

GSC36XX Firmware Release Notes

Table of Content

Table of Content.....	1
FIRMWARE VERSION 1.0.3.5	2
PRODUCT NAME.....	2
DATE	2
SUMMARY OF UPDATE.....	2
FIRMWARE APPLIES TO BELOW HW VERSION ONLY	2
ENHANCEMENT	2
BUG FIX	3
NEW P-VALUE	3
NEW HTTP API:	5
NEW FEATURES OVERVIEW	6
<i>GDMS/TR069 SUPPORT.....</i>	<i>6</i>
<i>API TO CHECK MOTION DETECTION STATUS (QNAP INTEGRATION)</i>	<i>7</i>
<i>AUTO REBOOT FEATURE</i>	<i>8</i>
<i>SEQUENCE, MULTI-ZONE COMBINED AND ZONE RATIO ALARM MODE.....</i>	<i>9</i>
<i>ITSP (BROADSOFT/TELEFONICA) SUPPORT</i>	<i>10</i>
FIRMWARE VERSION 1.0.1.19	11
PRODUCT NAME.....	11
DATE	11
SUMMARY OF UPDATE.....	11
FIRMWARE APPLIES TO BELOW HW VERSION ONLY	11
ENHANCEMENT	11
BUG FIX	11
NEW P-VALUE	12
MODIFIED P-VALUE	12
NEW HTTP API:	13
NEW FEATURES OVERVIEW	14
<i>WDR SUPPORT</i>	<i>14</i>
<i>ADD 720p(HD), D1 RESOLUTION IN 2ND STREAM</i>	<i>15</i>
<i>SIP UPNP NAT TRAVERSAL</i>	<i>16</i>

FIRMWARE VERSION 1.0.3.5

PRODUCT NAME

GSC36XX - GSC3610/GSC3615 (*HW Supported: 1.0A, 1.0B, 1.0C*)

DATE

1/12/2021

SUMMARY OF UPDATE

The main purpose of this release is bug fixes and features enhancement.

NOTE:

Factory reset is suggested if having abnormal webUI parameters after upgrade.

FIRMWARE APPLIES TO BELOW HW VERSION ONLY

HW version	FW	Comments
GSC36XX HW1.0C	YES	
GSC36XX HW1.0B	YES	
GSC36XX HW1.0A	YES	

ENHANCEMENT

- Added GDMS/TR069 support
- Added SN/CPE information at System Info page.
- Added API command to check the motion detection status (QNAP Integration).
- Added auto reboot feature.
- Added Sequence Alarm Mode, Multi-zone Combined Alarm Mode and Zone Trigger Ratio Alarm Mode in Motion Detection.
- Added support/compatibility for Telefonica ITSP.
- Added 30FPS support at 2nd stream and default video resolution to 640x480 (VGA).
- Added Cloud Support by pushing video stream to server for some Service Provider.

BUG FIX

- Fixed GSWave (Wave Lite) call GSC36XX no video.
- Fixed video recorded by IE browser cannot be played by playback tool.
- Fixed HTTP API time zone issue
- Fixed email address with special characters in template will prompt error.
- Fixed MD new alarm call will not move to next number when previous number time out no answer.

NEW P-VALUE

P2327	Account.Account_1.Enable_RFC6184 Value: 0 / 1. 0: Disable; 1: Enable.
P2427	Account.Account_2.Enable_RFC6184 Value: 0 / 1. 0: Disable; 1: Enable
P2527	Account.Account_3.Enable_RFC6184 Value: 0 / 1. 0: Disable; 1: Enable
P2627	Account.Account_4.Enable_RFC6184 Value: 0 / 1. 0: Disable; 1: Enable
P15540	Reboot_Reset.Auto_Reboot.Enable Value: 0 / 1. 0: Disable; 1: Enable
P15541	Reboot_Reset.Auto_Reboot.Week Value 0:Everyday 1:Sunday 2:Monday 3:Tuesday 4:Wednesday 5:Thursday 6:Friday 7:Saturday)
P15542	Reboot_Reset.Auto_Reboot.Time Value: String. Example: 08:20 → 0820
P63010	Cloud_Server_Settings.Enable_Cloud_Server Value: 0 / 1. 0: Disable; 1: Enable
P63012	Cloud_Server_Settings.Token Value: String. Max. Length = 1024
P63013	Cloud_Server_Settings.Stream Value: 0 / 1. 0: Stream 1; 1: Stream 2
P15517	Alarm_Settings.Alarm_Event_Config.Motion_Detection_Mode Value: 0/1/2/3 0: Default Alarm Mode 1: Sequence Alarm Mode 2: Multi-zone Combined Alarm Mode 3: Zone Trigger Ratio Alarm Mode
P15518	Alarm_Settings.Alarm_Event_Config.Multi_Region_of_Motion_Detection Value: String.
P15524	Alarm_Settings.Alarm_Event_Config.Longest_Time_for_a_Valid_Multi-Zone_Alarm_Detection Value: 5 ~ 60 (second)
P15525	Alarm_Settings.Alarm_Event_Config.Minimum_Number_of_Alarming_Zones_for_a_Valid_Multi-Zone_Alarm_Detection Value: 1 ~ 4

P15519	Alarm_Settings.Alarm_Event_Config.Minimum_Number_of_Blocks_Detected_Per_Region (For night motion detection only) Value: 1 ~ 100
P1409	System_Settings.TR069.Enable_tr069 Value: 0 / 1. 0: Disable; 1: Enable.
P4503	System_Settings.TR069.ACS_URL Value: String. Max. Length = 1024
P4504	System_Settings.TR069.ACS_User_Name Value: String. Max. Length = 512
P4505	System_Settings.TR069.ACS_Password Value: String. Max. Length = 512
P4506	System_Settings.TR069.Periodic_inform_enable Value: 0 / 1. 0: Disable; 1: Enable
P4507	System_Settings.TR069.Periodic_inform_interval Value: 1 ~ 4294967295
P4511	System_Settings.TR069.connect_request_user_name Value: String. Max. Length = 256
P4512	System_Settings.TR069.connect_request_password Value: String. Max. Length = 256
P4518	System_Settings.TR069.connect_request_port Value: 1 ~ 65535
P8220	System_Settings.TR069.cpe_cert_file Value: String. Max. Length = 2048
P8221	System_Settings.TR069.cpe_cert_key Value: String. Max. Length = 2048

NEW HTTP API:

```
GET:[http|https]://<servername>/goform/config?cmd=get&type=sip
SET:[http|https]://<servername>/goform/config?cmd=set&P2327=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P2427=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P2527=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P2627=<value>
GET:[http|https]://<servername>/goform/config?cmd=get&type=event
GET:[http|https]://<servername>/goform/config?cmd=get&type=reset_reboot
SET:[http|https]://<servername>/goform/config?cmd=set&P15540=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P15541=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P15542=<value>
GET:[http|https]://<servername>/goform/config?cmd=get&type=neccloud
SET:[http|https]://<servername>/goform/config?cmd=set&P63010=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P63012=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P63013=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P14040=<year_value>&P14041=<month_v
alue>&P14042=<mday_value>&P14043=<hour_value>&P14044=<minute_value>&P14045=<secon
d_value>
```

```
GET:[http|https]://<servername>/goform/config?cmd=get&type=event
SET:[http|https]://<servername>/goform/config?cmd=set&P15517=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P15518=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P15519=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P15524=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P15525=<value>
```

```
GET:[http|https]://<servername>/goform/config?cmd=get&type=tr069
SET:[http|https]://<servername>/goform/config?cmd=set&P1409=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4503=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4504=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4505=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4506=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4507=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4511=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4512=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P4518=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P8200=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P8221=<value>
```

Released HTTP API documentation can be downloaded from here:

http://www.grandstream.com/sites/default/files/Resources/gsc36xx_http_api.pdf

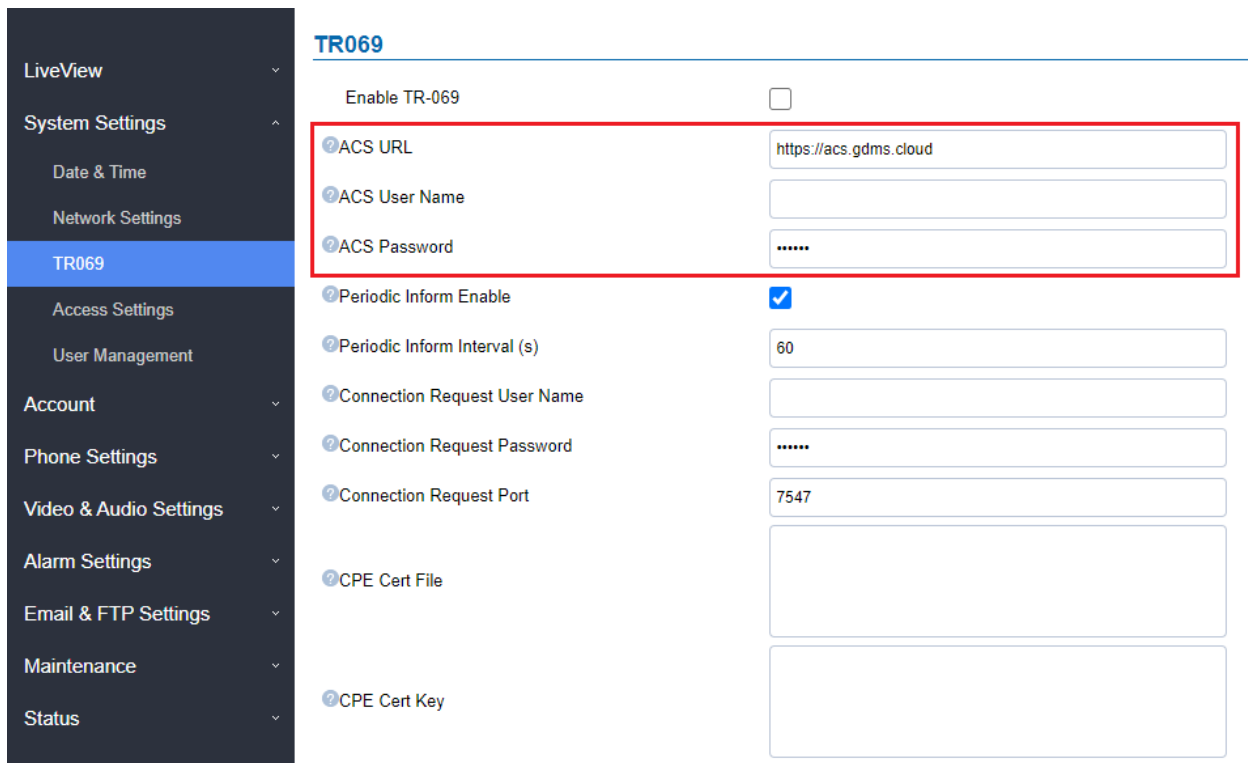
NEW FEATURES OVERVIEW

This section lists major new features or improvement and describes how to use them from the user's point of view.

GDMS/TR069 SUPPORT

- **Web Configuration**

This option can be found under device web UI → System Settings → TR069:



TR069	
Enable TR-069	<input type="checkbox"/>
ACS URL	https://acs.gdms.cloud
ACS User Name	
ACS Password	*****
Periodic Inform Enable	<input checked="" type="checkbox"/>
Periodic Inform Interval (s)	60
Connection Request User Name	
Connection Request Password	*****
Connection Request Port	7547
CPE Cert File	
CPE Cert Key	

- **Functionality**

This feature enhancement will allow centralized management and provisioning of mass product operations. This is very useful for ITSP customers and enterprise solutions.

With GDMS management, customers can manager, provision the GSC36XX from GDMS platform.

For detailed management and usage of this feature, please refer to Grandstream Device Management System (GDMS) product page:

<http://www.grandstream.com/products/device-management/gdms>

API TO CHECK MOTION DETECTION STATUS (QNAP INTEGRATION)

- **Functionality**

This feature is implemented based on feedback from field customers.

Please use the following URL example to request the actual status of Motion Detection Status after configured and defined the related region:

https://192.168.5.169/goform/config?cmd=api_get_data&type=0

(the above IP address is the example of GSC36xx IP camera)

Actual/Expected Result:

Response Message:

<Configuration>

<MD_STATUS>1</MD_STATUS>

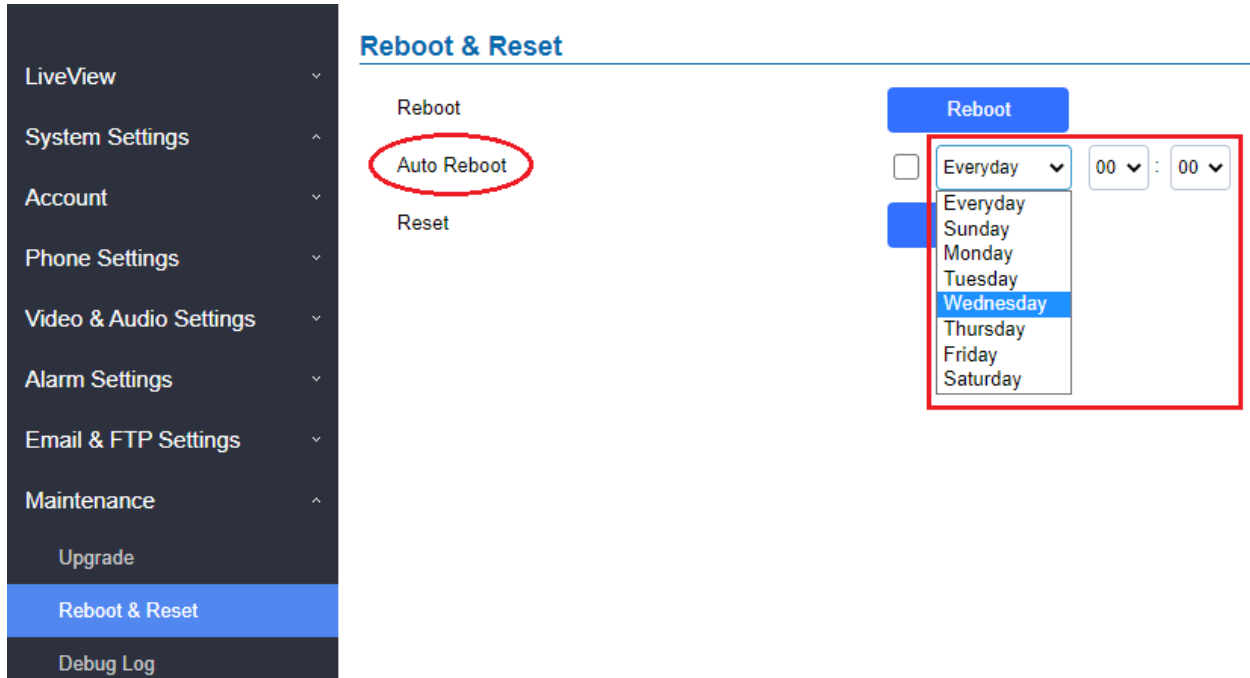
<RetMsg>OK</RetMsg>

</Configuration>

AUTO REBOOT FEATURE

- Web Configuration**

This option can be found under device web UI → Maintenance → Reboot & Reset:



- Functionality**

By default, this setting is disabled.

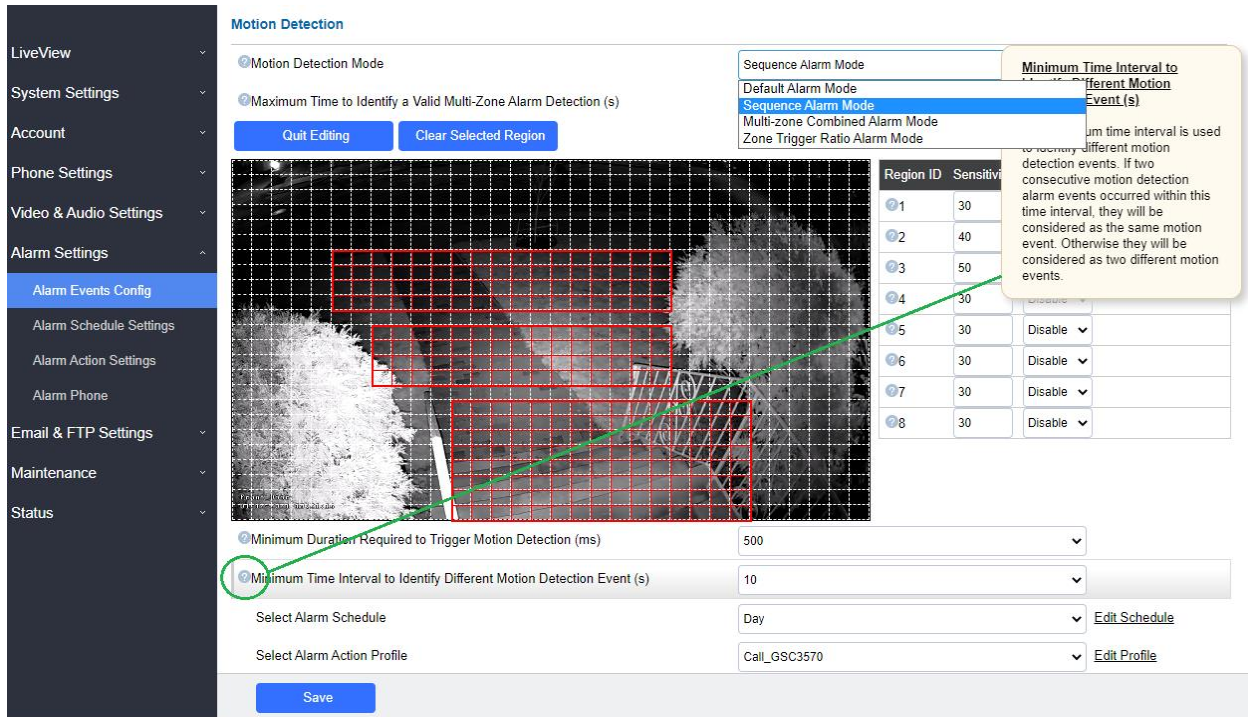
User can configure the device to reboot itself at specific time every day or particular day at every week, to make sure the IP camera is running smooth and provide stable and reliable video feed to the 3rd party NVR device or 3rd party RTSP video pulling device.

This enhancement is requested by 2nd stage developers and system integrators.

SEQUENCE, MULTI-ZONE COMBINED AND ZONE RATIO ALARM MODE

- **Web Configuration**

This option can be found under device web UI → Alarm Settings → Alarm Events Config:



Motion Detection

Motion Detection Mode
 Maximum Time to Identify a Valid Multi-Zone Alarm Detection (s)

Region ID	Sensitivity	Schedule	Action Profile
1	30		
2	40		
3	50		
4	30		
5	30	Disable	
6	30	Disable	
7	30	Disable	
8	30	Disable	

Minimum Duration Required to Trigger Motion Detection (ms) 500
 Minimum Time Interval to Identify Different Motion Detection Event (s) 10
 Select Alarm Schedule Day
 Select Alarm Action Profile Call_GSC3570

- **Functionality**

In addition to the default MD alarm mode, these new enhancements will allow user to configure multiple alarm region and based on Sequence, Combined, or Blocks Ratio per region (Night Mode Only), to trigger motion detection alarm.

The main purpose of such enhancement is to reduce false positive alarms triggered by motion detection.

By pointing the mouse to the “?” icon, explanations of the settings or configurations will be displayed. (See the green circle and yellow square in above snapshot).

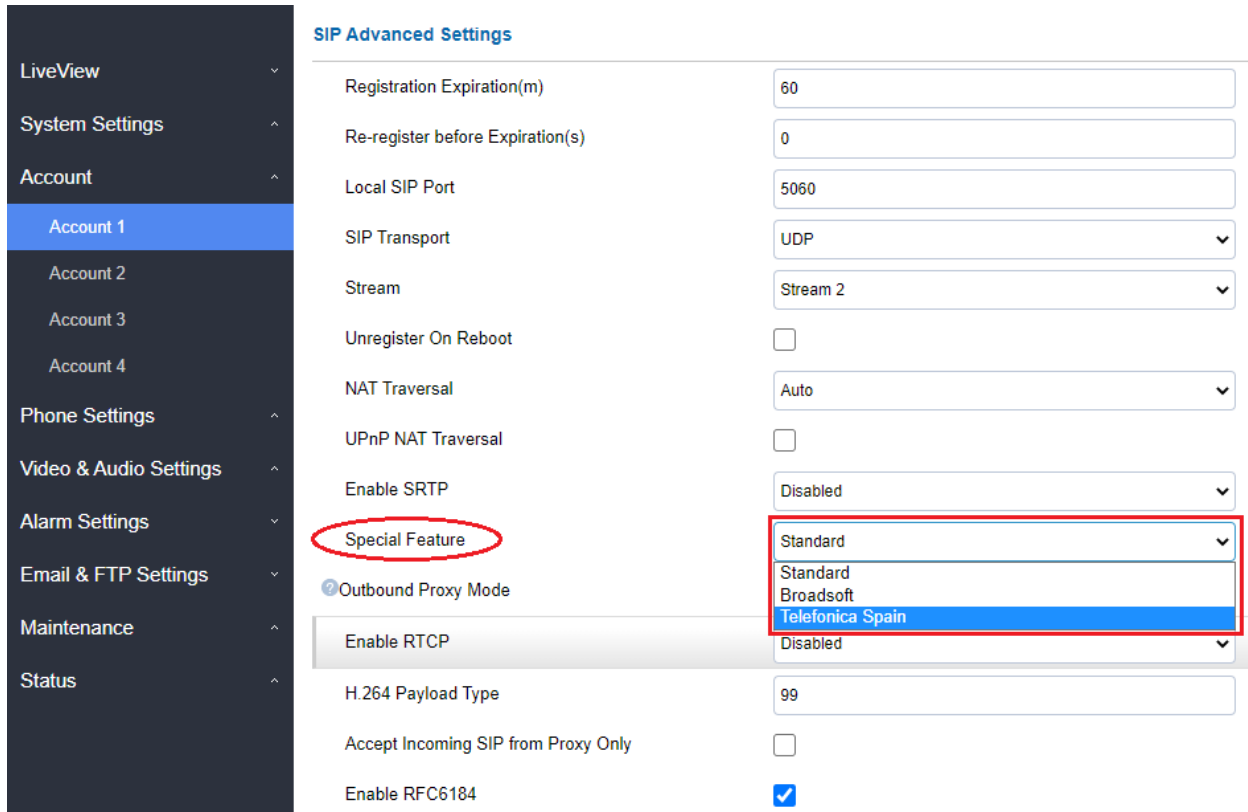
For detailed configuration and how to use these enhanced motion detection mode, please refer to GSC36xx User Manual:

http://www.grandstream.com/sites/default/files/Resources/GSC36XX_usermanual.pdf

ITSP (BROADSOFT/TELEFONICA) SUPPORT

- **Web Configuration**

This option can be found under device web UI → Account → Account X → SIP Advanced Settings:



SIP Advanced Settings

Registration Expiration(m)	60
Re-register before Expiration(s)	0
Local SIP Port	5060
SIP Transport	UDP
Stream	Stream 2
Unregister On Reboot	<input type="checkbox"/>
NAT Traversal	Auto
UPnP NAT Traversal	<input type="checkbox"/>
Enable SRTP	Disabled
Special Feature	<ul style="list-style-type: none"> Standard Standard Broadsoft Telefonica Spain
<input checked="" type="checkbox"/> Outbound Proxy Mode	
Enable RTCP	Disabled
H.264 Payload Type	99
Accept Incoming SIP from Proxy Only	<input type="checkbox"/>
Enable RFC6184	<input checked="" type="checkbox"/>

- **Functionality**

This “Special Feature” will allow GSC36xx to operate like other Grandstream SIP end points in some ITSP’s network, like for example Telefonica, or Broadsoft platform.

For detailed information, please refer to User Manual and Resource Center:

- **GSC36XX User Manual:**
http://www.grandstream.com/sites/default/files/Resources/GSC36XX_usermanual.pdf
- **HTTP API documentation can be downloaded from here:**
http://www.grandstream.com/sites/default/files/Resources/gsc36xx_http_api.pdf

FIRMWARE VERSION 1.0.1.19

PRODUCT NAME

GSC36XX - GSC3610/GSC3615 (*HW Supported: 1.0A, 1.0B, 1.0C*)

DATE

07/28/2020

SUMMARY OF UPDATE

The main purpose of this release is bug fixes and features enhancement.

FIRMWARE APPLIES TO BELOW HW VERSION ONLY

HW version	FW	Comments
GSC36XX HW1.0C	YES	
GSC36XX HW1.0B	YES	
GSC36XX HW1.0A	YES	

ENHANCEMENT

- Added WDR Support
- Added 720p(HD), D1 resolution support in 2nd stream.
- Added SIP UPnP NAT Traversal

BUG FIX

- Fixed Chrome/Firefox cannot preview/liveview H.265 video
- Fixed video is fuzzy when there is a motion
- Fixed device lost webUI access when enabled Anonymous LiveView and viewing video via API
- Fixed audio distorted or lost sometimes when using MJPEG and recording with MS IE
- Fixed IE cannot use the plugin to preview/liveview video
- Fixed video frozen then resume when alarm triggered with email snapshot
- Fixed RTSP stream not disconnected after changing RTSP password
- Fixed certificate cannot be uploaded via IE browser
- Fixed sometimes webUI automatically log out
- Fixed sometimes no alarm record stored at ONVIF NVR

NEW P-VALUE

P15513	Video_Audio_Settings.CMOS_Settings.WDR Value: 0 / 1. 0: Disable; 1: Enable.
P43064	Account.Account_1.UPnP_NAT_Traversal Value: 0 / 1. 0: Disable; 1: Enable.
P43065	Account.Account_1.UPnP_NAT_Traversal Value: 0 / 1. 0: Disable; 1: Enable.
P43066	Account.Account_1.UPnP_NAT_Traversal Value: 0 / 1. 0: Disable; 1: Enable.
P43067	Account.Account_1.UPnP_NAT_Traversal Value: 0 / 1. 0: Disable; 1: Enable.

MODIFIED P-VALUE

P12315	Video_Audio_Settings.Video_Settings.Stream_1.Bit_Rate Value: 512/1024/2048/3072 → 512/1024/2048/3072/4096/6144
P12707	Video_Audio_Settings.Video_Settings.Stream_2.Resolution Value: 1(640*480)/1009(352*288)/0(320*240) → 1022(1280*720/1016(704*576))/1(640*480)/1009(352*288)/0(320*240)
P12708	Video_Audio_Settings.Video_Settings.Stream_2.Bit_Rate Value: 256/512/1024/2048 → 256/512/1024/2048/3072
P15480	Account.Account_1.stream 0:stream1 1:stream2 → 1:stream1 0:stream2
P8000	Account.Account_2.stream 0:stream1 1:stream2 → 1:stream1 0:stream2
P15481	Account.Account_3.stream 0:stream1 1:stream2 → 1:stream1 0:stream2
P15482	Account.Account_4.stream 0:stream1 1:stream2 → 1:stream1 0:stream2
P8003	Phone_Settings.SIP_Proxy_Compatibility_Mode 0:Disable 1:Enable → 1:Disable 0:Enable

NEW HTTP API:

- **P15513**
GET:[http|https]://<servername>/goform/config?cmd=get&type=cmos
SET:[http|https]://<servername>/goform/config?cmd=set&P15513=<value>
- **P43064/43065/43066/43067**
GET:[http|https]://<servername>/goform/config?cmd=get&type=sip
SET:[http|https]://<servername>/goform/config?cmd=set&P43064=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P43065=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P43066=<value>
SET:[http|https]://<servername>/goform/config?cmd=set&P43067=<value>

Released HTTP API documentation can be downloaded from here:

http://www.grandstream.com/sites/default/files/Resources/gsc36xx_http_api.pdf

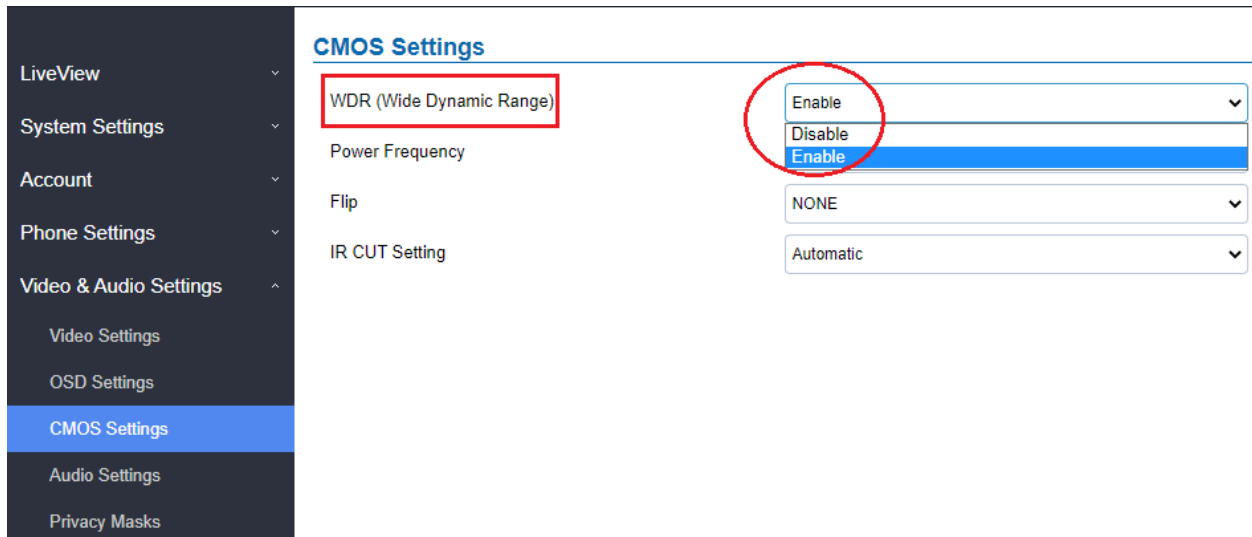
NEW FEATURES OVERVIEW

This section lists major new features or improvement and describes how to use them from the user's point of view.

WDR SUPPORT

- **Web Configuration**

This option can be found under device web UI → Video & Audio Settings → CMOS Settings:



The screenshot displays the 'CMOS Settings' page in the Grandstream web UI. On the left is a dark sidebar menu with options: LiveView, System Settings, Account, Phone Settings, Video & Audio Settings (expanded), Video Settings, OSD Settings, CMOS Settings (highlighted in blue), Audio Settings, and Privacy Masks. The main content area is titled 'CMOS Settings' and contains four settings: 'WDR (Wide Dynamic Range)' (highlighted with a red box), 'Power Frequency', 'Flip', and 'IR CUT Setting'. The 'WDR' dropdown menu is open, showing three options: 'Enable' (circled in red), 'Disable', and 'Enable' (highlighted in blue). The other settings have dropdown menus with 'NONE' and 'Automatic' as visible options.

- **Functionality**

This feature enhancement will allow users to configure the IP Camera in some special lighting environment like back light, strong contrast scene to have a better image.

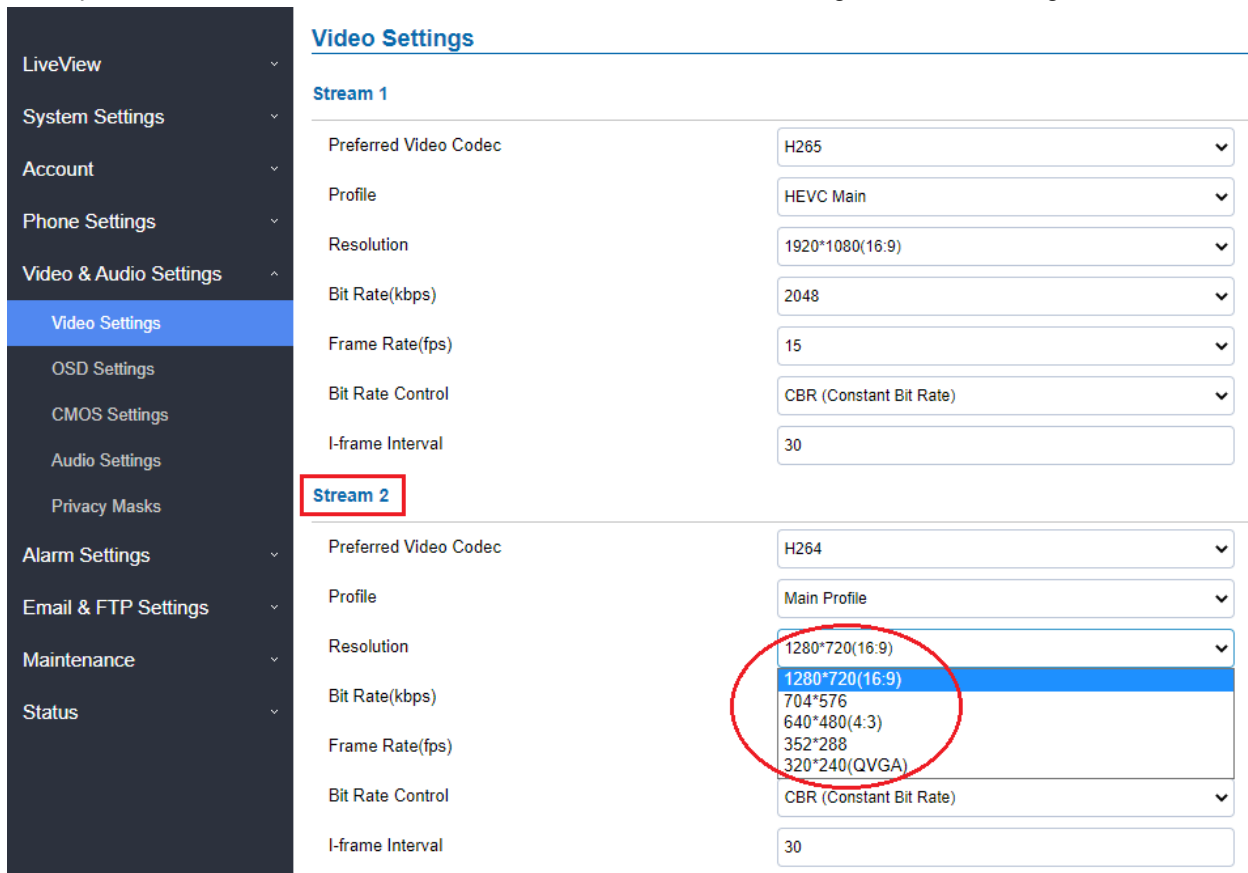
The WDR (Wide Dynamic Range) is e-WDR, meaning the IP Camera combining two images based on bright and dark light condition and combined to form the image.

This WDR may help some light condition environment, but will not be effective at all light conditions or application scenes.

ADD 720p(HD), D1 RESOLUTION IN 2ND STREAM

- **Web Configuration**

This option can be found under device web UI → Video & Audio Settings → Video Settings:



Video Settings	
Stream 1	
Preferred Video Codec	H265
Profile	HEVC Main
Resolution	1920*1080(16:9)
Bit Rate(kbps)	2048
Frame Rate(fps)	15
Bit Rate Control	CBR (Constant Bit Rate)
I-frame Interval	30
Stream 2	
Preferred Video Codec	H264
Profile	Main Profile
Resolution	1280*720(16:9) 704*576 640*480(4:3) 352*288 320*240(QVGA)
Bit Rate(kbps)	
Frame Rate(fps)	
Bit Rate Control	CBR (Constant Bit Rate)
I-frame Interval	30

- **Functionality**

This feature is implemented based on feedback from field customers.

Several resolutions have been added to 2nd stream, to allow users selecting based on application requirement and bandwidth availability, to use the resolution for SIP call, RTSP, Recording, etc.

SIP UPNP NAT TRAVERSAL

- **Web Configuration**

This option can be found under device web UI → Account → Account X → SIP Advanced Settings:

SIP Advanced Settings		
Registration Expiration(m)		60
Re-register before Expiration(s)		0
Local SIP Port		5060
SIP Transport		UDP
Stream		Stream 2
Unregister On Reboot		<input checked="" type="checkbox"/>
NAT Traversal		Auto
UPnP NAT Traversal		<input checked="" type="checkbox"/>
Enable SRTP		Disabled
Special Feature		Standard
Outbound Proxy Mode		In Route
Enable RTCP		Disabled
H.264 Payload Type		99
Accept Incoming SIP from Proxy Only		<input type="checkbox"/>

- **Functionality**

By default, this setting is disabled.

If user has SIP Proxy and Router support uPnP NAT Traversal, user can enable this feature by click to enable it, then the IP Camera can use UPnP NAT Traversal and automatically process the NAT issue.

For detailed information, please refer to User Manual and Resource Center:

- **GSC36XX User Manual:**
http://www.grandstream.com/sites/default/files/Resources/GSC36XX_usermanual.pdf
- **HTTP API** documentation can be downloaded from here:
http://www.grandstream.com/sites/default/files/Resources/gsc36xx_http_api.pdf