

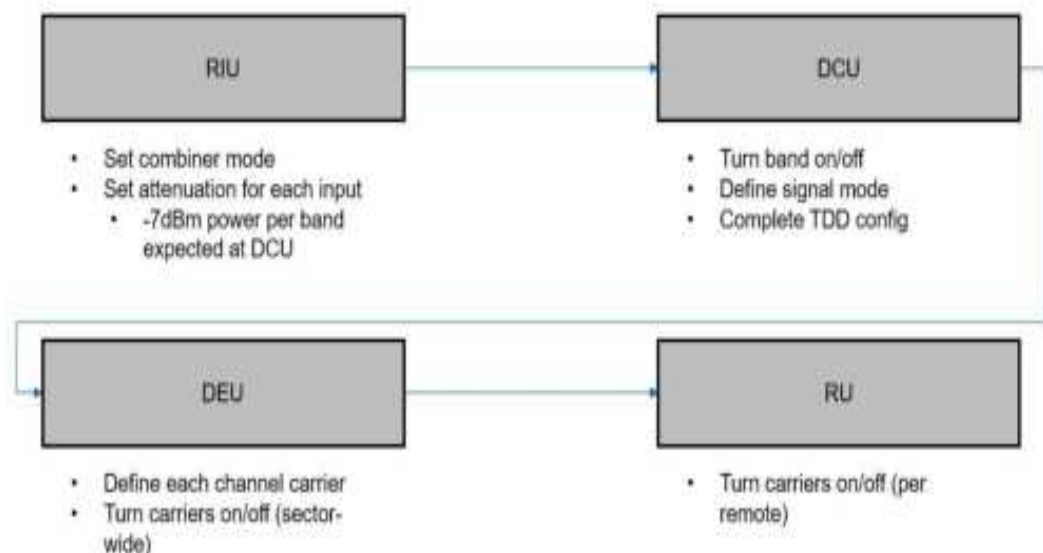
Figure 80. General setting

- 3) Once the connection is established (can be verified by accessing through command prompt: `cmd& ipconfig`), open a browser and type in the LOCAL port default IP address in the address bar: <https://192.168.8.101>.

## 5. Commissioning

Configuring the Corning® Everon™ 6000\_G2 system for each frequency requires a basic understanding of link, budgets, and RF technology. Most system commissioning should be adjusted based on the site requirements and instructions of Corning Support.

### webGUI

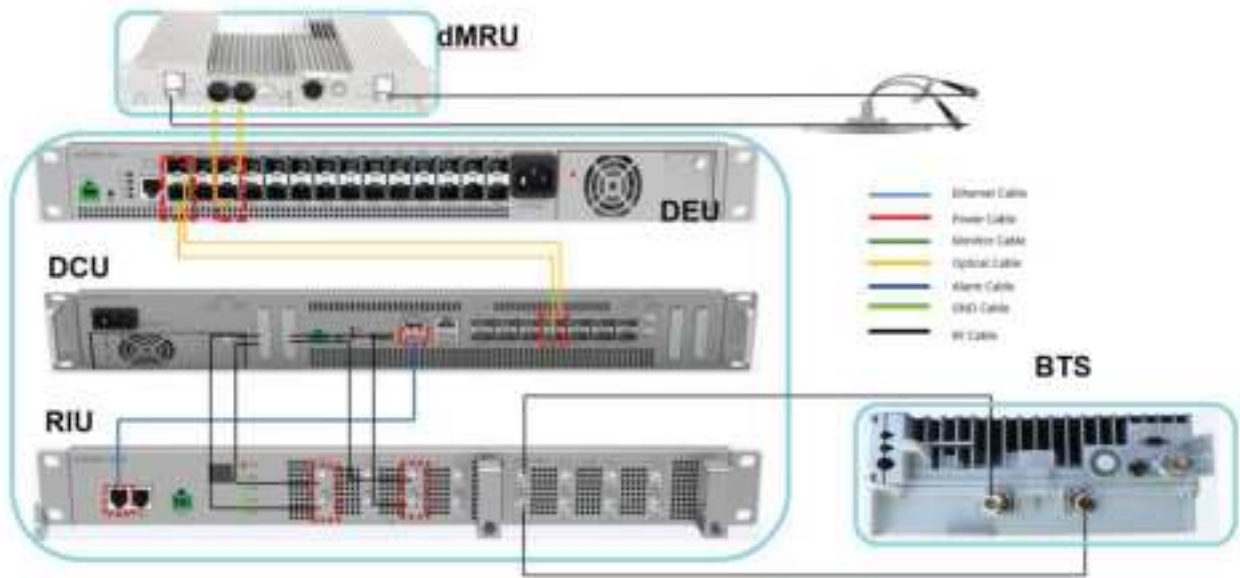


### Workflow

Figure 81. webGUI Workflow

*\*Note: In order to protect the whole system, please keep no signal injection into eNodeB before commissioning.*

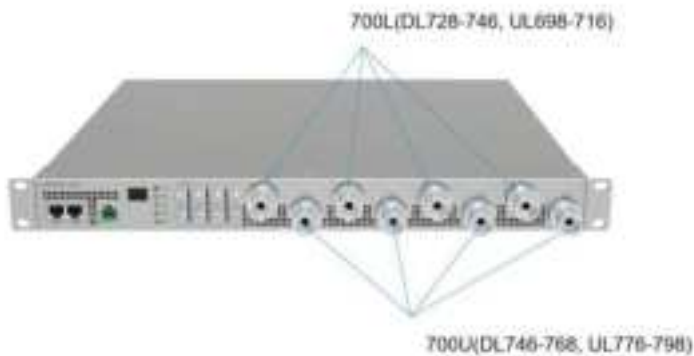
Headend Units – Architecture Example: 2x2 MIMO, 1 Operator.



Commissioning tools:

Tools	Description
Laptop	Debug tool
Network cable	Connect DCU OMT port with laptop

**Note:** The RIU-G2-7 input ports are different, RIU input port1,3,5,6 for 700L band and port2,4,6,7 for 700U band.



**Limitation1:** In the current design, all the SFP connections (between DCU and DEU, DEU and dLRU) cannot be cross connected.

The following connection is supported:

DCU Port1 <--> DEU PortA

DCU Port2 <--> DEU PortB

DEU Port1 <--> dLRU-3.5 Port1

DEU Port2 <--> dLRU-3.5 Port2

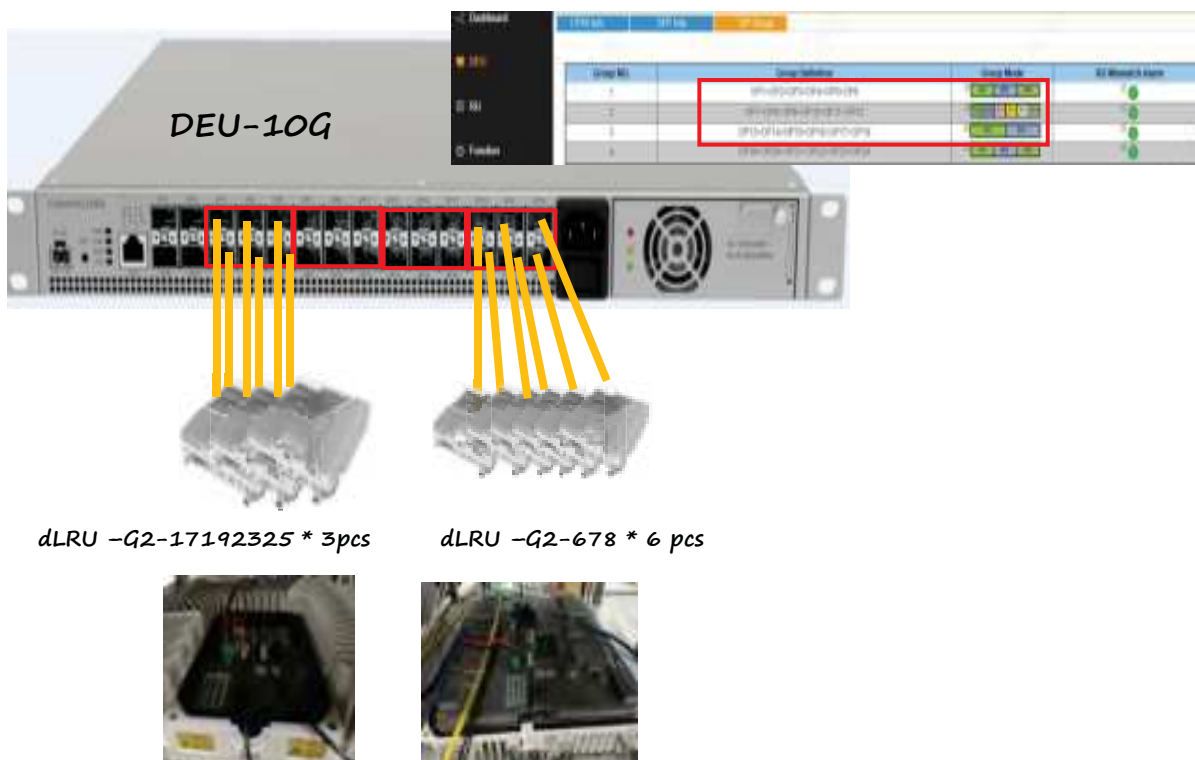
DEU Port3 <--> dMRU-3.5 Port1

DEU Port4 <--> dMRU-3.5 Port2

If the SFP is cross connected between DCU and DEU, the cross status will be shown on DEU web.

1. dLRU-3.5 and dMRU-3.5 support 8 carriers in one sub-band, and totally 16 carriers supported.
2. This version is based on build 8 for dLRU-G2-25 and dMRU-G2-25 upgrade.

**Case:** take dLRU fiber connection as an example.



**Note:**

- DEU-10G is defined as 4 groups, each group includes 6 ports
  - Each group can be set to
    - 1 fiber is connected to one device (dLRU-678)
    - 2 fibers are connected to one device (dLRU-17192325)
  - Connect the same devices to the same group
  - dLRU-17192325 need to be connected to the same pair SFP, such as OP1&OP2, OP3&OP4, OP5&OP6, but cannot be connected to unpaired ports such as port 1&5, 2&3
- Cross connection (OP1<-->OP2) is NOT supported in build 8

**Limitation2:** The EAWS channel configuration of DCU should be EAWS+ EAWS or EAWS + 1900B. If configure the channel as EAWS + N/A, it may cause a spurious signal in DL 2155Mhz.

## Recommended configuration:

Corning ERXON™ 4000 SOLUTIONS

OCU 01  
Equipment Mode: Primary  
Equipment Model: 1831100  
Equipment SN: 672887047  
Firmware Version: Euron\_0001\_OC1\_FW\_01.01.01.00000  
Hardware Version: 3  
Site Info: N/A

Dashboard  
OCU  
Wavelength  
Function  
User  
Status  
Program

Wave	Ch	Band	RF BW	OL Center Freq	Signal Mode	RF Switch	SL ATT	OL ATT	Max_Pwr_in	OL_Pwr_in	OL_Pwr_out	Att Loss	High Sat
1	1	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
2	2	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
3	3	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
4	4	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
5	5	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
6	6	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
7	7	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
8	8	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
9	9	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
10	10	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
11	11	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
12	12	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
13	13	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
14	14	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
15	15	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
16	16	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
17	17	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
18	18	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
19	19	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
20	20	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%

## Not recommended configuration (EAWs+N/A):

Corning ERXON™ 4000 SOLUTIONS

OCU 01  
Equipment Mode: Primary  
Equipment Model: 1831100  
Equipment SN: 672887047  
Firmware Version: Euron\_0001\_OC1\_FW\_01.01.01.00000  
Hardware Version: 3  
Site Info: N/A

Dashboard  
OCU  
Wavelength  
Function  
User  
Status  
Program

Wave	Ch	Band	RF BW	OL Center Freq	Signal Mode	RF Switch	SL ATT	OL ATT	Max_Pwr_in	OL_Pwr_in	OL_Pwr_out	Att Loss	High Sat
1	1	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
2	2	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
3	3	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
4	4	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
5	5	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
6	6	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
7	7	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
8	8	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
9	9	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
10	10	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
11	11	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
12	12	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
13	13	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
14	14	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
15	15	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
16	16	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
17	17	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
18	18	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
19	19	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%
20	20	Passive	100kHz	2100000	Passive	Passive	Passive	Passive	0dBm	-40.00dBm	-40.00dBm	0dB	75%

## 5.1 RIU Config

### 5.1.1 RIU WEB overview

Click RIU on the left side shown in the figure below to enter the RIU overview control interface where the information (e.g., RIU alarm) can be viewed. Drag the scroll bar under the information list box or the arrow in the column of More to view more.

**Configure the following parameters:**

- Band: Read Only. This shows the current frequency band supported by the RIU
- Combiner Mode: 8TO1/4TO1/2TO1



Figure 82. RIU overview

**Note:** RIU supports 3 working modes (2 to 1, 4 to 1, 8 to 1).

**2 to 1**, 4x4 MIMO for up to 2 groups. Duplexer (TX/RX1&2 for MIMO1, TX/RX3&4 for MIMO2, TX/RX5&6 for MIMO3, TX/RX7&8 for MIMO4), Simplexes (TX1/RX5 for MIMO1, TX2/RX6 for MIMO2, TX3/RX7 for MIMO3, TX4/RX8 for MIMO4)

**4 to 1**, 2x2 MIMO for up to 4 groups. Duplexer (TX/RX1&2&3&4 for MIMO1, TX/RX5&6&7&8 for MIMO2), Simplexes (TX1/RX5 for MIMO1, TX2/RX6 for MIMO2)

**8 to 1**, SISO for up to 4 groups. Duplexer (TX/RX1~8 all for SISO), Simplexes (TX1/RX5 for SISO)

## 5.1.2 RIU Parameter Config

RIU parameters:

SN	RIU Parameters		Ranges	Default Values	Remark
1	Work Mode		TxRx/Tx/Rx	TxRx	
2	High Gain Mode		ON/OFF DL gain=-30 dB/-7 dB	OFF (-30 dB gain)	ON (-7 dB Gain) Support downlink high gain mode
3	DL P_in		Read only	Read only	Downlink input power
4	RF Switch		On/Off	On	
5	UL ATT		0~25 dB	20 dB	RIU uplink ATT
6	DL ATT		0~25 dB	20 dB	RIU downlink ATT
7	ALC Switch		ON/OFF	ON	
8	High Gain Mode =ON	ALC Level	ON: -11~9 dBm	7 dBm	
		DC Input Overload THR	-13~12 dBm	12 dBm	
		DC Input Lower THR	-25~12 dBm	-15 dBm	
9	High Gain Mode =OFF	ALC Level	OFF: 12~32 dBm	30 dBm	
		DL Input Overload THR	12~37 dBm	37 dBm	
		DL Input Lower THR	0~37 dBm	10 dBm	





### To configure RIU parameters

1. In the dashboard, click RIU NE in the topology and enter RIU info page.



2. In the main menu options, click RIU-RIU 1 and the configuration page appears.

3. In the displayed page, click  to configure each field (Work mode, High Gain Mode, RF Switch, UL ATT, DL ATT, ALC Switch, ALC Level, DC Input Overload THR, DC Input Lower THR).
4. For UL/DL Slot Configuration, Special Sub Configuration, Sub Carrier Spacing, click the arrow to show the listed optional values and select one; Then click Save .



5. For User Set CF 1~8 and SSB Auto Search Switch, scroll the bar or click the arrow under **More** to fill in relevant values within the range according to the parameters above. Next click Finish


 to complete the settings.



Figure 83. RIU RF information



## 5.2 DCU Config

**Note:** DCU star connection is not supported, planned in Build 10. The max network topology would be 4:16:192(DCU star and DEU daisy chain connection).

### 5.2.1 DCU -> Dashboard

Click the Dashboard navigation button to enter the dashboard page shown in the figure below, where you can query the full topology of all the dependent NE connected to the DCU unit. Click NE ID in the topology, and switch to the info query and configuration management page of other NE to facilitate the user.

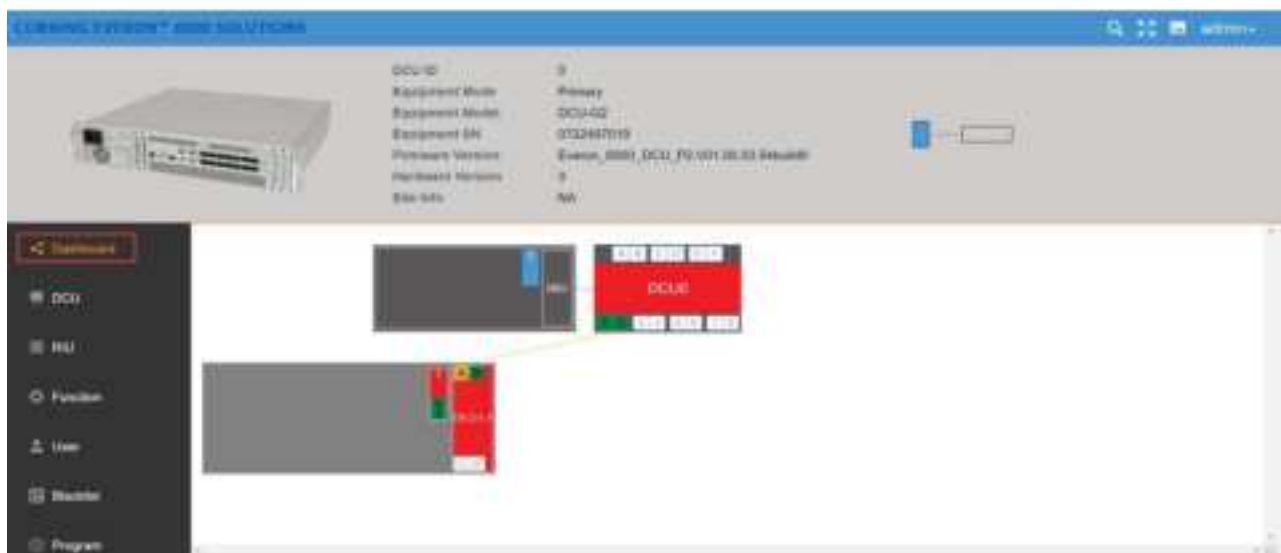


Figure 84. DCU dashboard



#### 5.2.1.1 DCU Alarm


SN	DCU parameters	Range	Default values	Remark
1	DL Overload THR	-40~10dBm	10dBm	Downlink overload threshold
2	Temperature THR	0~125°C	80°C	Temperature threshold
3	Power Temperature THR	0~125°C	80°C	Power supply unit temperature threshold
4	Optical Module Temperature THR	0~125°C	80°C	Optical Module Temperature threshold
5	System Delay THR	-999999999ns~999999999ns	60000ns	System delay threshold

On the left navigation page of the DCU unit, click DCU → Alarm shown in the figure below. On this page, all alarm quantities of the device are displayed to facilitate the user to query and monitor the alarm info.

#### ➤ To configure DCU alarm parameters

1. Click DCU—Alarm Info to enter the configuration page.

2. For alarms, click  and Disable and Enable button can be seen. Select Enable then the green icon will be displayed .

3. For Temperature THR, Power Temperature THR, Optical Module Temperature THR, System Delay THR, click  to enter the values within the range according to the form above.



- Click Finish  to complete the setting.



Figure 85. DCU alarm info

### 5.2.1.2 DCU OP Info

In this window, users can query the information of all optical ports.

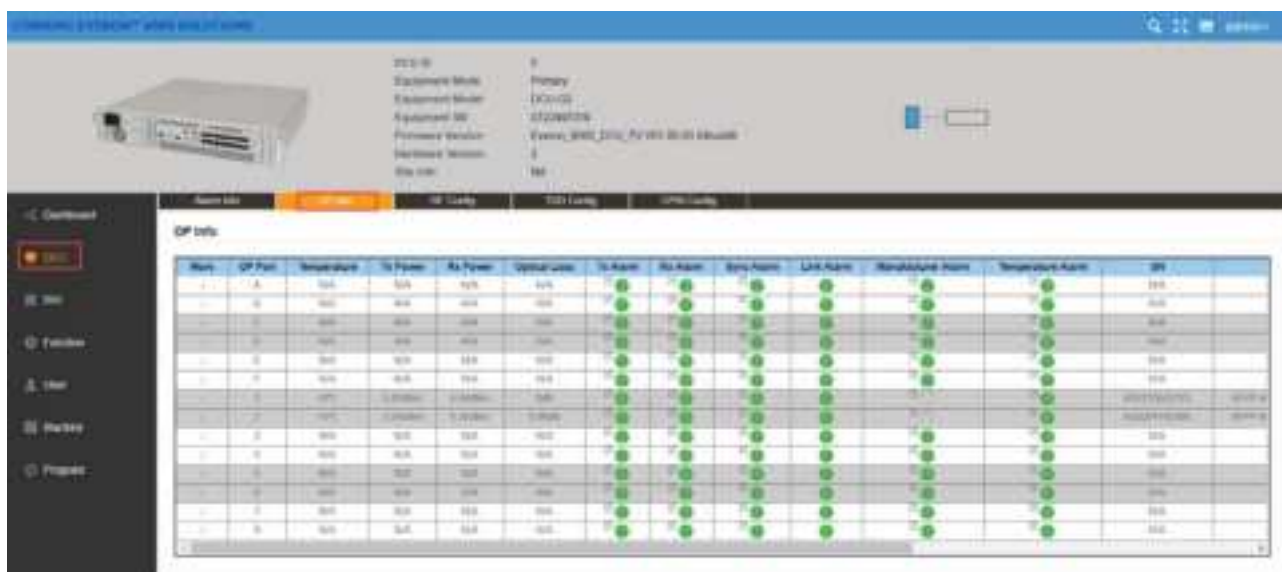



Figure 86. DCU OP info

#### ➤ To configure the OP Info

- Click the left navigation button DCU→ OP Info.

- Click the edit icon  in front of the alarm indicator to enter the alarm Enable and Disable settings page.

- Then click Finish button  to complete the setting, as shown below.



Figure 87. DCU→ OP Info → →Disable/Enable→Finish/Cancel

Click OP Info →More to view the optical module info, as shown below.

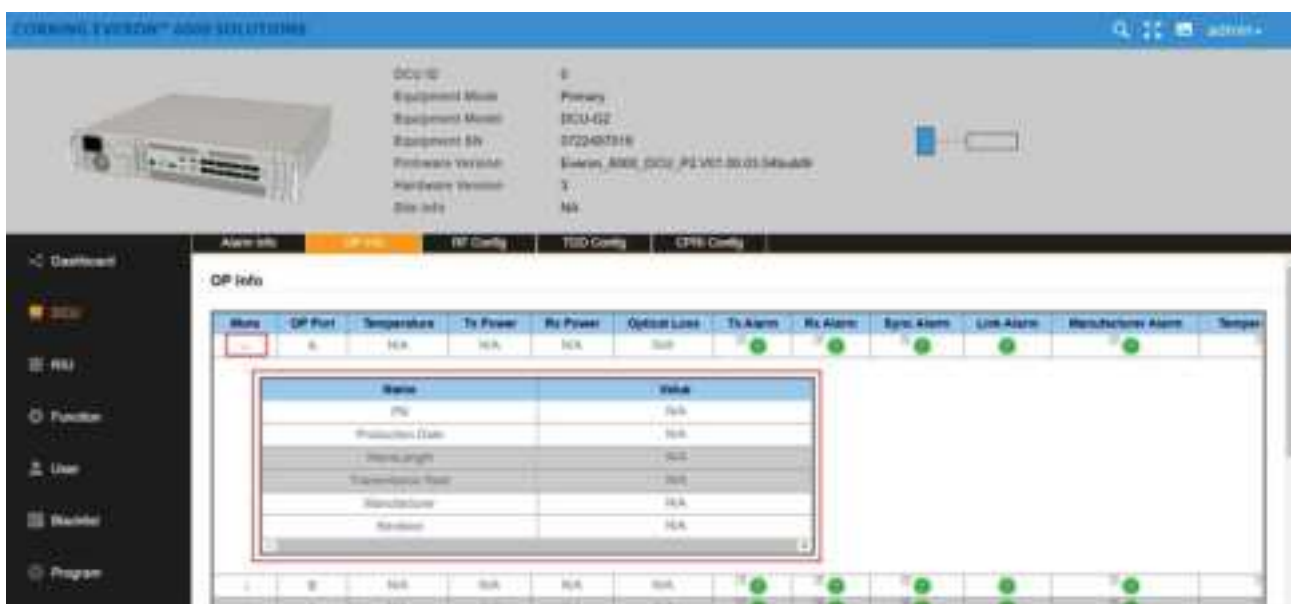


Figure 88. DCU→ OP Info→More



### 5.2.1.3 DCU RF Config

SN	DCU RF Config Parameters	Ranges	Default Values	Remark
1	Band	<b>Channel1-8</b> 3500G/3500F/2500T/WCS/1900B/ EAWS-A <b>Channel 9-16:</b> 600/700L+700U/ESMR+850/2500T/WCS/ 1900B/EAWS-A	N/A	If the 16 channels are divided into 4 groups (1-4, 5-8, 9-12, 13-16, EAWS-A and 1900B must be in the same group
2	BW	Read only	Read only	
4	Signal Mode	FDD/TDD-LTE/TDD-NR/TDD-LTE+TDD-NR	TDD-NR	
5	RF Switch	ON/OFF	OFF	
6	UL ATT	0~20 dB	20dB	
7	DL ATT	0~20 dB	20dB	
8	High Gain Mode	ON/OFF	OFF(0dB)	
9	DL Overload THR	-40~10 dBm	10 dBm	

#### Note:

- One DCU has the limitation of radio band(channel). It supports max 8 bands of these 9 bands (N3500F/2500T/EAWS-A/1900B/WCS/600/700L+700U/ESMR+850/3500G)
- The 3500F supports (3450~3700MHz), 3500G supports(3700~3980MHz)
- If the bands are N3500F,2500T and N3500G, there are three signal modes to choose from including TDD-NR,TDD-LTE,TDD-LTE+TDD-NR. If select other bands, the signal mode can only be FDD.
- If the TDD band(N3500F/2500T/3500G) is configured, the TDD parameters need to be configured.
- The CPRI config interface is associated with all channels in RF config.

#### ➤ To achieve RF config

- Click DCU→ RF Config to enter the page below.
- Click the icon  in each field.
- Select one from the drop-down options (e.g., In Band, N3500G is selected).
- For UL ATT, DL ATT, DL Overload THR, enter values within the range according to the parameters form above.
- For RF Switch and High Gain Mode, select ON/OFF and Enable /Disable button.
- Click Finish button  to complete the settings.

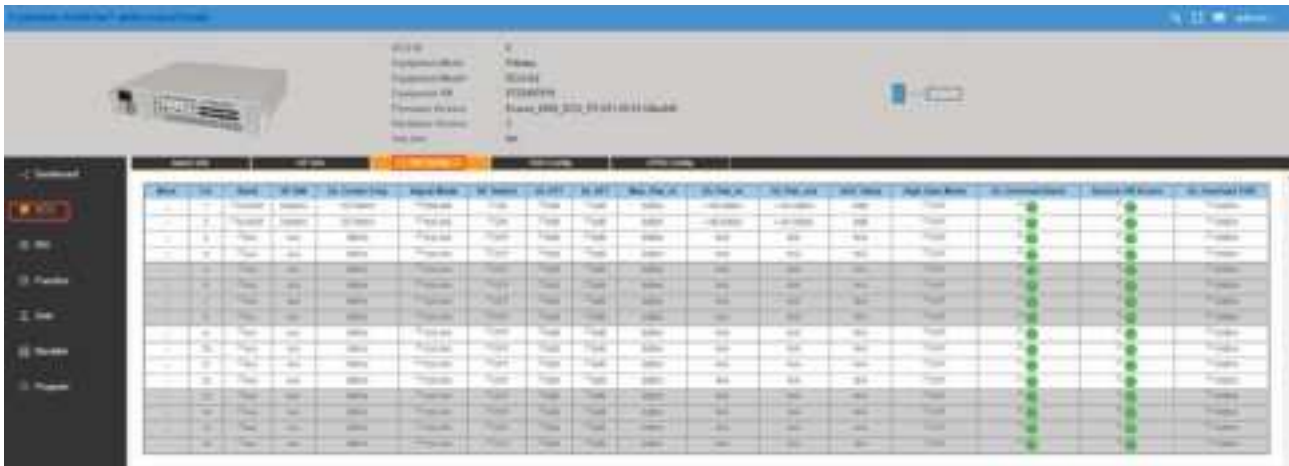




Figure 89. DCU→RF Config

#### 5.2.1.4 DCU TDD Config


SN	DCU TDD Config Parameters	Ranges	Default Values
1	UL/DL Slot Configuration	Pattern0:DDDSUDDSUU/Pattern 1:DDDSUUUDD/Pattern 2: DDDSUUDDDD/Pattern 3: DDDDDDDSUU/Custom	DDDSUDDSUU
2	Special Sub Configuration	3:8:3/ 10:2:2/ 6:4:4/ Custom	10:2:2
3	Sub Carrier Spacing	15 kHz/30 kHz	30 kHz
4	User Set CF 1~8	(2496-2690) (3450-3700) (3700-3980) (862-894) (617-652) (2350-2360) (728-768) (1930-2020) (2110-2200) MHz	0
5	SSB Auto Search Switch	ON/OFF	OFF

UL/DL Slot Configuration: User-defined parameters are supported, but should be the same as the operator parameters.

➤ To configure the TDD parameters

- For each screen field above (UL/DL Slot Configuration, Special Sub Configuration, Sub Carrier Spacing, User Set CF 1~8, SSB Auto Search Switch), click  to configure.
- For UL/DL Slot Configuration, Special Sub Configuration, Sub Carrier Spacing, click the arrow show the list of optional values and select one; Click Save  to complete the setting.



- For User Set CF 1~8 and SSB Auto Search Switch, scroll the bar or click the arrow under **More** to fill in relevant values within the range according to the parameters above. Click Finish  button.

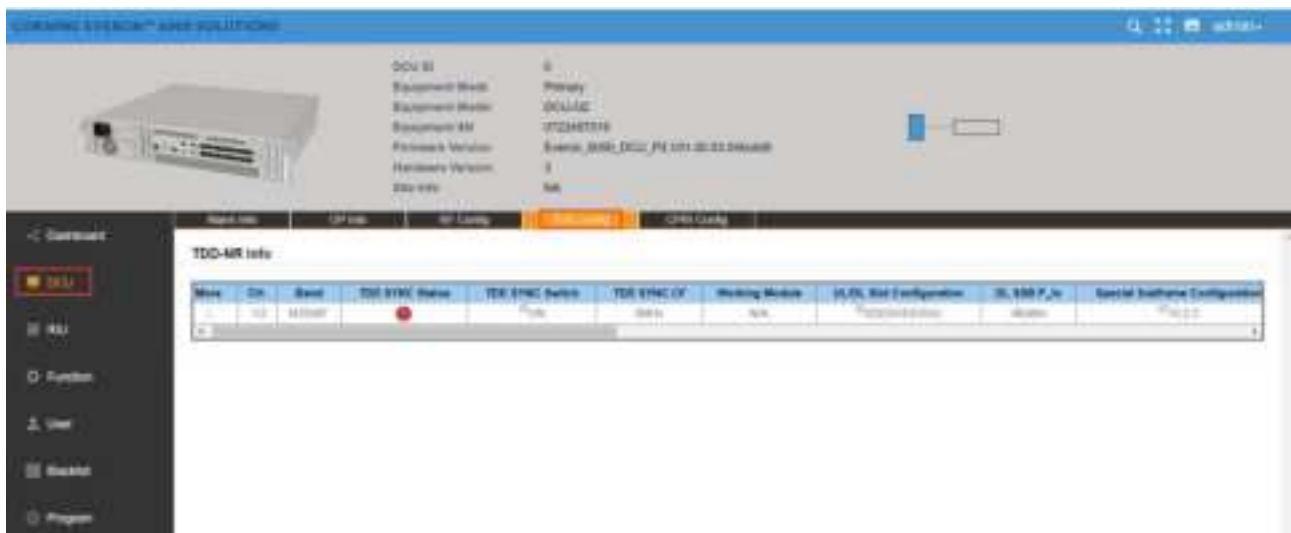


Figure 90. DCU→ TDD Info

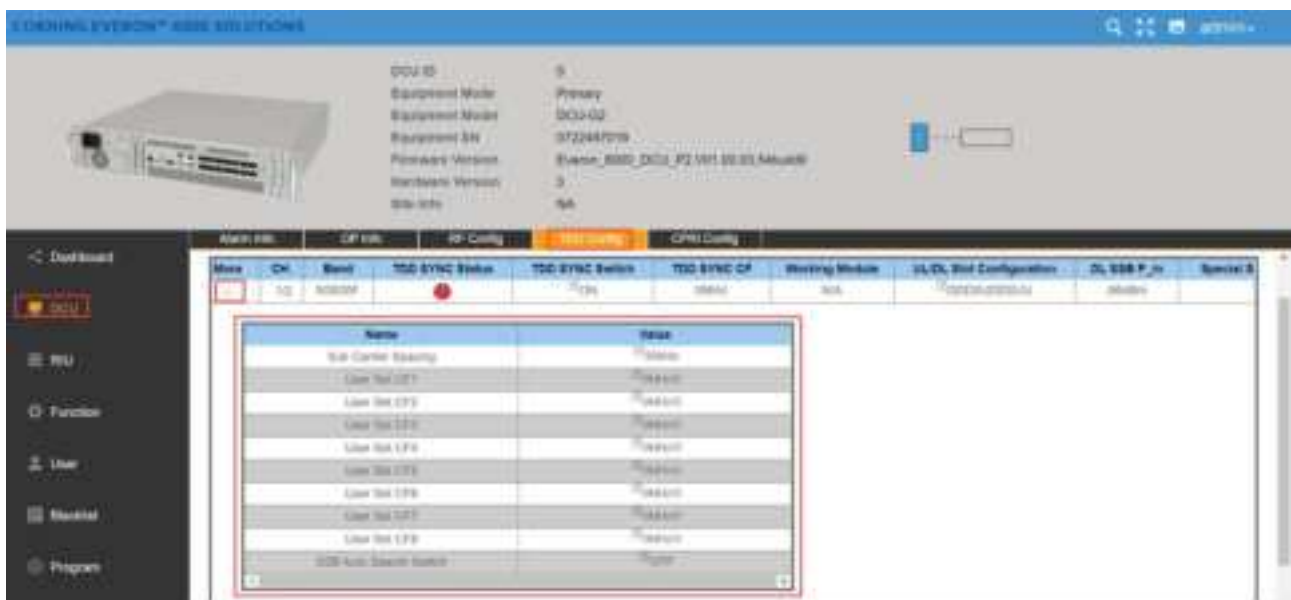


Figure 91. TDD Config→More

5.2.1.5 CPRI Config



Figure 91. DCU→CPRI Config

You can select OP1-8 to complement these configurations including export, import, delete all and add.

Click Add to add carrier. For the band, N/A and N 3500F can be selected. For DCU, you can select N/A, CH 1/2, CH3/4, CH5/6, CH7/8, CH9/10, CH 11/12, CH 13/14, CH 15/16. For MIMO, MIMO 1/2 and MIMO 3/4 can be selected. Then click Save to complete the carrier adding configuration as shown below.

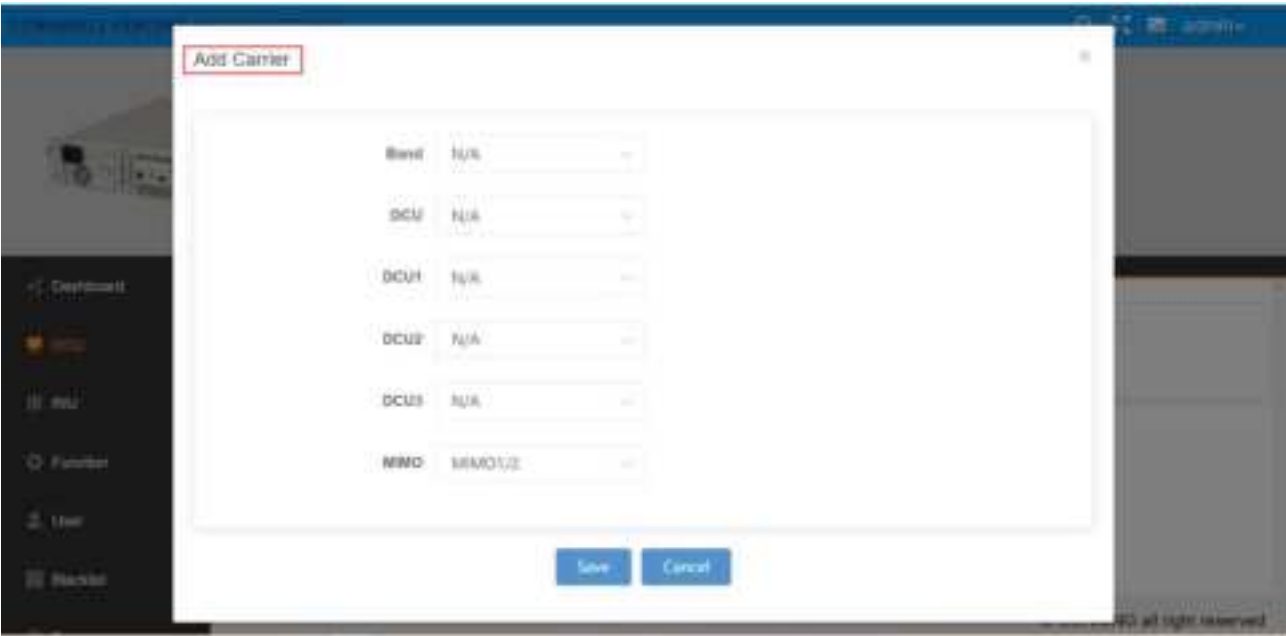


Figure 92.DCU→CPRI Config→Add Carrier

5.2.2 DCU -> RIU

As shown in the figure, click DCU → RIU to query and set the information of the RIU connected to the DCU unit.

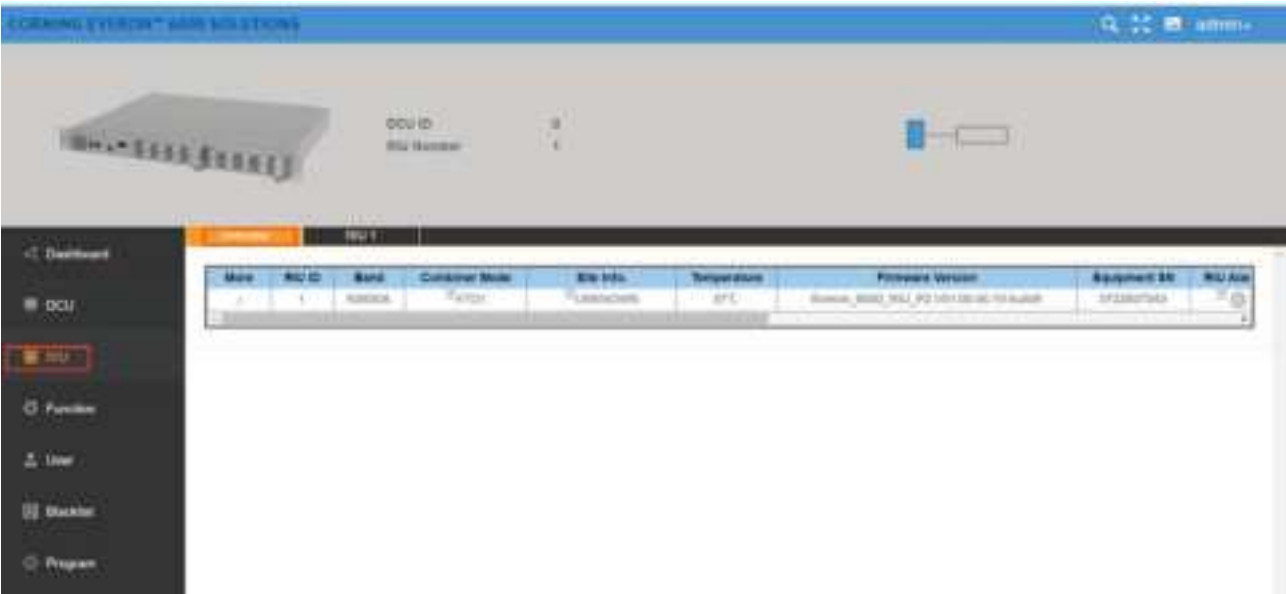


Figure 93. RIU overview

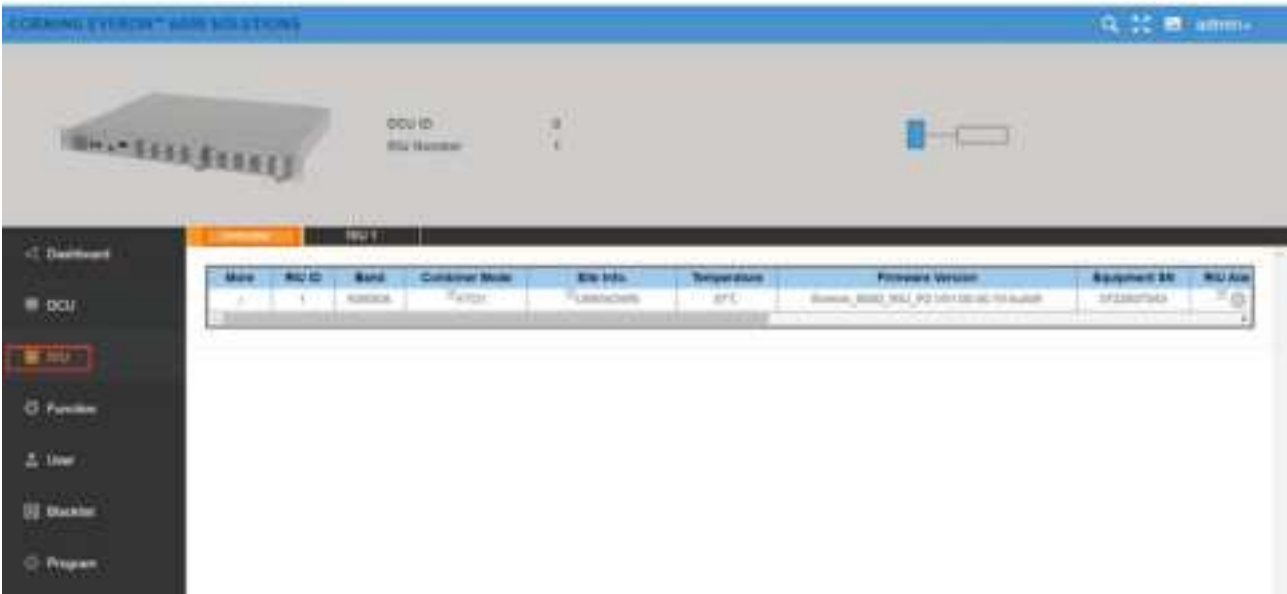


Figure 94. RIU overview→More

5.2.3 DCU -> Function

Configure the max input according to specific needs.

5.2.3.1 Device Info

Click Function → Device Info to query the names and values of the device, as shown below.





Figure 95. DCU →Function →Device Info

72H reboot time, site info, site ID, user model and device mode can be customized by users.

72H Reboot Time is set by the user which can be reset within 24 hours; Device Mode is used to set the work mode of DCU. (Note: when DCU is in master mode, it can be connected to DEU; when DCU is in slave mode, it cannot be connected to DEU and cannot work independently. It can only be connected to master DCU for normal use.)

### 5.2.3.2 Reset

Click Function →Reset to reset the software and hardware of DCU and clear the historical alarms.



Figure 96. DCU →Function →Reset

### 5.2.3.3 Trigger Switch

Trigger Switch includes Baseline Save, Baseline Clear and DCU Identify.

Baseline Save: It is to save the current topology based on customer requirements. If an NE is removed, a baseline Save alarm will be generated.

Baseline Clear: It is to clear the previous topology and update it to the current topology.

DCU Identity: If it is clicked, the red alarm indicator will blink for 10 seconds.

Click DCU->Function->Trigger Switch as shown in the figure below.

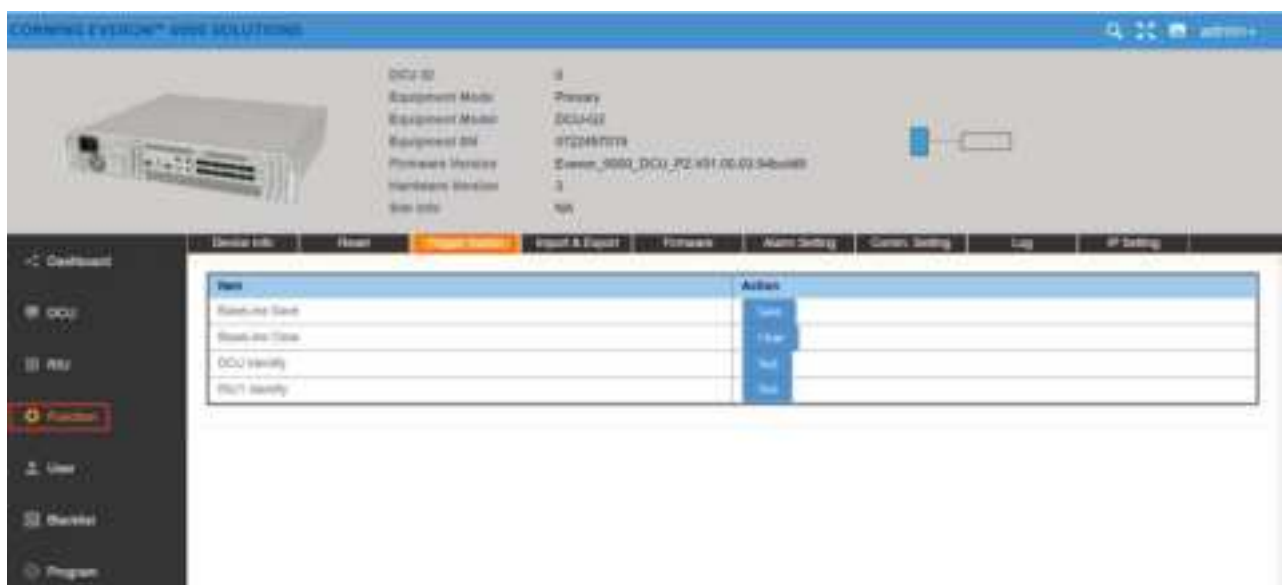


Figure 97. DCU->Function->Trigger Switch

#### 5.2.3.4 Import&Export

The user can import and export DCU configuration by clicking Function → Import & Export, as shown in figure:

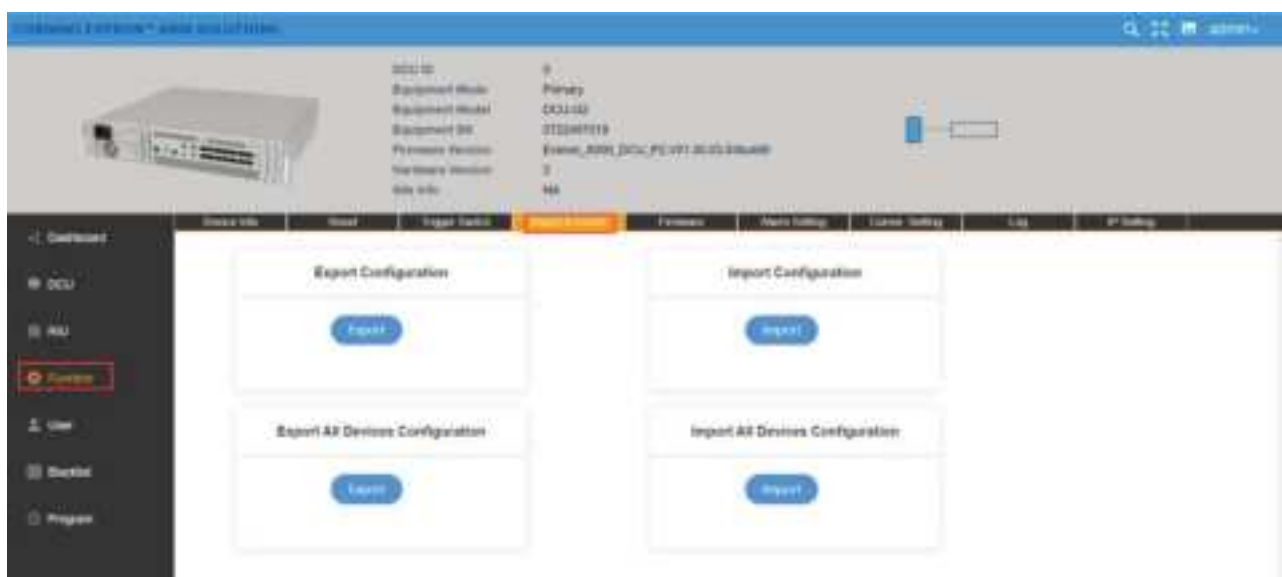


Figure 98. DCU →Function → Import & Export

#### 5.2.3.5 Firmware

Click Function →Firmware and the firmware info can be viewed and upgraded.

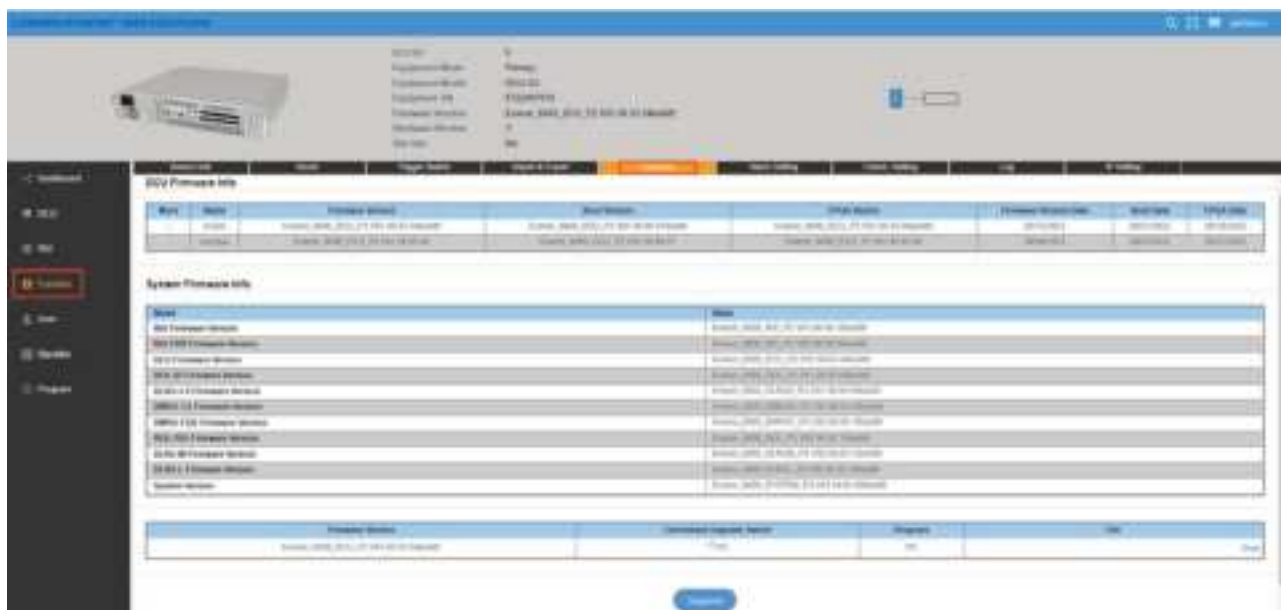


Figure 99. DCU →Function→ Firmware

Two upgrade modes are supported by 5G digital DAS products of D430 series of the system software of all NE: centralized upgrade and decentralized upgrade. The settings of the two modes can be configured in Control Switch.

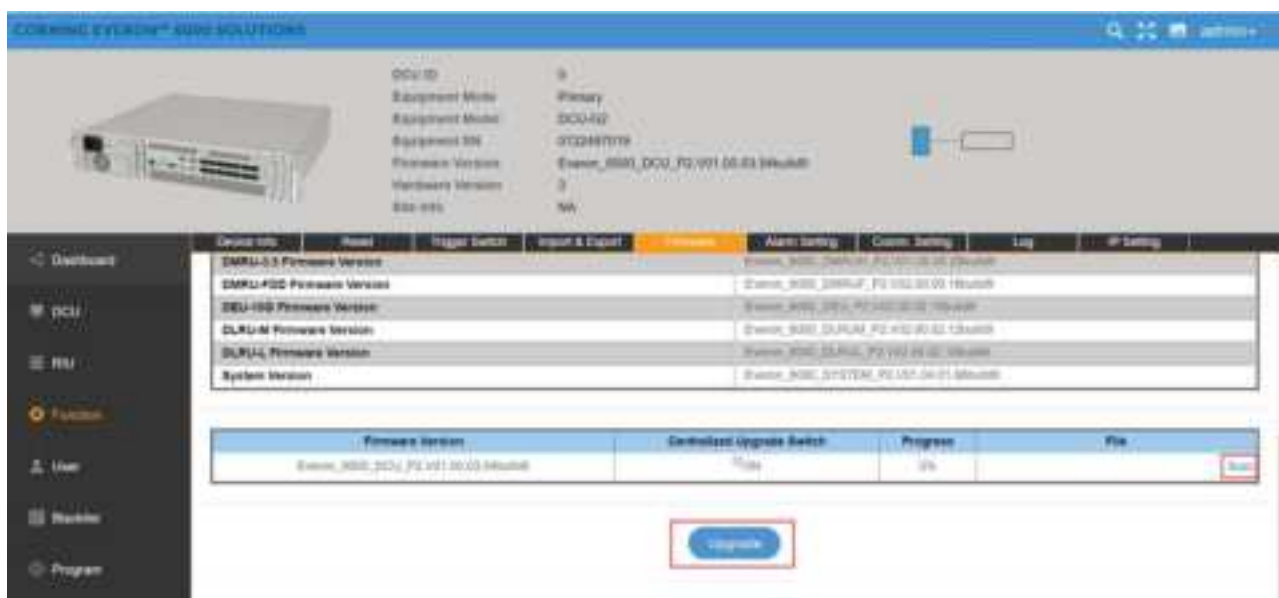


Figure 100. Firmware Upgrade Configuration

1. Decentralized upgrade: the Control Switch is OFF and only the software of the current DCU unit can be upgraded in this mode. The steps to upgrade the software are the followings:

Step 1: Click SCAN to import the software version to be upgraded.

Step 2: Click Upgrade. When the progress of downloading the software to the device is 100% and FINISH is prompted, the software is successfully downloaded.

Step 3: After the device is reset, the software will be upgraded automatically.

2. Centralize upgrade: the Control Switch is ON. The system software of seven NE (RIU, DCU, DEU, dLRU-2.5, dLRU-3.5, DMRU-2.5, DMRU-3.5) in the 5G digital DAS products will be stored after they are imported into the internal storage by the users. All the slave NE (slave DCU, DEU, dLRU) connected to this seven NE will automatically take the system software to be upgraded independently.

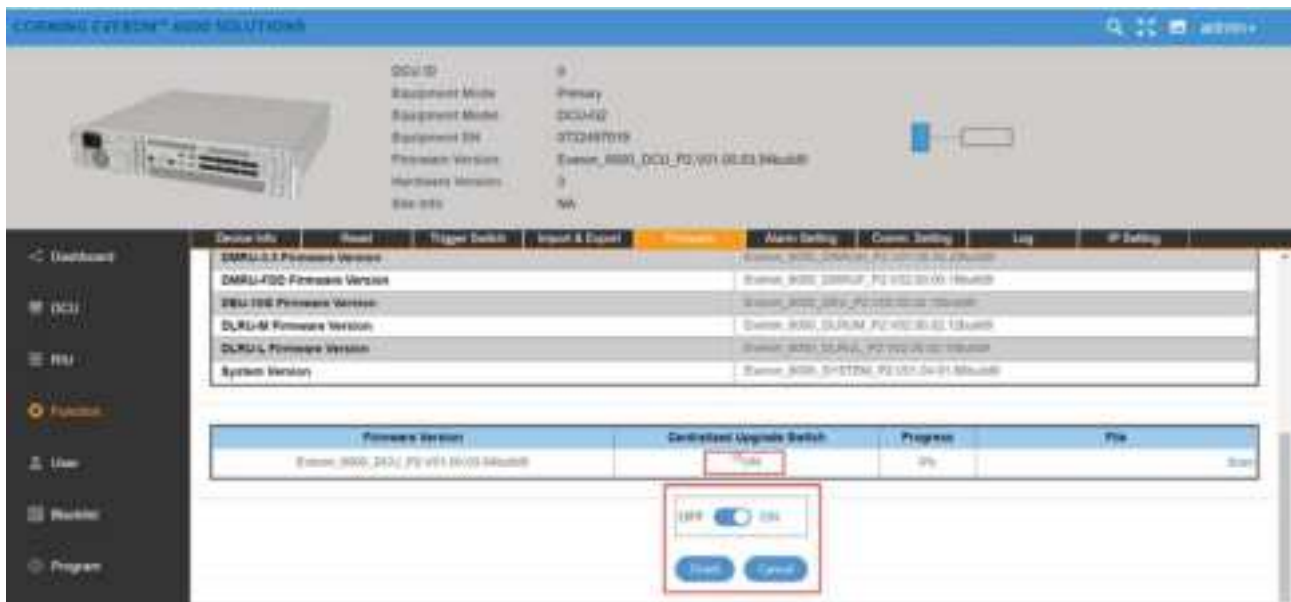


Figure 101. System Upgrade ON/OFF

### 5.2.3.6 Alarm Setting

Through Function → Alarm Setting, setting the alarm duration can be achieved. When it is set to 1~253, it shows alarm duration, with the unit of 10s. Setting to 254 indicates an immediate level alarm; Set to 0 and the alarm will not occur until 3 minutes later.

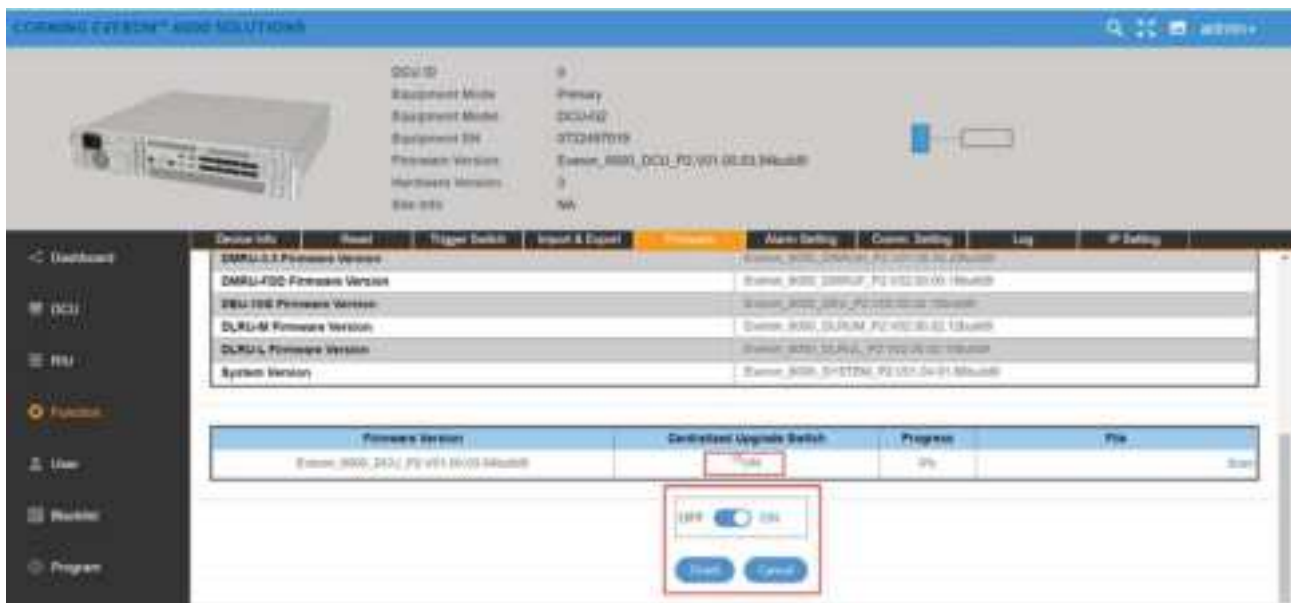


Figure 102. DCU → Function → Alarm Setting → Alarm Detect Duration

### 5.2.3.7 Comm.Setting

Click Function → Comm. Setting to set the network management communication types, as shown in the figure:



Figure 103. DCU → Function → Comm. Setting

### 5.2.3.8 Log

Click Function → Log to export the log of DCU for problem analysis, as shown in the figure:



Figure 104. DCU → Function → Log

### 5.2.3.9 IP Setting

Click Function → IP Setting to set DCU IP for OMC communication, as shown in the figure:

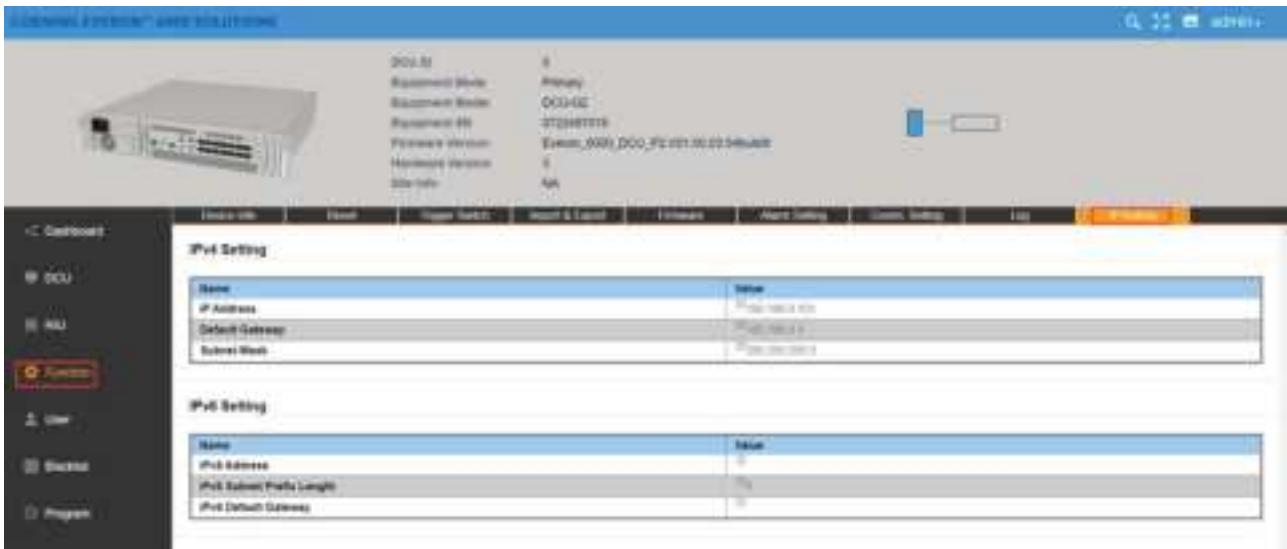


Figure 105. DCU→Function → IP Setting

## 5.3 DEU Config

SN	DEU Parameters		Ranges	Default Values
1	Temperature THR		0~125°C	80°C
2	Power Temperature THR		0~125°C	80°C
3	Optical Module Temperature THR		0~125°C	80°C
4	RU Temperature THR		0~125°C	80°C
5	Equipment mode		25G/10G	
6	Alarm Detect Duration		0-255S	0-10S
7	Switch		ON/OFF	ON
8	Technology		3G/4G/5G	3G
9	UL Center Freq. (MHz)		(2496-2690), (3450-3700), (3700-3980), (817-849), (663-698), (2305-2315), (698-798), (1850-1915), (1695-1780)	
10	DL Center Freq. (MHz)		(2496-2690), (3450-3700), (3700-3980), (862-894), (617-652), (2350-2360), (728-768), (1930-2020), (2110-2200)	
11	BW		N/A/5MHz/10MHz/15MHz/20MHz/30MHz/40MHz/50MHz/60MHz/70MHz/80MHz/90MHz/100MHz/150MHz/200MHz	
12	Operator		ATT/VZW/TMB/OTHER	
13	Power Sharing =OFF	UL ATT	-9~20 dB	0 dB
		DL ATT	0~20 dB	0 dB

	Power Sharing =ON	DL ATT	calculated by Power sharing	0 dB
14	UL Delay		0~4000000 us	0.0 us
15	DL Delay		0~4000000 us	0.0 us

### 5.3.1 DCU -> User Info

#### 5.2.5.1 Password

Click User->Password to reset the DCU password which should include capital and lower-case letters and 12 digits in length.

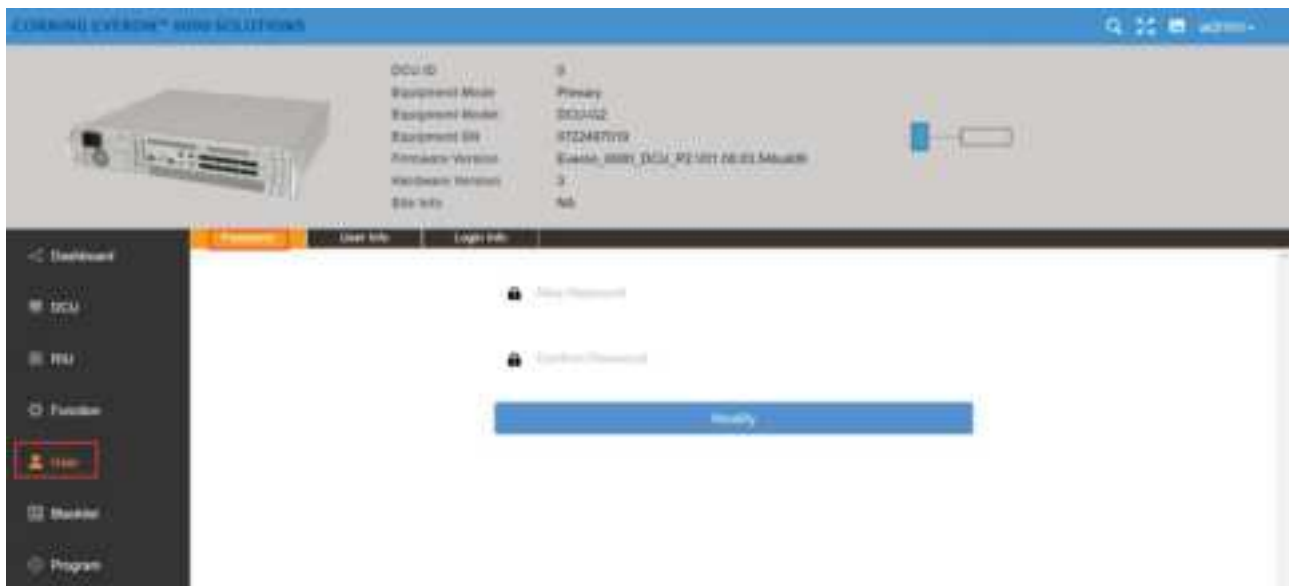


Figure 106. DCU→User→Password

The rules for setting passwords are as follows:

1. Default account and password at the first access: account/password= admin/admin
2. Need to change the password after the first access
3. Password restriction:
  - The minimum user password length is 12 characters.
  - At least three combinations of numbers, uppercase, lowercase and special symbols

It has been shown in the Web GUI if we enter into the password setup/modify page as follow



The minimum user password length is 12 characters.







At least three combinations of numbers, uppercase, lowercase and special symbols



Modify

### 5.2.5.2 User Info

Click User->User Info to add a user and set the role and password, as shown in the following figure.



Figure 107. DCU→User→User Info

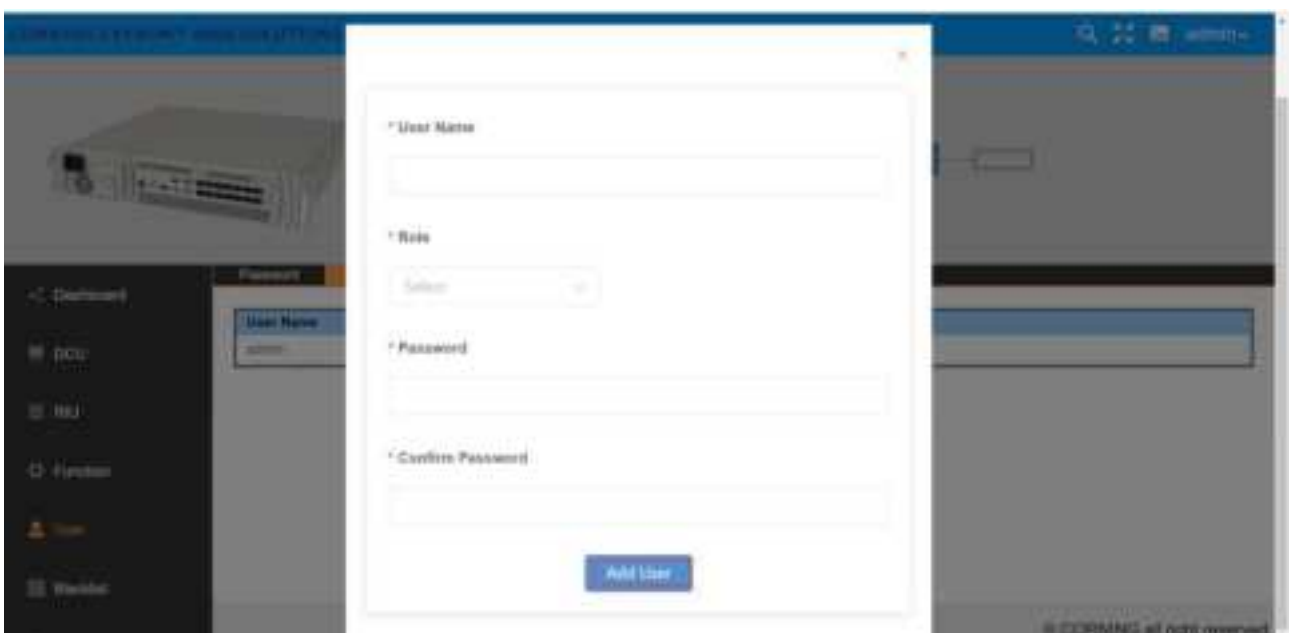


Figure 108. DCU→User→User Info→Add User

### 5.2.5.3 Login Info

As shown in the figure below, click User->Login Info to set the max value of password input attempts. This function indicates that when a user logs in, the system will be locked if the times of password input exceeds the maximum.

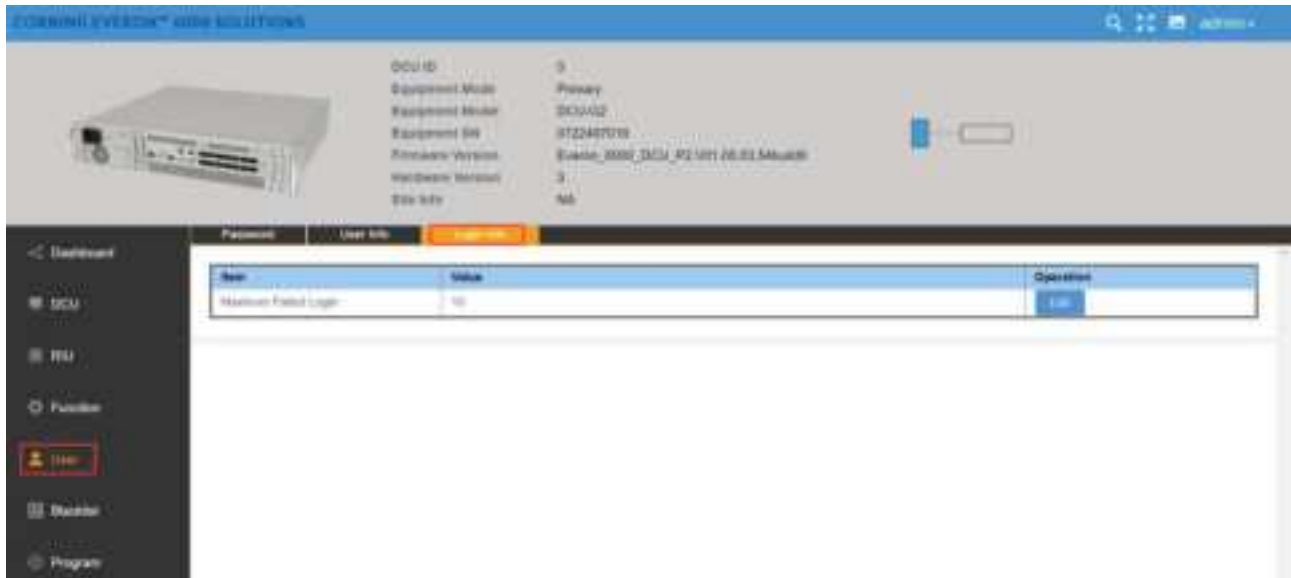


Figure 109. DCU→User→Login Info

#### 5.2.5.4 Blacklist



Figure 110. Blacklist.

#### 5.2.5.5 Program

The DCU ID is automatically obtained and cannot be set. The default value is 0. It is updated only when the internal DCU network is connected.

Click Program→Site Management to clear the site ID of the DCU.



Figure 111. DCU→Program→Site Management

### 5.3.2 DEU -> Dashboard

Click the Dashboard navigation button to enter the dashboard page shown in the figure below, where you can query the full topology of all the dependent NE connected to the DEU unit. And the info query and configuration management page of other NE can be switched to after clicking NE ID in the topology.



Figure 112. DEU25G →Dashboard

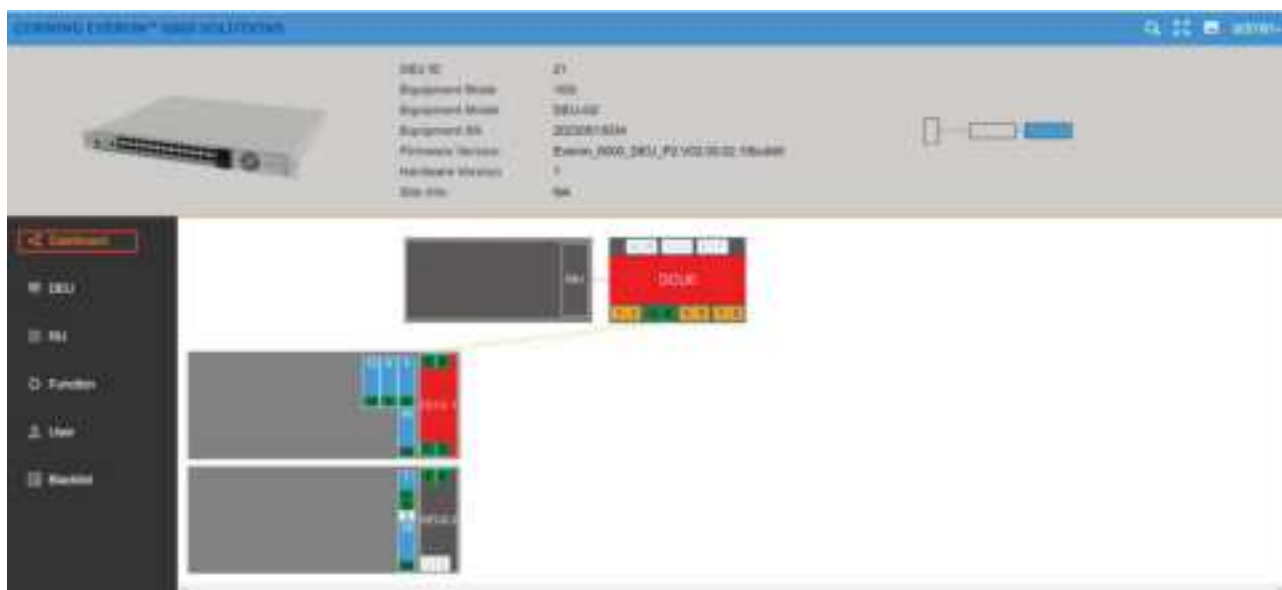


Figure 113. DEU10G→Dashboard

### 5.3.1.1 Alarm Info



Figure 114. DEU25G → Alarm Info







Figure 115. DEU 10 G → Alarm Info

Alarms can be set and viewed in this function which are defined as follows:

- 1) Equipment Alarm: Take effect if any alarm is valid.
- 2) Fan Alarm 1~4: Take effect if any fan (4 in total) in the module is abnormal.
- 3) Temperature Alarm: Take effect if the device temperature is higher than the device over temperature THR (80°C by default).
- 4) Power Temperature Alarm 1~2: Take effect if the temperature of any PSE is higher than the device over temperature THR (80°C by default).
- 5) DC Voltage Alarm: The alarm will occur if the input power < 37V
- 6) Digital Unlocked Alarm: Take effect if the device is unlocked.
- 7) Firmware Mismatch Alarm: The module version does not match the system version.

- 8) Temperature THR: Alarm will be generated if the device temperature exceeds this value.
- 9) Power Temperature THR: Alarm will be generated if the power module temperature exceeds this value.
- 10) RU Temperature THR: Alarm will be generated if RU temperature exceeds it.
- 11) Optical Module Temperature THR: Generate alarm if the optical module temperature this value.

➤ **To set alarm info parameters**

1. Click DCU—Alarm Info to enter the configuration page.
2. For alarms, click the edit button  and Disable and Enable button can be seen. Select Enable and the green icon will be displayed .
3. For Temperature THR, Power Temperature THR, Optical Module Temperature THR, System Delay THR, click  to enter the values within the range according to the form above.
4. Click Finish  to complete the configuration.

### 5.3.1.2 OP Info

#### 5.3.1.2.1 CPRI Info

The range of optical module transmitting power (Tx PWR) is -3dBm~5dBm; The range of Rx PWR shall be greater than -10dBm. The maximum operating temperature must be lower than 80 ° C and the optical module must be correctly matched. Otherwise, an exception may occur. Alarms can be queried on this interface.

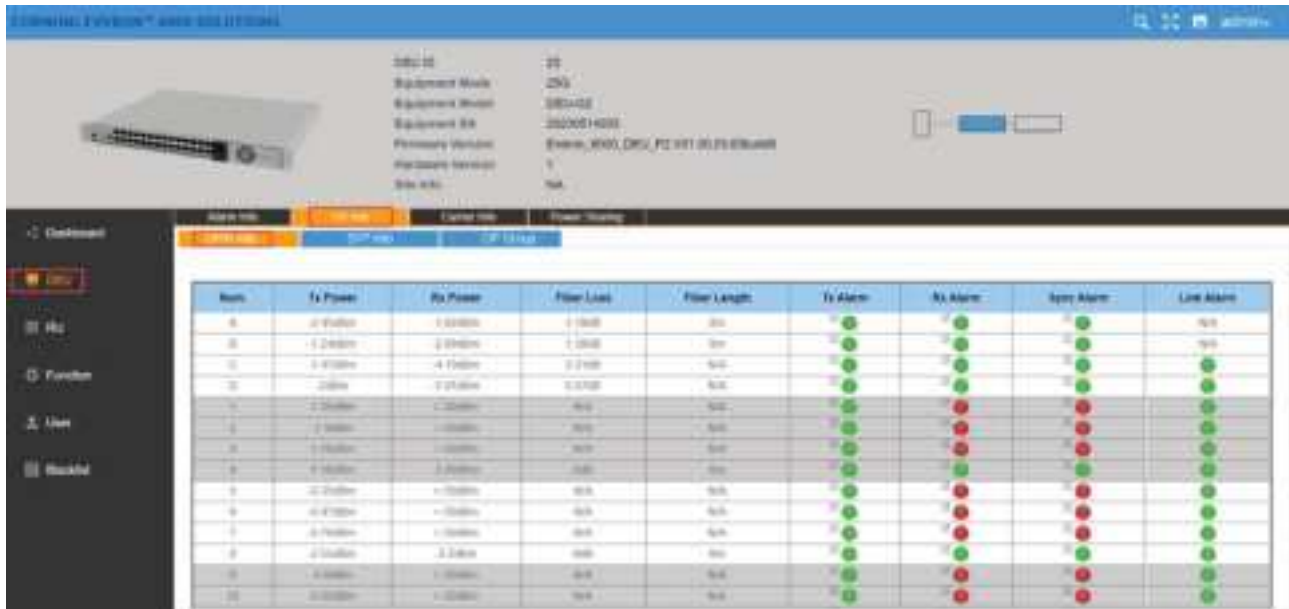


Figure 116.DEU 25 G→OP Info→CPRI Info

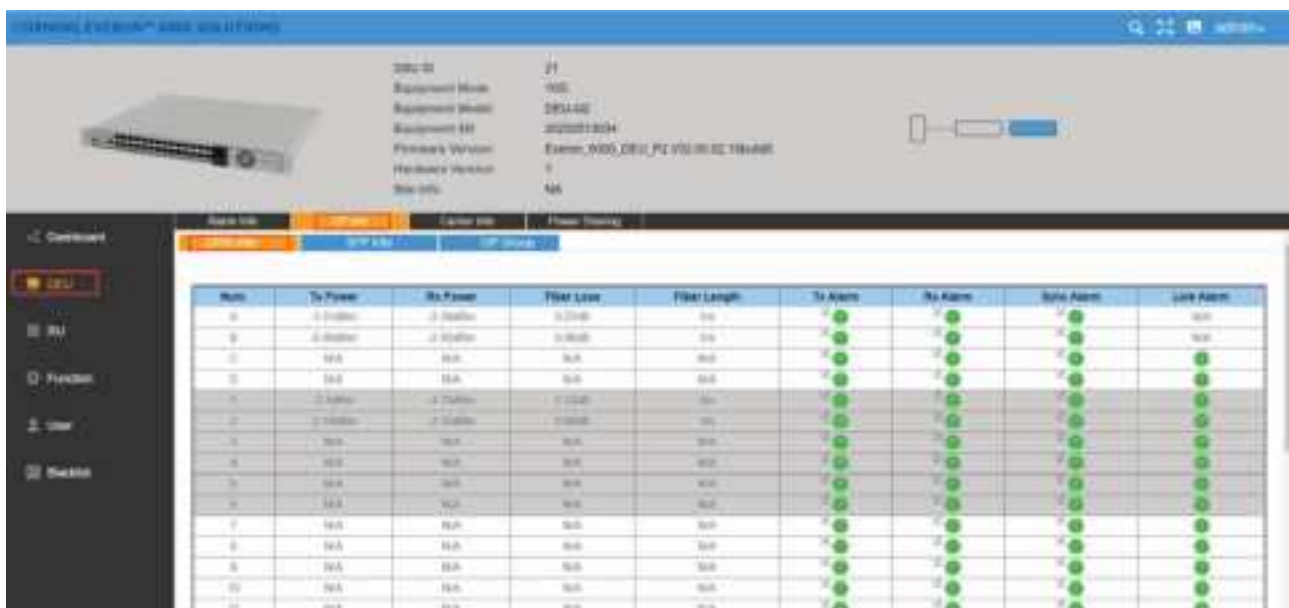


Figure 117.DEU 10 G→OP Info→CPRI Info

#### 5.3.1.2.2 SFP Info



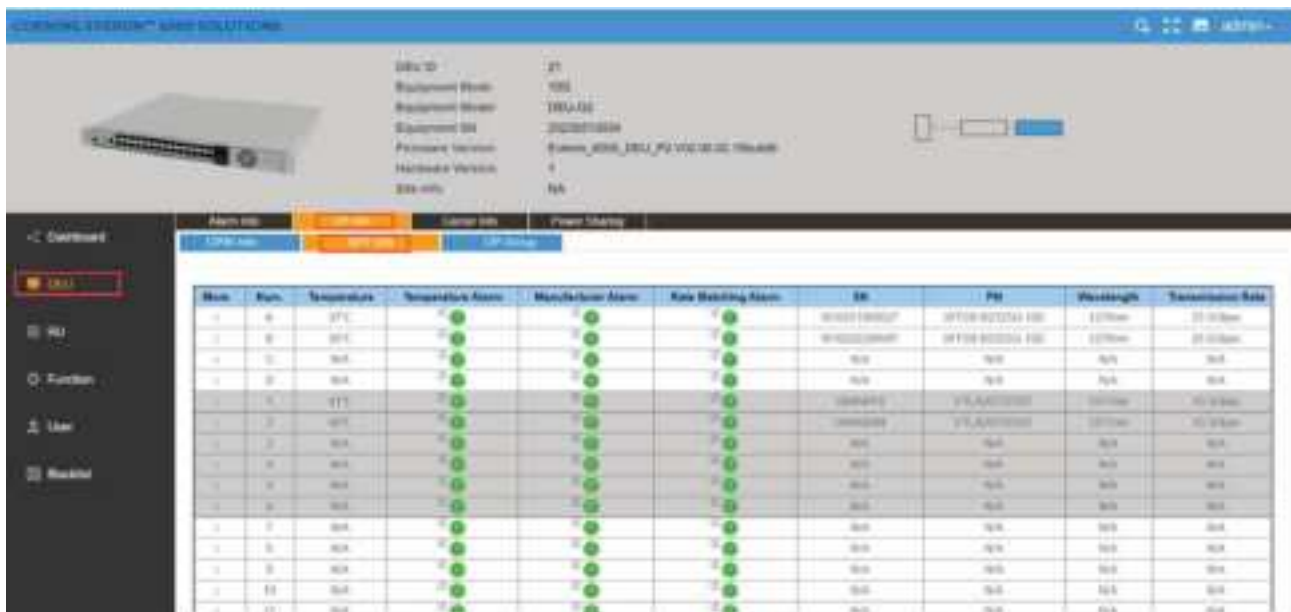


Figure 118. DEU 25 G→OP Info→SFP Info

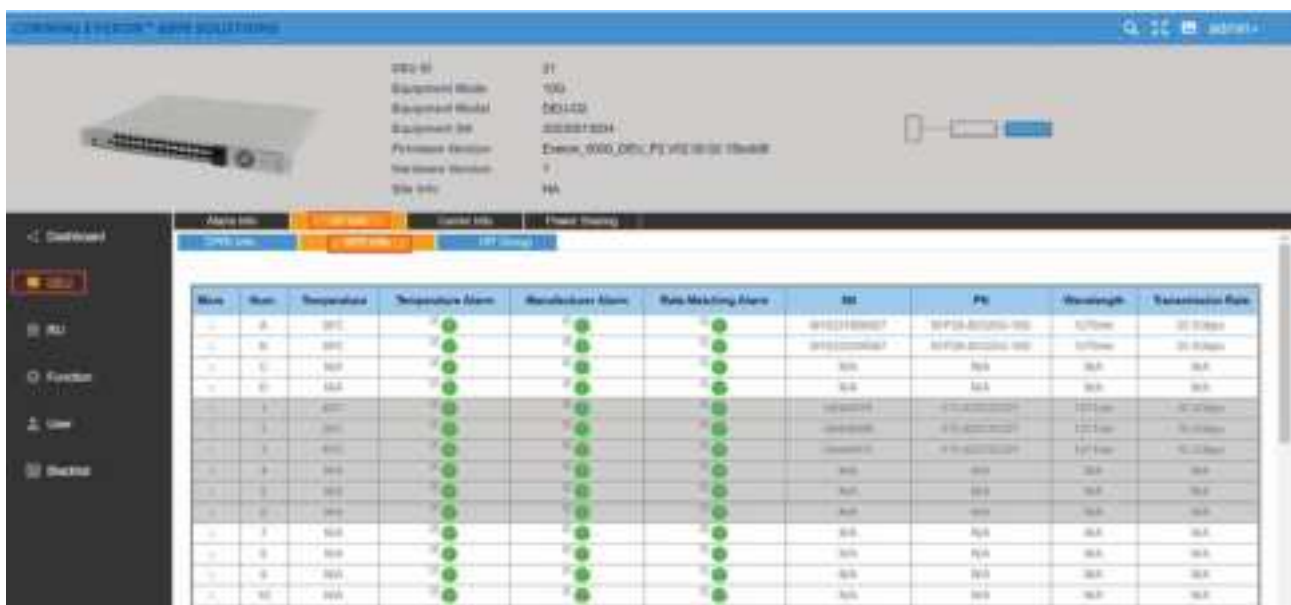


Figure 119. DEU 10 G→OP Info→SFP Info

Click ">" under the SFP Info→More to view the optical module info, as shown in the figure below:

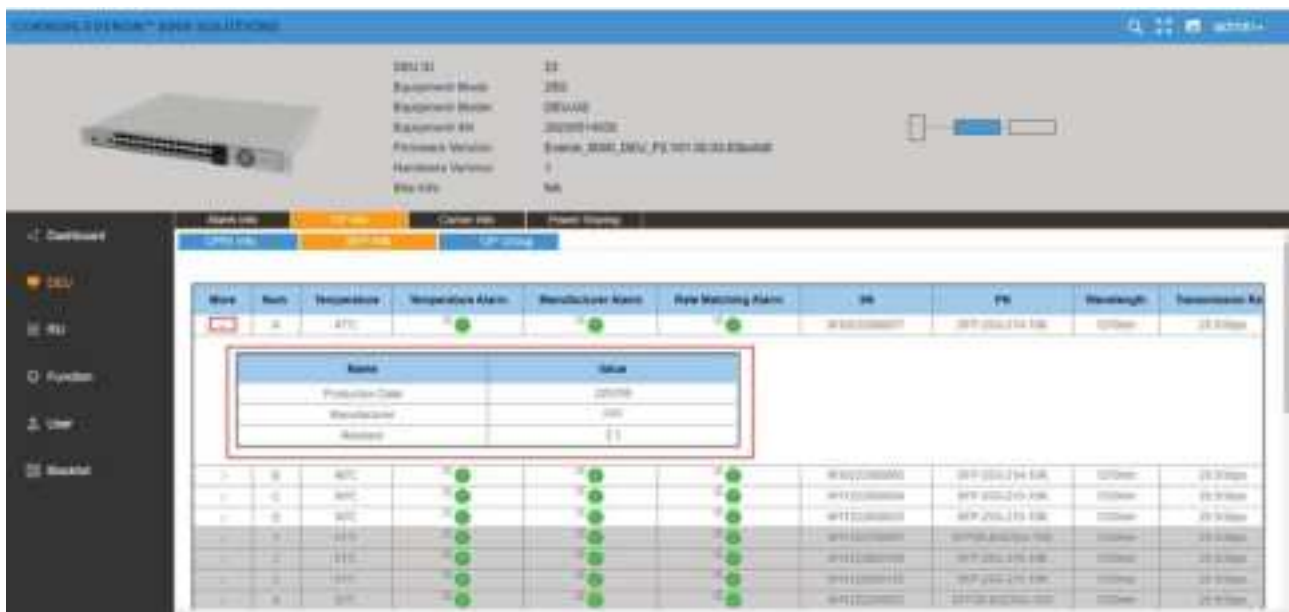


Figure 120.DEU 25 G→OP Info→SFP Info→More

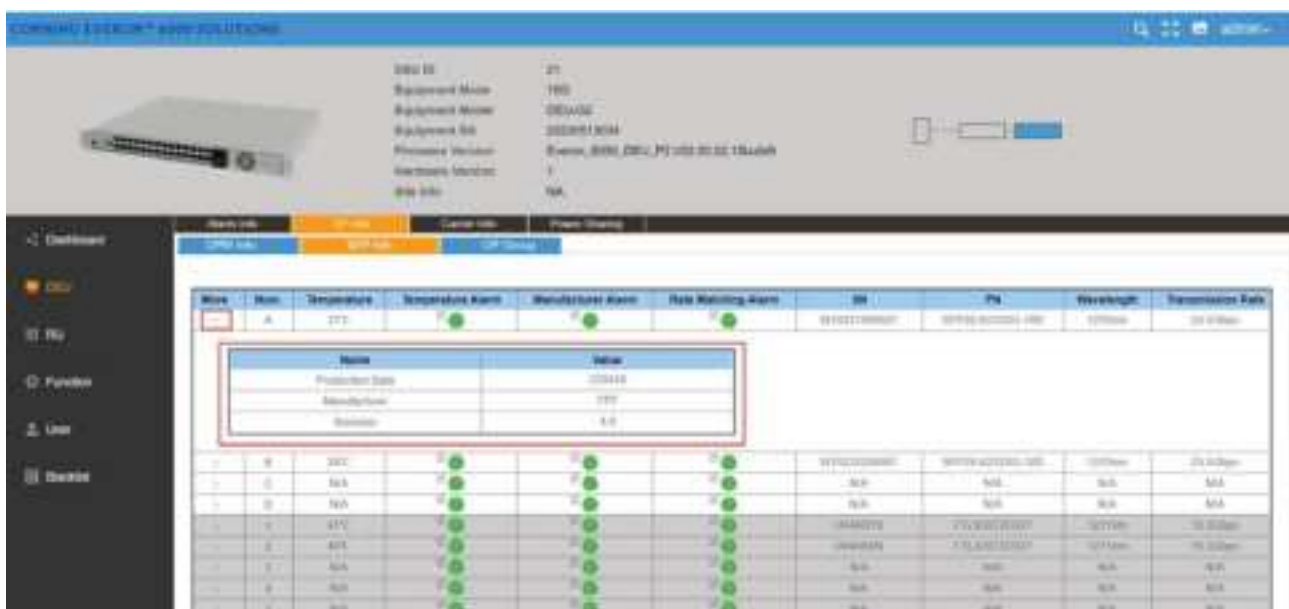


Figure 121.DEU 10 G→OP Info→SFP Info→More

### 5.3.1.2.3 OP Group

- a. For the port configuration of 10G DEU, we design the new GUI for the various SFP port config. It supports 3 configuration mode on each 6 SFP ports (Group). Click DEU→ OP Info →OP Group to configure SFP port as shown in the figure below.

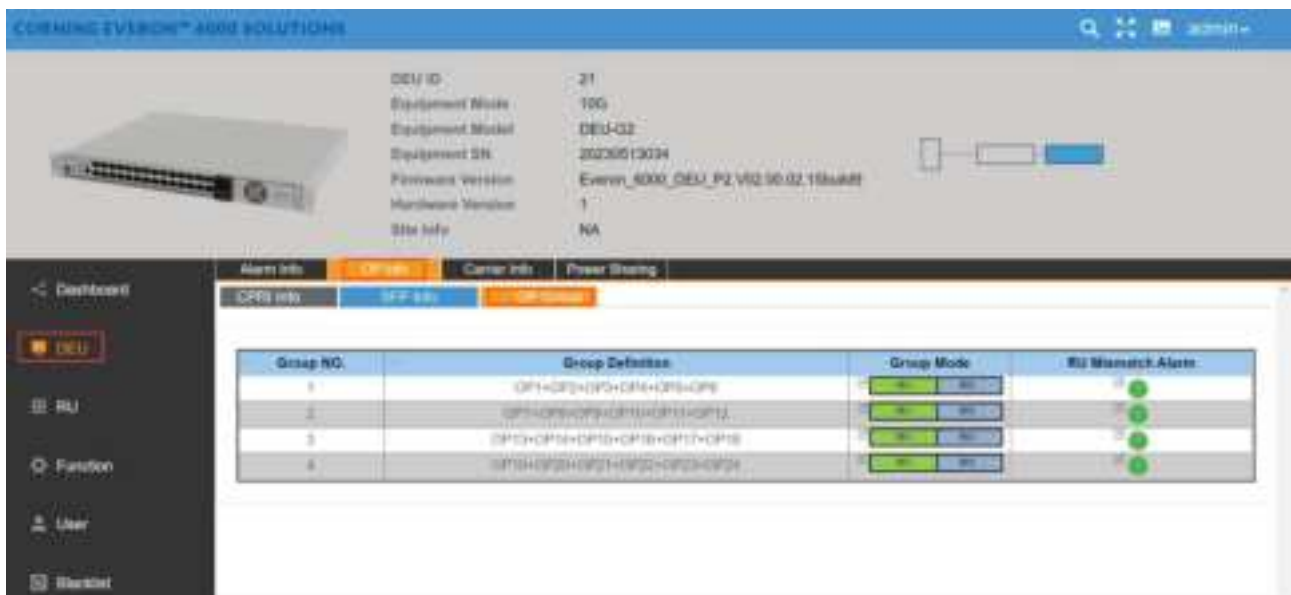



Figure 122.DEU 10G→ OP Info →OP Group

Click  button in Group Mode. In the drop-down box, there are three models to choose from. Then click Save to complete the configuration. Default configuration is model 1

*Model 1: Two SFP ports are mapped to one RU, and it is recommended to align the DEU and RU SFPs in the same order, otherwise an SFP alarm will occur.*

*Model 2: 1 SFP port is mapped to 1 RU.*

*Model 3: 3 SFP ports are mapped to 1 RU. It is recommended to align the DEU and RU SFP in the same order, otherwise an SFP alarm will occur.*



Figure 123.DEU 10 G →Group Mode


Click  button in RU Mismatch Alarm. Select Enable/ Disable, then click Finish to complete the configuration.



Figure 124.DEU 10 G →RU Mismatch Alarm

b. For the port configuration of 25G DEU, there are two models to choose from. The configuration steps are the same as that of 10G DEU OP group configuration.



Figure 125.DEU 25G→ OP Info→OP Group



Figure 126.DEU 25G→OP Group→Group Mode



Figure 127.DEU 25G→OP Group→RU Mismatch Alarm

### 5.3.1.3

#### 5.3.1.4 Carrier Info


- To configure carrier info
  1. Click DEU→Carrier Info→Add to set UL Center Freq. and DL Center Freq. to enter the following page.
  2. Click the icon  in each field and select one from the drop-down options, enter values within the range and select ON/OFF and Enable/Disable button.
  3. Click Finish to set.





Figure 128. DEU 25G→ Carrier Info

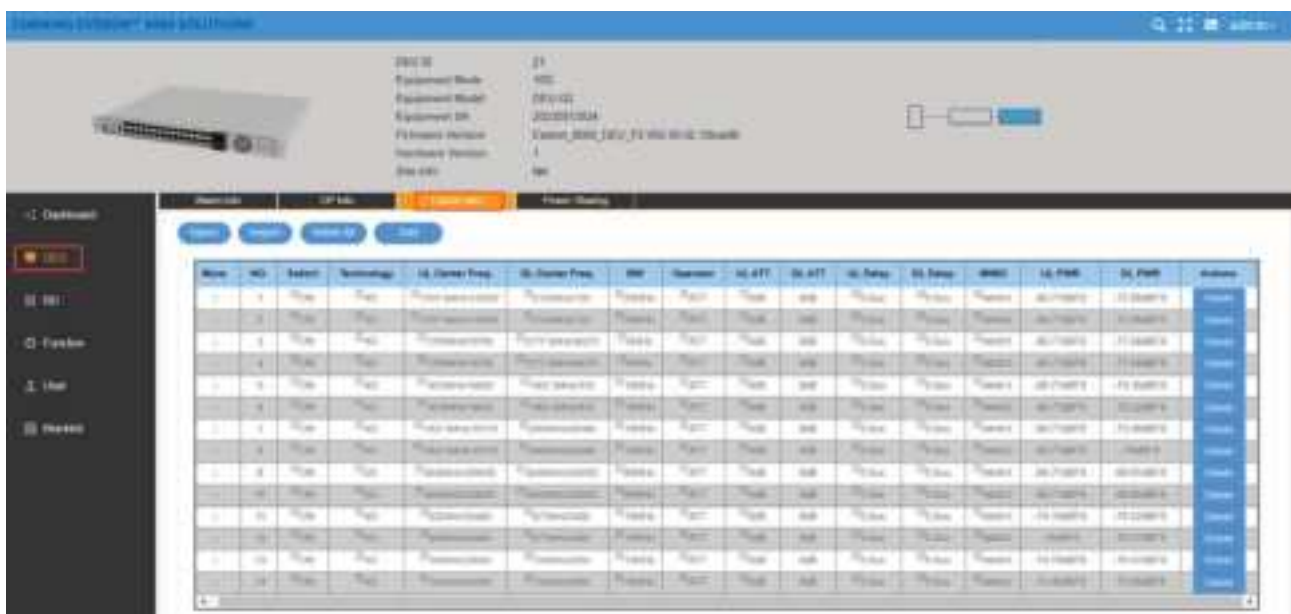



Figure 129. DEU 10G→ Carrier Info

➤ **To add carrier**

1. Click Add button  and the following setting page appear.

2. Click the arrow  and select one from the listed options.

3. Enter the values of the field marked \*.

4. Click Save  to finish the settings.





### 5.3.1.5 Power Sharing

SN	DEU Sharing Power Parameters	Ranges	Default Values
1	Power Sharing Lock	ON/OFF (Lock the DL ATT config on the carrier info)	OFF
2	Band	2500T/3500F/3500G	3500G
3	Assigned	10% ~ 100%	66%
4	Unassigned	0% ~ 90%	34%
5	Number of Carrier for each band/sub-band	0 ~ 4	N/A
7	Assign Percent	0%-100%	33%
8	Assign Type	Density/Even	Density

#### ➤ To configure power sharing

1. Click and set the Setting button then the DL ATT can be configured.

Calculate & Set DL ATT

2. Select Powering Sharing Lock

Power Sharing Lock

and operation success will pop up.

operation success

3. Enter the value of Assign Percent

Assign Percent

4. Click the arrow in Assign type

Assign Type



Figure 132. DEU25G → Power Sharing



Figure 133.DEU 10 G→ Power Sharing

## 5.3.3 DEU -> Function

### 5.3.2.1 Device Info

Click Function → Device Info to view the time, latitude, longitude, and other information of 10G/25G device. The site info is defined by the user, as shown in the figure below:



Figure 134. DEU25G → Function → Device Info



Figure 135. DEU 10 G → Function → Device Info

### 5.3.2.2 Reset

Click Function → Reset to clear the historical alarm, reset the software and hardware of the DEU, and reset the software and hardware of the RU connected to the DEU, as shown in the figure below:

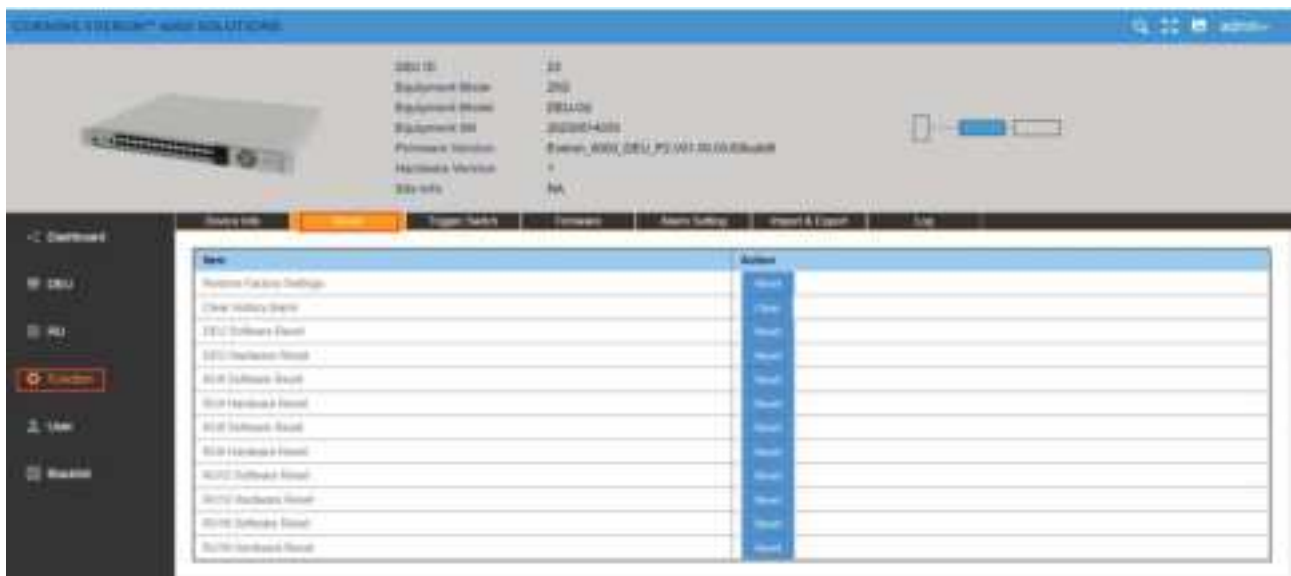


Figure 136. DEU25G→Function→Reset

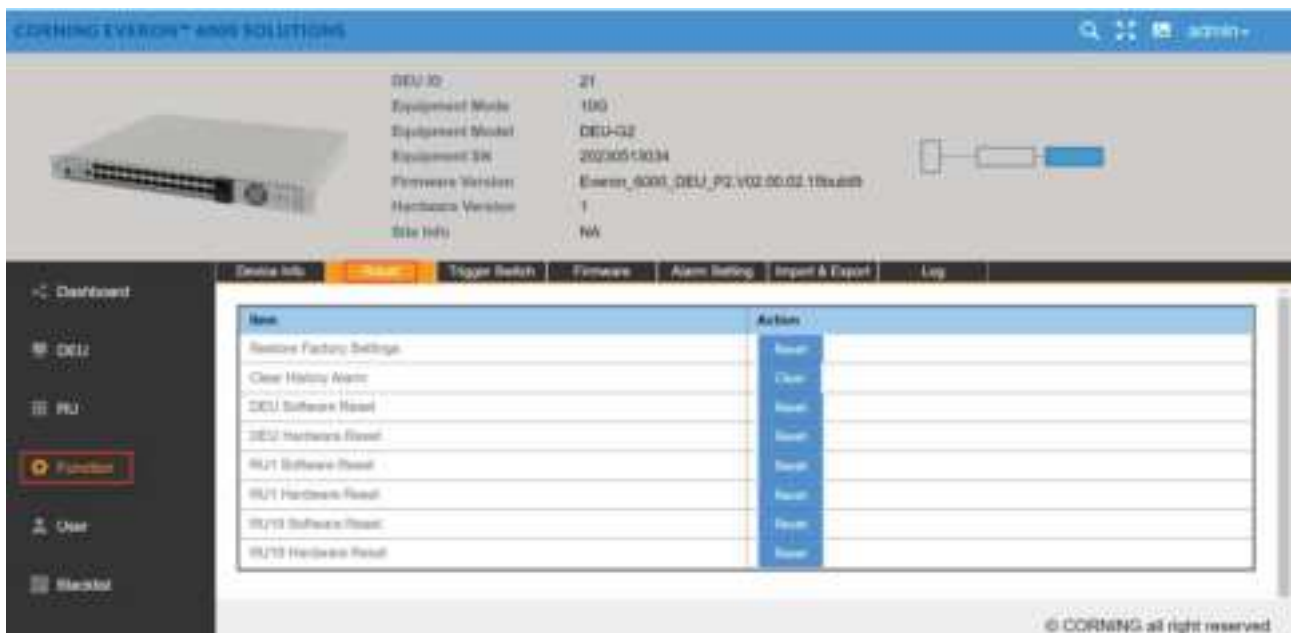


Figure 137. DEU 10 G→Function→Reset

### 5.3.2.3 Trigger Switch

Click DEU->Function->Trigger Switch as shown in the figure below.



Figure 138. DEU 25G → Function → Trigger Switch



Figure 139. DEU 10 G → Function → Trigger Switch

### 5.3.2.4 Firmware

Click Function → Firmware and the firmware info can be viewed and upgraded.



Figure 140. DEU25G →Function→Firmware



Figure 141.DEU 10G→Function→Firmware

### 5.3.2.5 Alarm Setting

Click Function → Alarm Setting to set the DEU alarm detect duration, as shown in the figure below:



Figure 142. DEU25G → Function → Alarm Setting

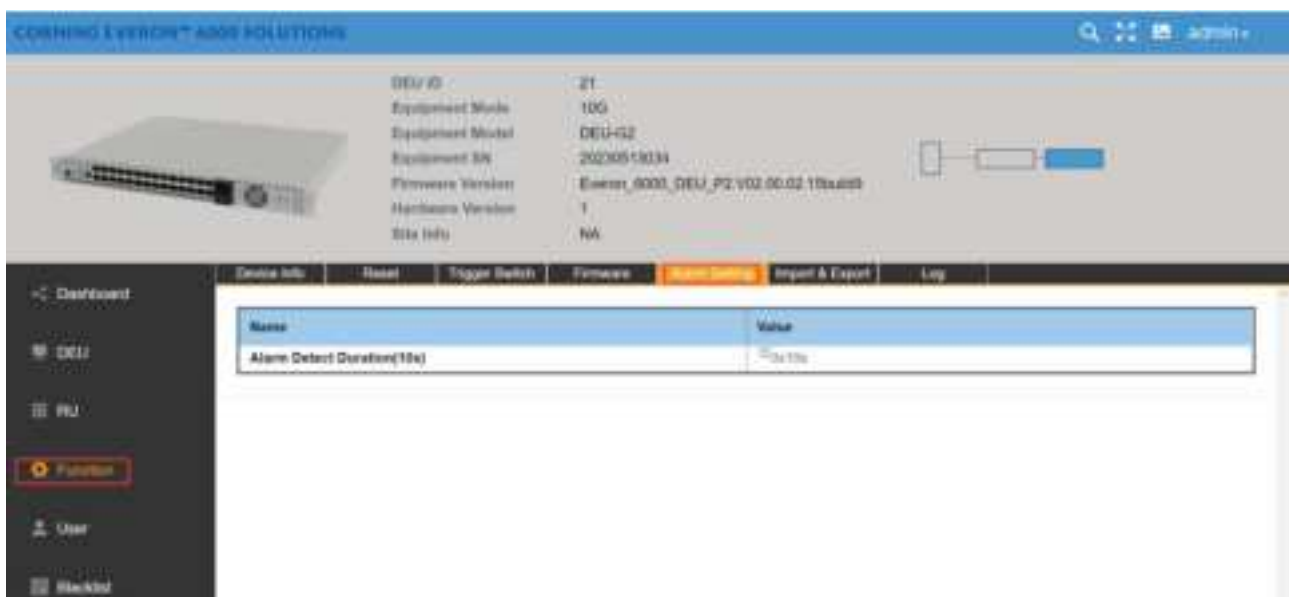


Figure 143. DEU10G → Function → Alarm Setting

### 5.3.2.6 Import & Export

Import and export the DEU configuration by clicking Function → Import & Export, as shown in the figure below:

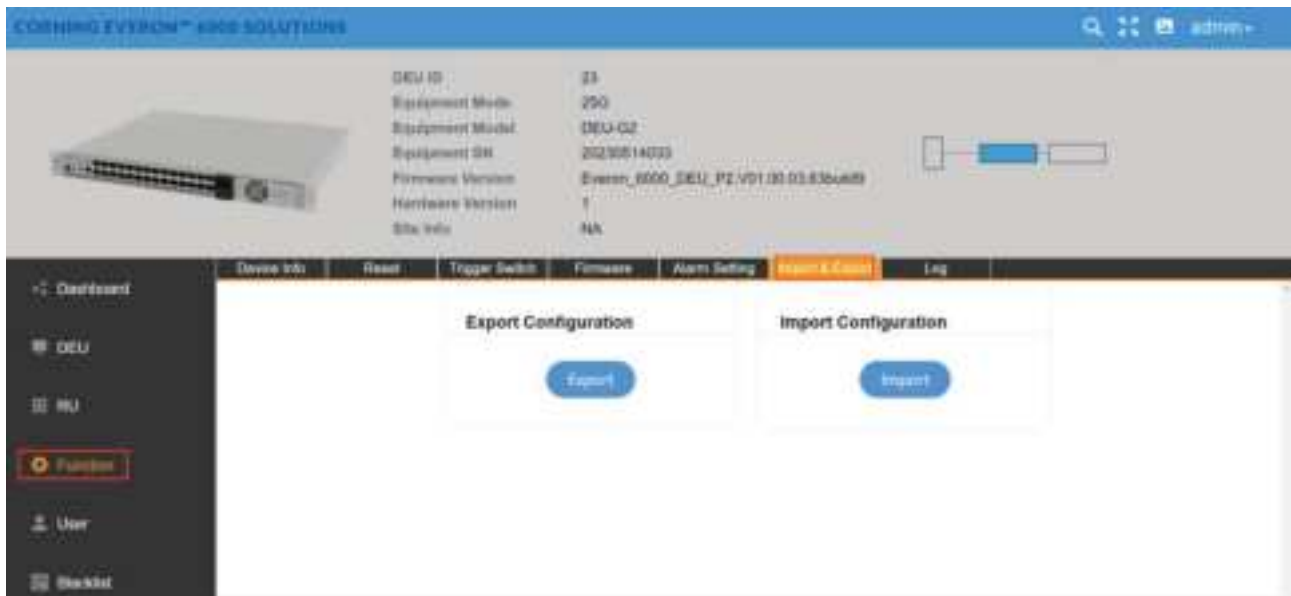


Figure 144. DEU25G →Function→Import & Export





Figure 145. DEU 10 G → Function → Import & Export

### 5.3.2.7 Log

Click Function → Log to export the log of DEU for problem analysis, as shown in the figure



Figure 146. DEU 25G → Function → Log



Figure 147. DEU 10G→Function→Log

## 5.3.4 DEU -> User Info

### 5.3.4.1 Password

Click User->Password to reset DEU password, as shown in the figure below.



Figure 148. DEU25G→User→Password



Figure 149. DEU 10 G→User→Password

5.3.4.2 User Info

Click User->User Info to add a user to set the role and password, as shown in the figure below.



Figure 150. DEU25G →User→User Info



Figure 151. DEU 10G →User→User Info

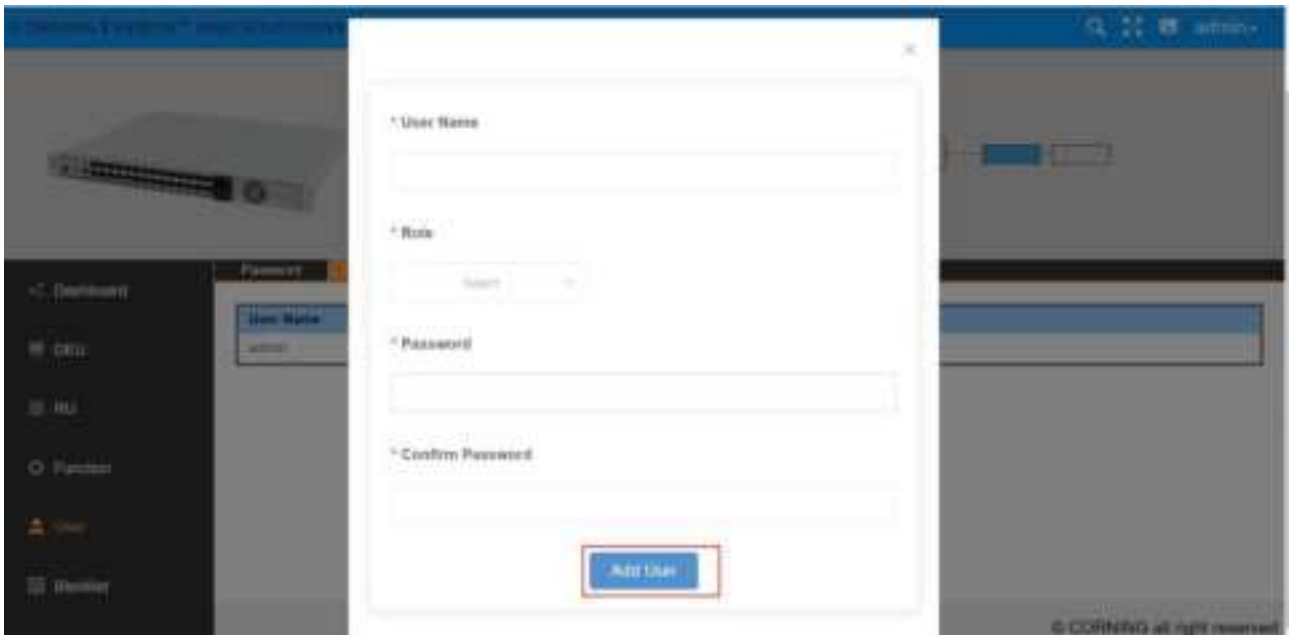


Figure 152.DEU10G/25G→User→User Info→Add User

5.3.4.3 Login Info

Click User->Login Info to set the max value of entering the password, as shown in in the figure below.

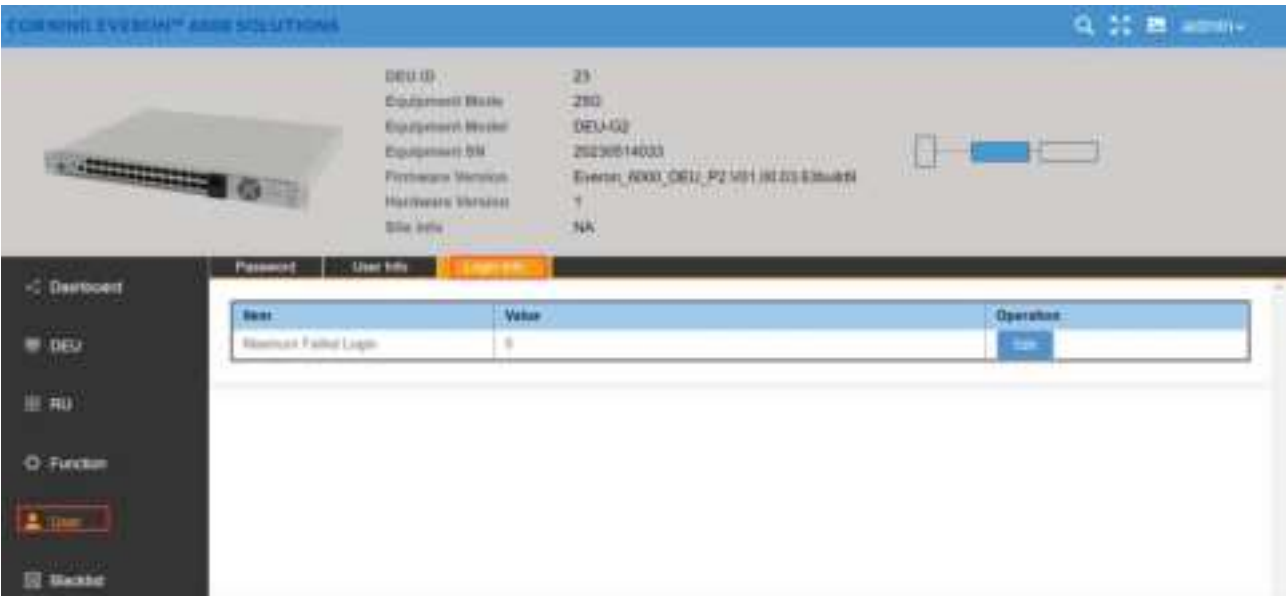


Figure 153. DEU25G→User→Login Info

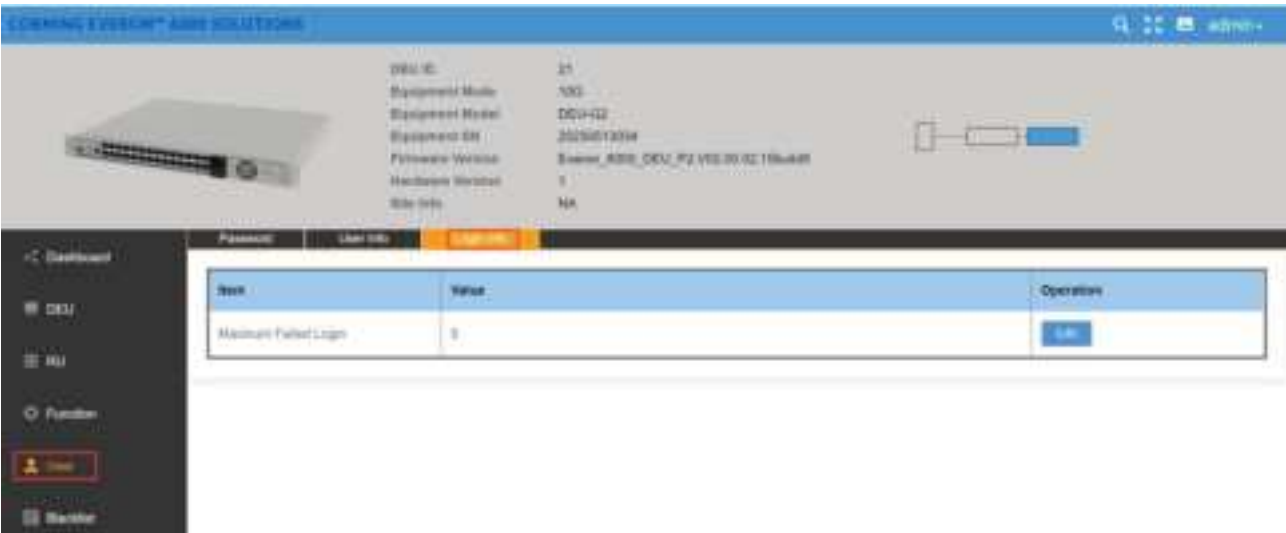


Figure 154. DEU 10 G→User→Login Info

5.3.4.4 Blacklist

DEU ID:  
Equipment Mode:  
Equipment Model:  
Equipment SN:  
Firmware Version:  
Hardware Version:  
Site Info:

21  
DEU  
DEU-G2  
20230219034  
Etwon\_6000\_DEU\_P2\_V02.00.03.15build8  
1  
NA

Dashboard  
DEU  
RU  
Function  
User  
**Blacklist**

Blacklist

Type	FirmwareVersion	Blacklist
DEU	Etwon_6000_DEU_P2_V02.00.03.00	Etwon_6000_DEU_P2_V02.00.03.00 Etwon_6000_DEU_P2_V02.00.03.00 Etwon_6000_DEU_P2_V02.00.03.00 Etwon_6000_DEU_P2_V02.00.03.00 Etwon_6000_DEU_P2_V02.00.03.00
DRM-L	Etwon_6000_DRM-L_P2_V02.00.03.00	Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00
DRM-L	Etwon_6000_DRM-L_P2_V02.00.03.00	Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00 Etwon_6000_DRM-L_P2_V02.00.03.00
DRM-L	DRM-L_P2_V02.00.03.00	DRM-L_P2_V02.00.03.00 DRM-L_P2_V02.00.03.00

Figure 155.DEU 25G→Blacklist

DEU ID:  
Equipment Mode:  
Equipment Model:  
Equipment SN:  
Firmware Version:  
Hardware Version:  
Site Info:

21  
100  
DEU-G2  
20230219034  
Etwon\_6000\_DEU\_P2\_V02.00.03.15build8  
1  
NA

Dashboard  
DEU  
RU  
Function  
User  
**Blacklist**

Blacklist

Type	FirmwareVersion	Blacklist
DRM-L	Etwon_6000_DRM-L_P2_V02.00.03.00	DRM-L_P2_V02.00.03.00
DRM-L	Etwon_6000_DRM-L_P2_V02.00.03.00	DRM-L_P2_V02.00.03.00

Figure 156. DEU 10 G→Blacklist

## 5.4 dMRU Config

This introduction is using for dMRU-G2-678/dMRU-G2-1719/dMRU-G2-2325/dMRU-G2-25/dMRU-G2-35 configuration.

### 5.4.1 RU -> Overview & Alarm

Click RU to enter the Overview interface and view the current status of RU alarms (e.g., Link Alarm).

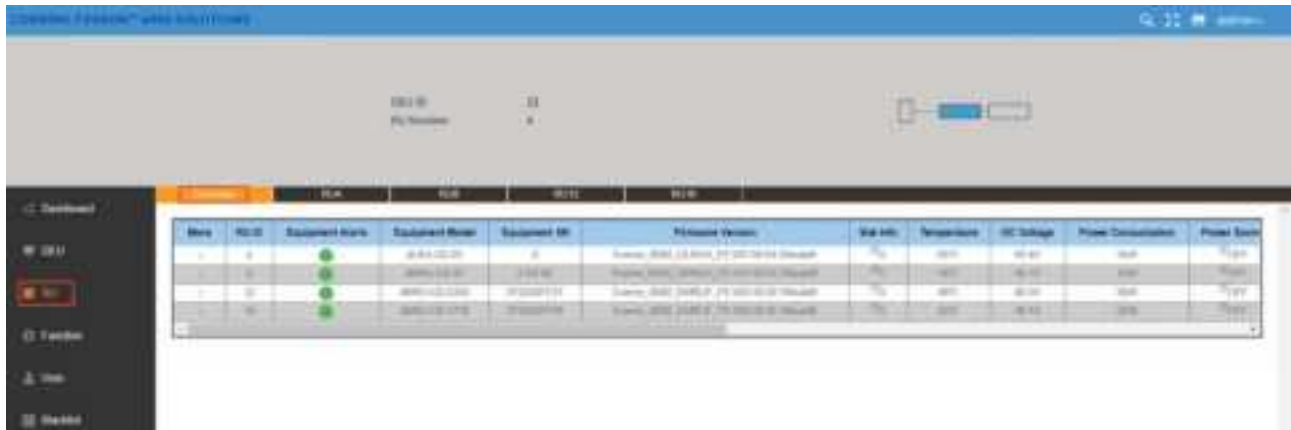
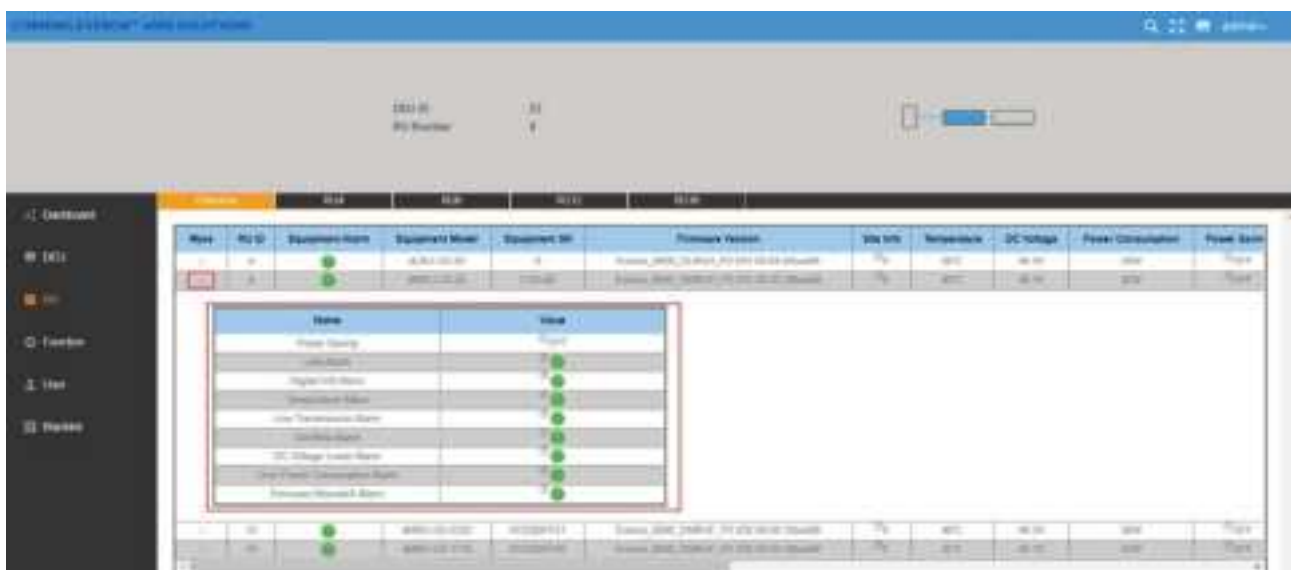


Figure 157. DEU→RU→Overview

Each alarm is defined as follows:

- Link Alarm
- Digital HW ALM
- Temperature Alarm
- Low Transmission Alarm
- Overflow Alarm
- DC Voltage Lower Alarm
- Over Consumption Alarm
- Firmware Mismatch Alarm

Drag the scroll bar to view more information (e.g., Low Transmission Alarm) as shown in the figure below.





*Figure 158.* RU→Overview→More

## 5.4.2 RU Parameter config

### 5.4.2.1 RF Info



Click RU → RU8 to read various RF information of RU, as shown in the figure below:



Figure 159. RU8→RF Info

SN	RU parameter	Range	Default values	Remark
1	RF Switch	ON/OFF	ON	
2	DL ATT	(0~20) dB	10 dB	0dB (max power)
3	UL ATT	(0~20) dB	10 dB	0dB (max power)
4	Work Mode	Normal DL force uplink UL force uplink	Normal	
5	Delay adjust mode	Auto/Manual	Auto	
6	Manual Delay Adjust Value	0~50000ns	0ns	
7	Fan Switch	ON/OFF	OFF	
8	DL VSWR THR	1.5/2.0/2.5	1.5	

#### ➤ To configure the RF info

1. Click RIU→ RU 3 to enter the info page.
2. Click the icon  in each field.
3. Select one from the drop-down options (In the Band of example below, N3500F is selected).
4. For UL ATT, DL ATT, enter values with the range according to the parameters form above.
5. For RF Switch, DL VSWR Alarm, Antenna Sense Alarm and PA Alarm, select ON/OFF and Enable /Disable button.
6. Click Finish  to complete the settings.

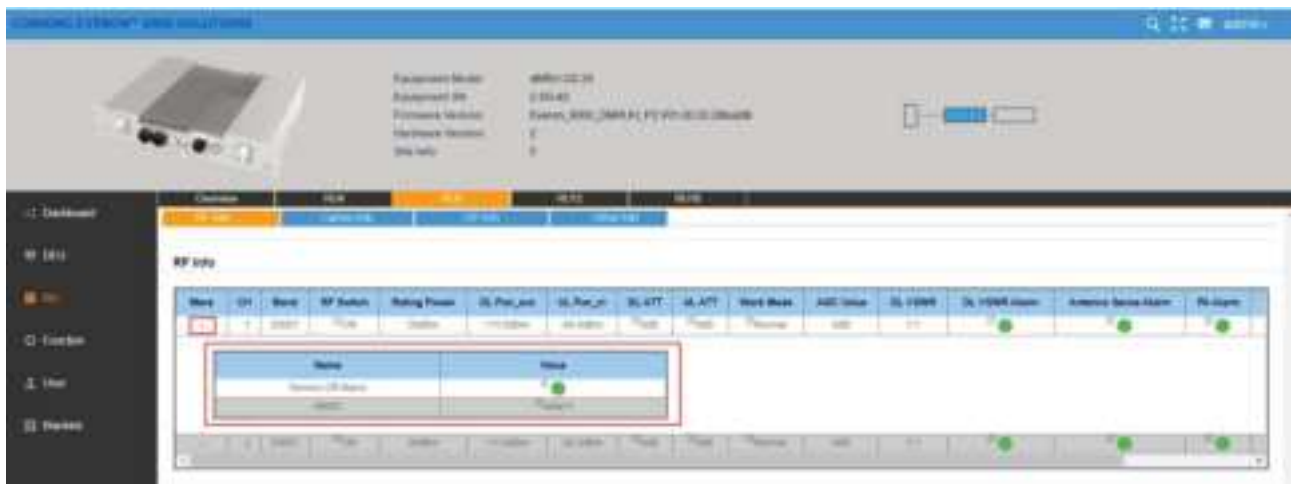


Figure 160. RF info → More

### 5.4.2.2 Carrier Info

The OP Info list box displays the current optical port connection status and information reading volume of the device, as shown in the figure below:

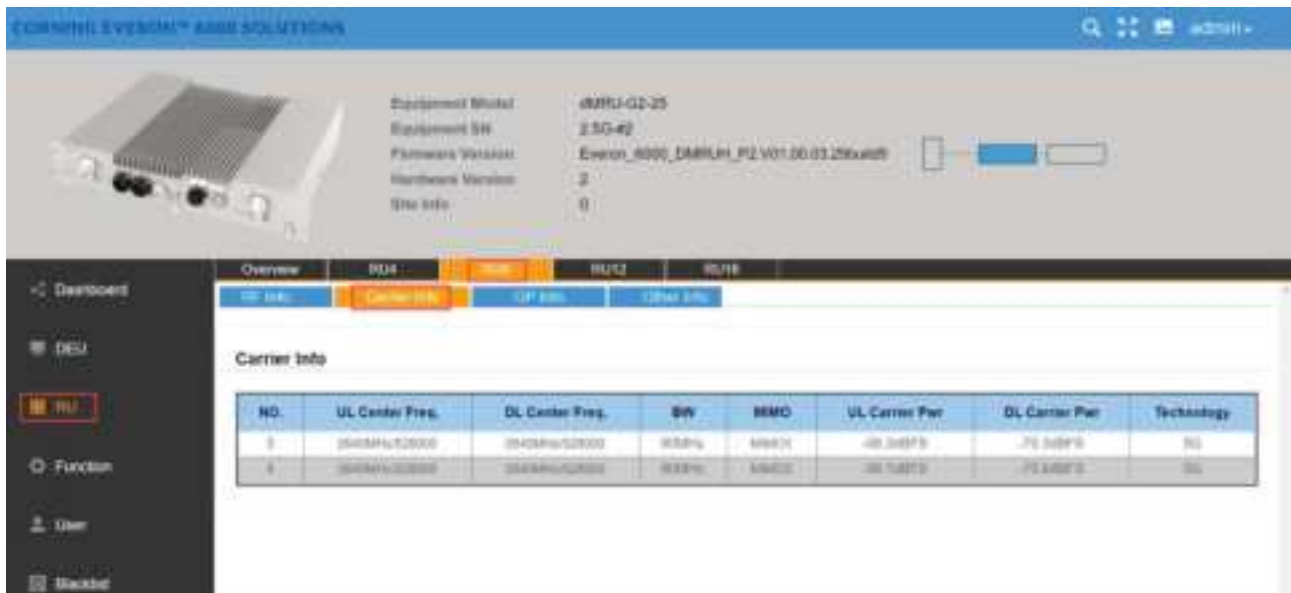


Figure 161. RU → Carrier Info

### 5.4.2.3 OP Info

The OP Info list box displays the current optical port connection status and information reading volume of the device, as shown in the figure below: