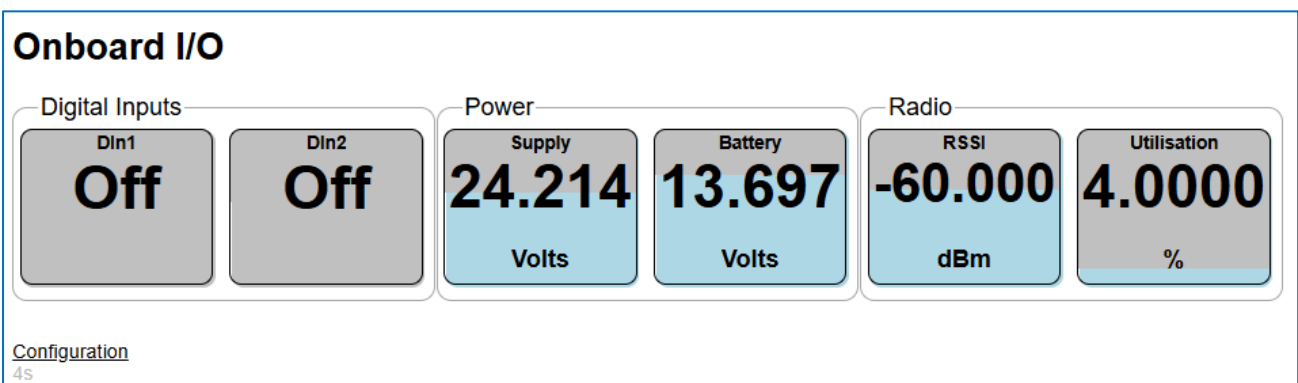


## Dashboard features and configuration.

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 and can be used for diagnostic purposes. (currently available in the Condor Series 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 physical I/O, and statistical & diagnostic registers. Any authorized user can access the dashboard remotely via the LAN or from over a radio network. The modules all come with a basic default example 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.

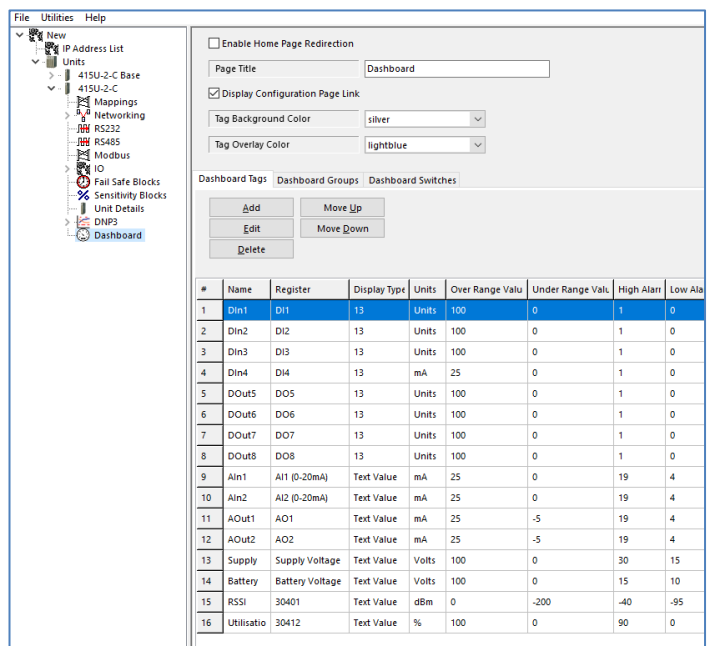
To access the dashboard, use a Web-browser to browse to the device's IP address then select the "View Dashboard" link. The dashboard can be configured to redirect automatically so that when connecting to the module IP the Dashboard will be displayed instead of having to select it from the menu. Below is the default 415U-2-Cx Web page Dashboard view.



Configuration of the dashboard can be done using configuration software or via Web page, see below for details on web config and display).

Generally, when the module is configured using the Software it will have the default I/O and status registers which can be tweaked and saved via the Web page interface if required.

A typical default 415U-2 dashboard.

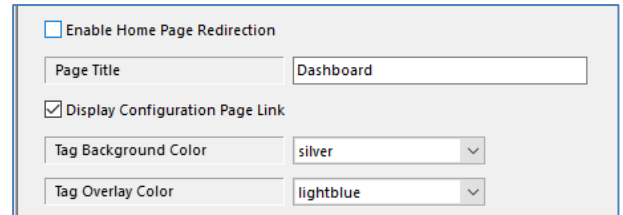


## Configuration

Using the configuration software, you can see some initial dashboard settings that can be configured, i.e. Redirect enable, Display configuration link, Title, Background and overlay color as well as some configuration tabs where the main Dashboard configuration is performed.

Web page configuration will show a similar configuration.

Enabling the “Home Page Redirection” means when someone accesses the IP Address of the modem, instead of going to the Main URL it will be redirected to the dashboard. This is useful when connecting over the air and over slower radio links.



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).

Below this table, we see some tabs (Dashboard Tags, Groups & Switches), which are explained a bit further down.

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

Dashboard Tags													
Dashboard Groups													
Dashboard Switches													
<input type="button" value="Add"/> <input type="button" value="Move Up"/> <input type="button" value="Edit"/> <input type="button" value="Move Down"/> <input type="button" value="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 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 Editing the tag or adding the new one and then configuring the parameters. You can also double click the table entry to edit.

**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 unit of measurement are displayed in the tag for any analog values and 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

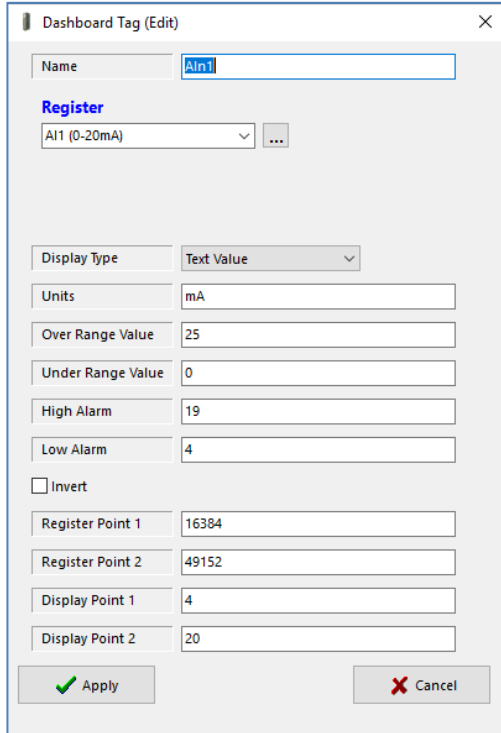
**Under Range Value** – This will display “UND” when the scaled value is less than this value. Not used for Digitals or Counters

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

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

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

**Register Pt 1&2 and Display Pt 1&2** below are where we setup the display scales. Register Pt 1 & 2 are the Engineering low/ High range and Display Pt 1&2 is the Displayed Low/High Range. E.g. below.



5	Supply	30601	red	Volts	100	0	30	0	<input type="checkbox"/>	16384	49152	8	40
---	--------	-------	-----	-------	-----	---	----	---	--------------------------	-------	-------	---	----

Our Battery supply from the module will be a value between 16384 to 49152 which will represent a Voltage scale between 8 & 40 V

**Register Point 1** – Low scaled Engineering value for the analog data that is used in the display. Typical Elpro analog range will be between 16384 = 4mA & 49152 = 20mA. Has no effect on Digitals or Pulsed Counters

**Register Point 2** – High scaled Engineering value for the analog data that is used in the display. Typical Elpro analog range will be between 16384 = 4mA & 49152 = 20mA. Has no effect on Digitals or Pulsed Counters

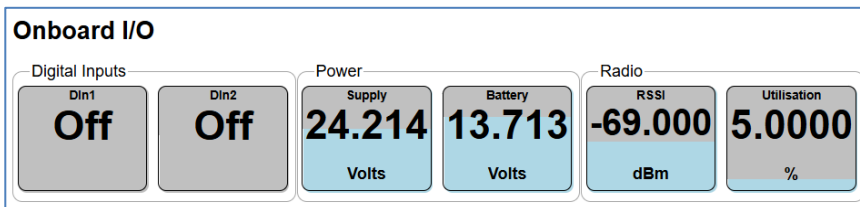
**Display Point 1** - Scaling value that will be displayed on the Web tag based on Engineering values above. (low end Scale). Has no effect on Digitals or Counters

**Display Point 2** - Scaling value that will be displayed on the Web tag based on Engineering values above. (High end Scale). Has no effect on Digitals or Counters

There is one other configuration parameter that is not available in the Config 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.

1	DIn1	10001	lightblue	Units
2	DIn2	10002	lightblue	Units
3	Supply	30005	red	Volts
4	Battery	30007	red	Volts

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.



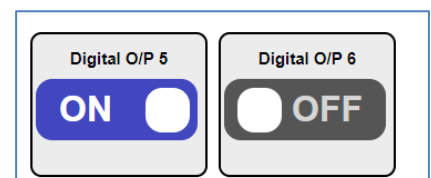
#	Name	Count
1	Digital Inputs	2
2	Power	2
3	Radio	2

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.

#	Name	Register	Invert
1	Digital O/P 5	5	<input checked="" type="checkbox"/>
2	Digital O/P 6	6	<input type="checkbox"/>

Note: Only available for Digital outputs, not available for Analogs.



## Webpage config

To access the Web Dashboard, view the yellow highlighted link from the main web URL. To view the Dashboard configuration, select the red link.

Webpage configuration will be very similar to the Configuration software apart from the Alarm color option and each will have its own Pro's and Con's.

Config Software allows you to move the order around

Often it is good practice to set it up and program from the software and then fine tune via the web as the web page allows changes to be made and checked, without needing to reboot the Radio.



## 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
1.3	17/4/25	Minor reword and update.