DG600II Hybrid Function Reference Guide

By Responder & Henry
Jun 2010

Supported IP Devices

AXIS								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
206	1	4.40.1	MJPEG	80 554	HTTP RTP+RTSP	-	O	X
207	1	4.40.2	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	O	X
210	1	4.3.0	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	O	X
211	1	4.40	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	O	X
221	1	4.45.1	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	O	X
231D+	1	4.3.0	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	O(PTZ)	O	X
232D+	1	4.41	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	O(PTZ)	O	X
Model with AXIS API-V3	-	-	-	-	-	O	O	O

SONY								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
SNC-CM120	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-CS20	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-DM110	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-DM160	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-DS10	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-DS60	1		MJPEG MPEG-4	80	HTTP	-	O	X

SNC-DF85P	1		MJPEG MPEG-4 H.264	80	HTTP	-	O	X
SNC-RX570P	1		MJPEG MPEG-4 H.264	80	HTTP	O(PTZ)	O	X
SNC-DF40N	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-DF40P	1		MJPEG MPEG-4	80	HTTP	-	O	X
SNC-RZ25N	1		MJPEG MPEG-4	80	HTTP	O(PTZ)	O	X
SNC-RZ25P	1		MJPEG MPEG-4	80	HTTP	O(PTZ)	O	X
SNC-CH210	1	1.12.00	MJPEG MPEG-4 H.264	80	HTTP	-	O	X
SNC-RX530N(P)/W	1		MJPEG MPEG-4 H.264	80	HTTP	O(PTZ)	O	X

SANYO								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
VCC-HD4000	1	MAIN: 1.0400 (090514-00) SUB: 1.0003 (090302-00)	MJPEG H264 (Baseline Profile)	554 80	RTP+RTSP HTTP	O(Z)	O	X
VA-20LAN	1	MAIN: 1.0400 (090514-00) SUB: 1.0003 (090302-00)	MJPEG	80	HTTP	O(PTZ)	X	X
VA-50LAN	1	MAIN: 1.0400 (090514-00) SUB: 1.0003 (090302-00)	MJPEG	80	HTTP	O(PTZ)	X	X
VA-51LAN	1	MAIN: 1.0400 (090514-00) SUB: 1.0003 (090302-00)	MJPEG	80	HTTP	O(PTZ)	X	X
VA-80LAN	1	MAIN: 1.0400 (090514-00) SUB: 1.0003 (090302-00)	MJPEG	80	HTTP	O(PTZ)	X	X
VA-82LAN	1	MAIN: 1.0400 (090514-00) SUB: 1.0003 (090302-00)	MJPEG	80	HTTP	O(PTZ)	X	X

VIVOTEK

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
IP7137	1	0202b	MJPEG MPEG-4	554 80	RTP+RTSP HTTP	-	O	X
PT7135	1	0201b	MJPEG MPEG-4	554 80	RTP+RTSP HTTP	O(PT)	O	X

TOSHIBA

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
IK-WB16A-W	1	0100b5	MJPEG MPEG-4	554 80	RTP+RTSP HTTP	X	X	X
IK-WR12A	1	0100c	MJPEG MPEG-4	554 80	RTP+RTSP HTTP	-	X	X

ACTI

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
SED-2120	1	V2.06.12-NB	MPEG-4	7070	RTP+RTSP	O(PTZ)	O	X
ACD-2100	1	V3.08.08	MJPEG MPEG-4	7070	RTP+RTSP	O(PTZ)	O	X
ACD-2200	4	V3.08.08	MJPEG MPEG-4	7070	RTP+RTSP	O(PTZ)	O	X
ACM-4200	1	V3.08.08-AC	MJPEG MPEG-4	7070	RTP+RTSP	-	O	X
ACM-1231	1	V3.11.13	MJPEG MPEG-4	7070	RTP+RTSP	-	O	X
ACM-5601	1	V3.11.13	MJPEG MPEG-4	7070	RTP+RTSP	-	O	X

DynaColor

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
NH060	1	090330NS	MJPEG MPEG-4	554	RTP+RTSP	-	O	O
NH061	1	d20091110NS	MJPEG MPEG-4 H.264	554	RTP+RTSP	-	O	O
NH070	1	090610NS	MJPEG MPEG-4	554	RTP+RTSP	O(Z)	O	O

NH101	1	090330NS	MJPEG MPEG-4	554	RTP+RTSP	-	O	O
V6	1	d20101210 NS	H.264 MJPEG	554	RTP+RTSP	-	-	-
D7521	1	0238-0032- 0313	MJPEG MPEG-4	80	HTTP	O(PTZ)	O	O
DH500e	1	0238-0032- 0313	MJPEG MPEG-4	80	HTTP	O(PTZ)	O	O
DH701e	1	0238-0032- 0313	MJPEG MPEG-4	80	HTTP	O(PTZ)	O	O
DH801^{+}e	1	0238-0032- 0313	MJPEG MPEG-4	80	HTTP	O(PTZ)	O	O

A-MTK								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
AM9730M	1	5.0.0.3166	MJPEG MPEG-4 H.264	80 554	HTTP RTP+RTSP	-	O	X
AM9539	1	5.0.0.3166	MJPEG MPEG-4 H.264	80 554	HTTP RTP+RTSP	-	O	X
AM323M	1	3.0.2.2457	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	O(PT)	O	X
AM3519	1	5.0.0.3166	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	O	X
AM6121	1	3.0.2.2457	MJPEG MPEG-4 H.264	80 554	HTTP RTP+RTSP	O(PTZ)	O	X

HikVision								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
DS-852MF-E	1	V2.0 build 090608 V4.0 build 090606	H.264 MPEG-4	554	RTP/RTSP RTP+RTSP	-	x	x
DS-862MF-E	1	V2.0 build 090608 V4.0 build 090606	H.264 MPEG-4	554	RTP/RTSP RTP+RTSP	-	x	x

HUNT								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
HLC-81I	1	V3.2.34	MJPEG MPEG-4	554	RTP+RTSP	-	X	X
HLC-84M	1		MJPEG MPEG-4	554	RTP+RTSP	-	X	X

HLT-87Z	1		MJPEG MPEG-4	554	RTP+RTSP	O(PTZ)	X	X
HLC-79AD	1	V1.0.14	MJPEG H264	554 80	RTP+RTSP HTTP	-	X	O

iCanTek

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
iCanView220	1	2.0.0	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	X	O
iCanserver512	1	2.2.2	MPEG-4	80	HTTP	O(PTZ)	X	O
iCanserver540	4	2.0.0	MPEG-4	554	RTP+RTSP	-	X	O

LOREX

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
LNE3003	1	LM.1.6.16.03_P1	MJPEG MPEG-4	8087 554	HTTP RTP+RTSP	-	O	O
LNE4001	1	LM.1.6.16.03_P1	MJPEG MPEG-4	8087 554	HTTP RTP+RTSP	O	O	O

LUXON

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
MIP1280	1	V3.2.22_L	MJPEG MPEG-4	554	RTP+RTSP	-	X	X
IP540	1	V3.2.34	MJPEG MPEG-4	554	RTP+RTSP	-	X	X

Panasonic

Model Name	Video Channel	Firmware Version	Streaming Format	Streaming Port	*Streaming* Protocol	PTZ Control	Configu-ration	Motion Detection
DG-NS202A	1	2.60j3	MJPEG MPEG4	554	HTTP RTP+RTSP	O	X	X
DG-NP502	1	1.01 1.04	MJPEG MPEG4	554	HTTP RTP+RTSP	-	X	X

PLANET								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
ICA-M230	1	3.0.2.2457	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	O(PT)	X	X
ICA-312	1	5.0.0.3166	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	O	X
IVS-110	1	3.0.2.2457	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	O(PTZ)	O	X
ICA-151	1	1005	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	X	X
ICA-750	1	V1006	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	X	X
ICA-150W	1	V1000	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	X	X
ICA-M220	1	v1.19	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	O(PT)	X	X
ICA-107W	1	V137	MJPEG MPEG-4	80 554	HTTP RTP+RTSP	-	X	X
ICA-700	1		MJEPG	80	HTTP	-	O	O
ICA-H610	1		MJPEG MPEG-4 H.264	80 554 554	HTTP RTP+RTSP RTP+RTSP	O(PTZ)	O	X

PIXORD								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
P400	1		MJPEG MPEG-4	554	RTP+RTSP	-	X	X

XVISION								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
XIP3000	1	1.0.0 build: 9	MJPEG MPEG-4	80	HTTP	-	X	X
XIP3101	1	1.0.0 build: 9	MJPEG MPEG-4	80	HTTP	-	X	X

ETROVISION								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
EV6551A-CI (EV6000)	1	1.8.2	H.264 MPEG-4 MJPEG	1852 554 80	RTP+RTSP HTTP	-	X	O

FlexWATCH								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
FW-3170	1	4.00-68	H.264 MJPEG	554	RTP+RTSP	-	X	X

Zavio								
Model Name	**Video Channel**	**Firmware Version**	**Streaming Format**	**Streaming Port**	***Streaming* Protocol**	**PTZ Control**	**Configu-ration**	**Motion Detection**
F312A	1	LM.1.6.16.03_P5	MJPEG MPEG-4	8087 554	HTTP RTP+RTSP	-	O	O
LNE4001	1	LM.1.6.01_P2	H264 MJPEG MPEG-4	8087 554	HTTP RTP+RTSP	-	O	O

ONVIF Devices

DG600II series are **video and UPnP search compatible** with the ONVIF IP devices.

O stands for “Supported.” – stands for “Not Supported by IP Device.” X stands for “Not Supported by DVR.”
All information listed here subject to change without notice. Certain brand/product names mentioned herein may be trade names and/or registered trademarks of their companies.

Recommended IP Camera Connection

Connection	***Resolution***	***Compression***	***Compression Rate***	***FPS****
NH061 x 6	720p	H.264	Medium (default)	30

*FPS is variable. Actual fps depends on picture size and how many frames cannot be received by DVR because of data transfer over network.

*DG600II series is able to support up to 24 Mbit/Sec streaming from IP devices. The DVR was tested under 14 analog and 6 IP cameras, also the alarm was triggered at all channels to be simulated as full loading.

Supported IP Camera Resolution

{1920,1080}, {1600,1200}, {1280,1024}, {1280,720}, {1280,960}, {1024,768}, {1024,576}, {1080,864}, {960,540}, {800,600}, {720,480}, {704,480}, {720,576}, {704,576}, {720,240}, {704,240}, {720,288}, {704,288}, {640,480}, {640,368}, {640,360}, {368,288}, {360,240}, {360,288}, {352,240}, {352,288}, {320,240}, {320,192}, {176,144}, {176,120}, {160,128}, {160,120}

Hybrid Function Limitations

Following IP camera functions cannot be supported by DVR.

1. Audio
2. Alarm I/O

Q & A

1. What's the Max resolution for DG600 Hybrid? Can be 1920x1080p full HD?

DG600II can store up to 1080p resolution IP camera video in hard drives now. The native resolution for DG600II is 1080p (simultaneous output OFF), therefore DG600II can output the IP channel image with 1080p high resolution.

2. How much bit rate from IP cameras can DG600II decode?

About 24 Mbit/sec.

3. How does DG600II manage bit rate limitation? Does it give an alert when the IP bit rate is too high or simply drop some frames?

For single IP channel, DG600II is able to decode all frames; for multi channels, DG600II will slow down frame rate when bit rate from IP cameras is too high.

4. With 24 Mbit/Sec bit rate limitation, Can DG600II support 8pcs 1.22MP IP cam with slow frame rate (1~6fps)?

Yes, actual fps depends on data bit rate from IP cameras (6 pcs is recommended to prevent from overloading).

5. Can IP camera works with DVR Motion Detection? (For Event List)

Yes, DG600II supports this, please check with the support list

6. Can IP cameras work with DVR Alarm I/O? (For Event list)

Yes, DG600II supports this, but cannot support IP camera alarm I/O.

7. Does DVR support Motion Detection, Alarm I/O, Audio & Video Loss functions of IP cameras?

DG600II could support Video Loss and Motion Detection (on specific models, like Axis cameras supporting H264 NalType SEI / API V3), but still cannot support Alarm I/O and Audio yet.

8. Does Smart Search function work on IP camera channels?

No, this function is supported on analog camera channels only. FPGA chip will do parameter records after getting

video source from video decoder. IP cam video stream does take this path.

9. Does DG600II support all NH series compressions & resolutions?

DG600II series supports all NH series with H.264, MJPEG and MPEG4 streaming format and also support the following resolution: 1280 x 960, 1280 x 1024, 720p, D1, VGA, QVGA, CIF, QCIF.

10. Does DG600II support V series (NVxx2, NAxx2) camera compressions & resolutions?

Yes, the image quality is acceptable, but video displays with latency due to the main profile resulting in the full loaded DSP. The supported resolution is up to 1080p.

11. Can users view DG600II IP camera channel video by Mobile View software?

Yes

12. Can users view DG600II IP camera channel video by I-Phone Safari?

Yes, with the IP camera providing MJPEG streaming.

13. Does Hybrid channel support POS text overlay?

Yes

14. Does DG600II support H.264 Main Profile?

Yes, the image quality is acceptable, but video displayed with latency due to the main profile resulting in the full loaded DSP.

15. Could recording of IP camera channels be scheduled?

Yes, recording could be turned on/off at ezRecord page (Day/Night/Weekend) with analog camera channels.