

# D300 plus/pro Media Gateway

high-performance embedded multi-functional device



#### Overview:

D300 Plus/ Pro media gateway is a high-performance embedded multi-functional device, which integrates functions such as stream media protocol conversion, stream media distribution service, multi-channels video decoding and video image segmentation. It can be applied to video format conversion, protocol intercommunication, decoding and splitting display from different systems, different manufacturers, different types and different encoding ways. It also works as the stream media server with the capability for 100 concurrent access.

#### Advantages :

- •It supports the most comprehensive protocol conversion and the widest application, which covered various stream media protocols in the market including professional protocols such as SIP and GB/ T28181.
- Support stream media protocol conversion, stream media distribution, live streaming, video split display, audio digital remix, video decoding to the display wall, etc.
- •Portable design, low power consumption (<6w), stable and reliable working mode makes 7×24 hours working available.

### **Application**

- It can be widely applied to RTSP/Onvif LAN monitoring or other IP-Camera video live broadcast over public network, such as scenic spot, store monitoring, campus monitoring, farm monitoring, etc., it can realize the functions of multi-camera, multi-angle switching.
- All kinds of non-unified video can be converted to video that can meet the national GB/T28181 standard and international SIP standard, which can connect the traditional communities, parks, enterprises and institutions monitoring to relevant government platforms.
- Multi-parties video collaboration; SIP video conference to live webcast; IP stream distribution (forwarding) / switching / live broadcasting; stream media decoding to the display wall (RTMP / RTSP / TS-UDP and other stream media to SDI or HDMI); multi-channels split screen display, etc.

### **Main function**

- Support 4 channels (D300 Plus) or 9 channels (D300 Pro) stream media protocol conversion.
- > It supports the conversion of RTP/RTSP, TS over UDP, RTMP (service and push), HLS (m3u8), SIP (multi-parties conference mode), GB/T28181, Onvif and other media protocols that are software extendable, makes various input protocol streams can be converted to other target protocol. The transmission/ reception of NDI-HX protocol can also be supported with additional application authorization.
- > Compatible with various IP cameras, IP encoders, NVRs, video conference systems input.
- > Supports up to 4 channels (D300 Plus) or 9 channels (D300 Pro) input video streams' protocol conversion (Media source number is unlimited and can be dynamically switched), and each input stream can be converted into 4 different target protocol stream outputs, or 4 identical protocols stream output;
- > Expandable SATA and NAS video record and storage capability.
- Stream service function for up to 100 concurrent access capability (streaming distribution/ live broadcasting).
- It has 4 channels (D300 Plus) or 9 channels (D300 Pro) of network streaming distribution/ live broadcasting function (each stream can be pushed to up to 4 different live broadcast targets simultaneously), and support various live broadcast protocols such as RTMP;
- > Unicast mode can meet up to 100 concurrent user viewing, it can be used directly as a distributed live broadcast server for live events such as education/ conference/ broadcast program/ digital signage etc..
- > (Note: The actual of concurrent access capability depends on the specific network bandwidth, video format and other factors. Device transmission limit is 600Mbps.)
- Support up to 16 channels of video decoding and self-defined split display as well as multi-channels video dynamic switching and re-encoding transmission/ live broadcasting.
- Support UHD (4K) / HD H.264 / H.265 video decoding, the device comes with HDMI and SDI output interface, support HDMI (up to 3840x2160@60Hz) and SDI (up to 1920x1080@60Hz) with the same image or different image output:
- > Support HDMI/ SDI embedded audio output and analog audio output, audio channel can be switched at will, support high quality audio digital remix and conference mode audio remix;
- Decode up to 4 channels of 4K 30Hz H.264/H.265 video, or 8 channels of 1080P 50Hz/60Hz H.264/H.265 video, or 16 channels of 1080P 30Hz or 1080I 50/60Hz or 720P and below H.264/H.265 video;
- > Support 16 channels video self-defined 1/2/4/6/8/9/16 split display, and dynamic switching output;
- Support encoding the video after splitting and recombining for live broadcast/ transmission (up to 1080P60 H.264 encoding).

# Dimension



## **Parameter**

Model	D300plus/ D300pro
Streaming input/output	2*100M/ 1000M RJ-45 adaptive Ethernet ports
Decoding output	1*SD/HD/3G-SDI, up to 1080P 60Hz 1*HDMI 2.0, up to 3840x2160@60Hz
Analog audio output	1*3.5mm line out
Analog audio input	1*3.5mm line in
USB	1*USB 3.0 Type-A

Protocol support capa	Dility
Access protocol	RTSP/ ONVIF /RTMP/TS-UDP/RTP/SIP/HTTP
Output protocol	RTSP/ ONVIF /RTMP/TS-UDP/RTP /HLS/SIP/GB28181
Protocol conversion	Simultaneous 4 channels (D300 Plus), or 9 channels (D300 Pro) 1080P video conversion
Streaming distribution	D300 Plus: Unicast supports 100 channels of RTSP/TS streams D300 Pro: Unicast supports 100 channels of RTSP/TS /RTMP/HLS streams (Not exceeds 600Mbps)
Live streaming	(4 or 9 channels)*4 channel 1080P
Video decoding capab	ility
Number of decoding	4K 30Hz H.264/H.265: Up to 4 simultaneous channels; 1080P 50Hz/60Hz H.264/H.265: Up to 8 simultaneous channels; 1080P 30Hz or 1080I 50/60Hz or 720P and below H.264/H.265: Up to 16 simultaneous channels
Video decoding standard	H.264, H.265
SDI output format	1080P60/59.94/50,1080P30/29.97/25/24/23.98 1080I60/59.94 /50 720P60/59.94/50 570I/50 480I/60
HDMI output format	4K 3840x2160@60/30、1080p60/50、1080p24/25/30、1080i60/50、720p60/50  Compatible with VESA standard format
Video rate range	128Kbps ~ 40Mbps
Audio decoding	AAC-LC / G.711 (aLaw / uLaw)
Audio rate range	AAC: 8Kbps ~ 320Kbps G.711: 64Kbps
Decoding delay	≤200ms
Split display style	Support 1/2/4/6/8/9/16 segmentation; Support re-encoding the splitted and recombined video for live broadcast/ transmission. The image supports 1080P60 H.264 encoding.
Management	
Management interface	Web
Remote management	Support
Remote firmware upgrade	Support
Operating environmen	t
Operating temperature	-25 ℃ ~ 60℃
Relative humidity	20 ~90%RH(No condensation)
Power consumption	≤6W
Power supply	12V/1A