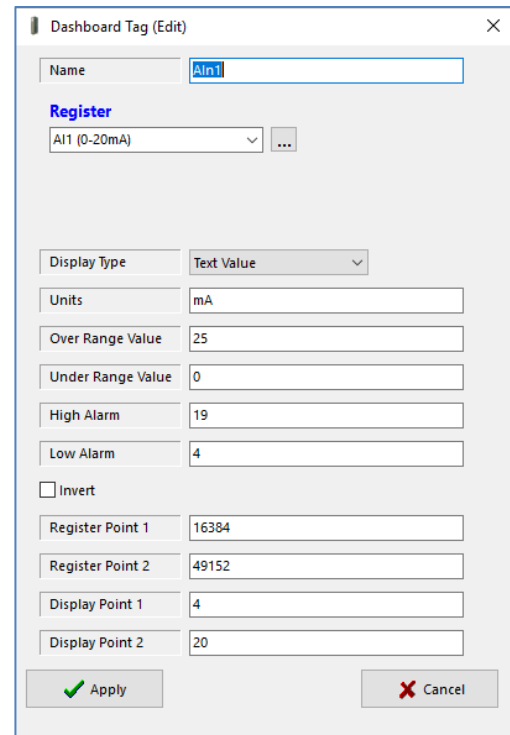
Register Point 1 – Low scaling value for the analog data (Register Low scale). Software will configure the digital Tags with analog values however it has no effect on Digitals or Counters

Register Point 2 – High scaling value for the analog data (Register High scale). Software will configure the digital Tags with analog values however it has no effect on Digitals or Counters

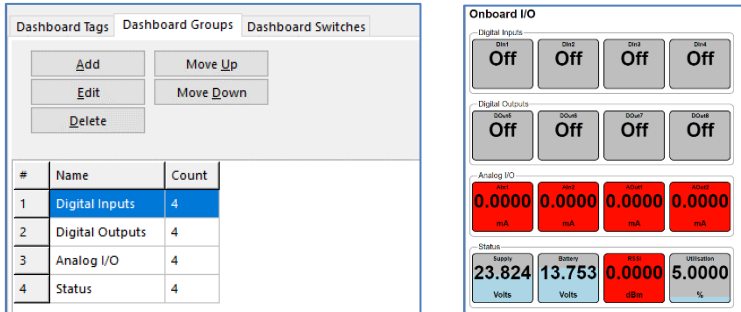
Display Point 1 - Scaling value displayed on the Web tag (Display low Scale). Has no effect on Digitals or Counters

Display Point 2 - Scaling value displayed on the Web tag (Display High Scale). Has no effect on Digitals or Counters

There is one other configuration parameter that is not available in the software (only via web page configuration) and this is the Background Colour when the Tag is in an Alarm state. By default, the Digitals will be Light Blue, and the Analogs will be Red, to change, connect to the Web page and select the colour you wish to use from the drop-down list.

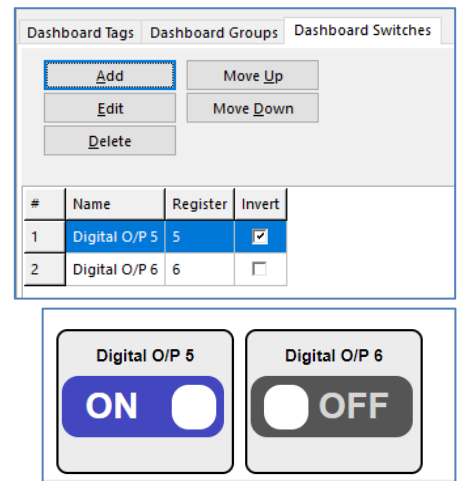


The Dashboard Groups allow you to position the I/O into different groups, i.e. Inputs/Outputs, Analogs, Status, Etc. It works from top to bottom on the web page and they are grouped to the count that has been configured. Maximum number of groups is 10 and the maximum number across that it will display is 6 before moving to another line.



The Dashboard Switches allow you to add digital output switches to the web page so that you can turn things ON and OFF by clicking the button. There is also an option to invert the logic of the switch so that it can be ON by default and switch OFF. Maximum number of Switches (Outputs) is 50 and the maximum number across is like the groups and will display is 6 across before moving to another line.

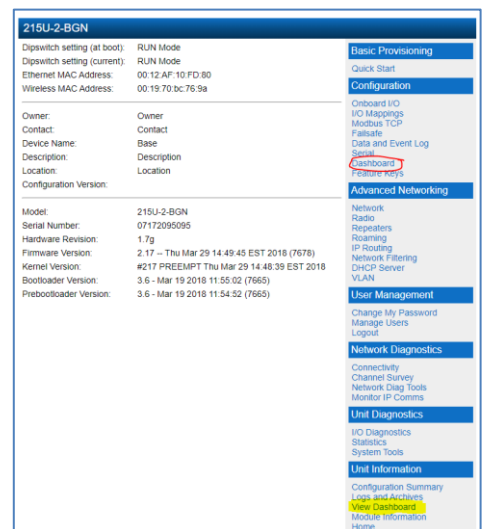
Note: Only available for Digital outputs and is not available for Analogs.



Webpage config

To access the Actual Dashboard , view the Yellow highlighted link and to go to the Webpage configuration go to the Red circle link.

Webpage configuration will be very similar to the Configuration software parameters and Table shown above.



Amendment Register:

Issue No.	Date	Details of Amendment
1.0	11/06/20	Draft Issue
1.1	10/12/20	Add 215 Webpage and add 115E-2 model
1.2	23/7/24	Added 925U-2