

GAM FW Upgrade Procedure



1. Use windows File Explorer app or a FTP client like Filezilla to open connection with Positron FTP Server with link shown below.





ftp://ftp.positronaccess.com/GAM/

Note: Do not use any Web Browsers due they block ftp downloads.



Figure 1 Connecting with Positron FTP Server using File Explorer

2. Once the Log On window be prompted, use the following credentials:

Username: positron Password: positron

Log On	As		×
1	Either the serve accepted.	r does not allow anonymous logins or the e-mail address was not	
	FTP server:	ftp.positronaccess.com	
	User name:	positron ~	
	Password:	•••••	
	After you log on	, you can add this server to your Favorites and return to it easily.	
Æ	FTP does not en server. To prot	crypt or encode passwords or data before sending them to the ect the security of your passwords and data, use WebDAV instead	Ι.
	Log on <u>a</u> non	/mously Save password	
		Log On Cancel	

Figure 2 FTP Log On window



3. Select GAM folder and open it by double clicking on it.

👺 🛃 🖡 🗢 ftp.positronaccess.com		– 🗆 X		
File Home Share View		~ 😢		
← → × ↑ ♥ > The Internet > ftp.positronaccess.com		✓ ⊘ Search ftp.positronaccess.c		
📌 Quick access	AEX-200	Aktino-Flexstream		
 OneDrive OneDrive 	BRX-VDSL2	BRX-XLR(adsI)		
 This PC 3D Objects 	FS-GIGA	GAM		
 Desktop Documents Downloads 	OSIRIS-1024-F	OSIRIS-Mutti Sention Type: File folder		
👌 Music				
Not Pictures				
Videos				
🧶 OS (C:)				
🧼 Network				
8 items 1 item selected		8== 📼		

Figure 3 GAM folder in Positron FTP Server

4. For GAM working with G1000 Endpoint series <u>only</u> go to folder **2-GA-LATEST-v1.4**. before going to higher versions (*see Figure 4*). *Read <u>IMPORTANT NOTES A AND B</u> ON PAGES 5 AND 7*



Figure 4 Folder with FW for GAM working with G1000



5. For GAM working with G1001 and G1002 Endpoint series go to folder **3-NEW-latest-v1.5** (*see Figure 5*)

📕 🗹 📕 🖛 GAM				- 🗆 X
File Home Share View → Pin to Quick Copy Paste Clipboard C	Move to • X Delete •	New folder	Properties V Open	Select all
← → • ↑ 🖡 « ftp.positronaccess.	com > GAM	ٽ ~	✓ Search GAN	И
📌 Quick access	1-CURRENT-proc	luction-v1.4		
OneDrive - Positron	2-GA-LATEST-v1.	4		
	3-NEW-latest-v1.	5		
🛕 Linux	old-files			
	Virtuoso-EMS			
	GAM FAQ A v1.pdf	ugust 1 2019 -		
	GAM-Installation Guide-180-0186-	and Activation 001-R03.pdf		
7 items 1 item selected				III 🖿

Figure 5 Folder with FW for GAM working with G1001/G1002

6. Each GAM type, indoor/outdoor/MIMO/Coax has a different folder. (see Figure 6),



Figure 6 Folders with FW for different models of GAM



- a. gam12-24_coax_1_X_X_r2XXXX is for Indoor GAM-12-C or GAM-24-C
- b. gam12-24_mimo_1_X_X_r2XXXX is for Indoor GAM-12-M or GAM-24-M
- c. gam4-8_coax_1_X_X_r2XXXX is for Outdoor GAM-4-CX or GAM-4-CRX
- d. gam4-8_mimo_1_X_X_r2XXXX is for Outdoor GAM-4-MX , GAM-8-MX, GAM-4-MRX or GAM-8-MRX
- Once you locate the right folder, open it and proceed to download the file with ".mfip" extension into your PC, see Figure 7. For Example: for a GAM12/24-M the file will be <u>ftp://ftp.positronaccess.com/GAM/3-NEW-latest-v1.5/gam12-24 mimo 1 5 4 r24791/</u>



Figure 7 Firmware load for GAM 12/24-M working with G1001/G1002 series

The GAM doesn't validate if you are using the proper file for the GAM model, validation was implemented from V 1.5.0.r22842, it is important to upload the good file if you a running an older version.

<u>IMPORTANT NOTES:</u>

 A. IF YOU ARE RUNNING A VERSION PRIOR OF 1.5.1 AND HAVE LEGACY G1000-C (COAX ONLY) IN YOUR NETWORK, YOU MUST UPGRADE TO V1.5.1 PRIOR TO UPGRADE TO 1.5.4, IF NOT, YOU WILL BE STUCK WITH ENDPOINTS THAT WILL NEVER UPGRADE. VERSION 1.5.1 IS LOCATED IN <u>ftp://ftp.positronaccess.com/GAM/3-NEW-latest-v1.5/</u> AS SHOWN IN Figure 8 and Figure 9



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File Home Share View			~ 😮
Pin to Quick Copy Paste 2 Cop access Clipboard	ve to • X Delete • ny to • I Rename Organize	New folder New Op	en
\leftarrow \rightarrow \checkmark \uparrow \blacksquare \ll GAM \rightarrow 3-NEW	/-latest-v1.5	م ن	Search 3-NEW-lat
★ Quick access	gam12-2	!4_coax_1_5_4_r24791	
 OneDrive OneDrive - Positron 	gam12-2	!4_mimo_1_5_4_r24791	
This PC	gam4-8_	.coax_1_5_4_r24791	
🛕 Linux	gam4-8_	mimo_1_5_4_r24791	
	READ-CH or G1000	HANGELOG-version1.5.1-f I-C-only	
	PDF changelo	og 1.5.4 build 24791.pdf	
	MIBS-v1.	.5.3.zip	
	README	.txt	
8 items 1 item selected			=== 📼

Figure 8 Folder with GAM FW V 1.5.1



Figure 9 Foldes with FW V 1.5.1 for Coax GAM



- **B.** IF THE GAM IS RUNNING A VERSION OLDER THAN 1.2.0(BUILD r21298), THERE IS A RARE CASE OF FLASH CORUPTION THAT CAN OCCUR DURING THE UPGRADE. CHECK WITH SALES ENGINEERING TEAM FIRST.
- 8. Download the **.mfip** file to your PC.
- 9. Open GAM Web GUI on your PC.
- Copy running-config to startup-config of the GAM by doing click on disk symbol located in top right corner of Web GUI as shown in Figure 10 or from menu Maintenance -> Configuration -> Save startup-config



Figure 10 Copy running-config to startup-config button

- 11. Under Maintenance→Software select Update From File See Figure 11.
- 12. Click on **Choose File** button to locate the **.mfip** file downloaded previously in your PC then press **Open** button to confirm, see **Figure 12**.
- 13. Click on **Upload** button to start the update process, see Figure 13.

POSITRON Access Solutions	GAM-12-C™ G.hn Access Multiple	exer
 Configuration Monitor Diagnostics Maintenance Configuration ave startup-config Download Upload Activate Delete aults Restart Device Software Update From File Update From URL Activate Alternate Image 	Software Upload Choose File No file chosen Upload Click Here	
	Figure 11 Update From File menu	

C Open					×
← → ~ ↑ 🖡 > Thi	s PC → Desktop → Upgrade		< 5 √	Search Upgrade	
Organize 🔻 New folde	r			== -	. ?
1 Ouish server	Name	Date modified	Туре	Size	
VUICK access	gam12-24_mimo_1_5_4_r24791_positronfw.mfip	10/13/2023 4:26 PM	MFIP File	29,653 KB	
 OneDrive - Positron This PC 	Select the file				
Network				Click Here]
🛕 Linux					J
File na	me: gam12-24_mimo_1_5_4_r24791_positronfw.mfip		~ A	Il files Open Ca	~ ncel

Figure 12 Selecting new GAM Firmware



POSITRON Access Solutions		GAM-12-C™ G.hn Access Multiplexer	8603
Configuration Monitor	Software Upload		
Maintenance	Choose File gam12-24_csitronfw.mfip Upload		
Configuration Save startup-config Download Upload Activate Detete			
Factory Defaults Restart Device	Click Here		
Software Update From File Update From URL Activate Atternate Image			

Figure 13 Starting Update Process

- 14. It will take a few minutes and the system will reboot the GAM automatically once the firmware load is copied into the flash. (Upgrade takes around 5-10 mins)
- 15. After the GAM upgrade is completed, a message will appear in Web GUI confirming it.
- 16. Go to **Monitor→System→Information** to confirm that the GAM is working with new firmware version and release, see **Figure 14**.

POSITRON			
Access Solutions			
Configuration			
Monitor System Informati	on		
▼ Svstem	-		
	System		
CPU Load Contact	support@positronaccess.com		
IP Status Name			
NTP status Location	LAB 2nd floor		
■ L0g - Detailed Log	Hardware		
Addrease MAC Address	00-0e-d8-13-7f-7e		
FPGA Version (main	n board) 20		
FPGA Version (expa	asion card) Unavailable		
Hardware Version	ASY-2100-21,R05		
Serial Number	01031766		
G.nn NOR Flash Model	n25q512ax3		
> IPMC MGM I PHY Model	MGMT PHY Model vsc8211		
▶ Link OAM	Temperatures		
► LLDP CPU	35.8(C), 96.5(F)		
MAC Table Intake #1	31.3(C), 88.4(F)		
► MVR Intake #2	32.8(C), 90.9(F)		
• MVRP Exhaust #1	33.0(C), 91.4(F)		
Performance Monitor Exnaust #2	29.9(C), 85.9(F)		
▶ PPPoE	Fans		
▶ Ports Fan #1	6661 rpm		
Private VLANs	6706 rpm		
PTP Fan #3	6/51 rpm		
Fan #4	6661 rpm		
s Slow	Time		
Sponning Troo	2023-08-04T16:29:20+00:00		
System Uptime	10d 21:35:58		
	Software		
Bootloader Version	1_4-20974		
Maintenance Software Version	GAM-12/24-C v1.5.3		
Software Date	2023-07-21T00:07:57-04:00		
Code Revision	24359		
Acknowledgments	<u>Details</u>		

Figure 14 Checking new gam FW version

17. At this point the endpoints could be showing a software mismatch issue with a warning symbol in Monitor→G.Hn→Overview.



18. Upgrade of endpoints firmware can be done manually one by one by clicking on the MAC address of endpoint while in Monitor→G.Hn→Overview, a button "upgrade endpoint" should be available to proceed (~1min to upgrade each). There is an option to perform automatic firmware upgrade of the endpoint as shown in Figure 15.



Figure 15 Enabling Endpoint Automatic Firmware Upgrade

- 19. Sometimes the endpoint doesn't seem to upgrade properly or the g.hn link goes up and down, in that case we recommend to power cycle the endpoint to fix it. If the issue persists, press and hold the reset button on the endpoint for 15 seconds, it will factory default the endpoint and firmware upgrade should be done again (manually or automatically).
- 20. In case Web GUI of GAM does not display **Monitor→G.hn→overview** information properly after firmware upgrade it is necessary to <u>clear cache</u> of your browser or open a new page in private/incognito mode.