### DUNLOP

### DP-2504HMI/GW Mobile DVR

#### Introduction:

Adopting embedded Linux operating system, Dunlop DP-2504HMI/GW series dedicated Mobile DVR (Digital Video Recorder) provides powerful monitoring functionalities, including audio and video encoding & decoding, 2G & 3G & Wi-Fi wireless network transmission, satellite positioning service, secure data storage, hard disk vibration damping. It can both work alone as a recorder and cooperate with other devices to build a comprehensive surveillance system.

Thanks to the features of high stability, easy-to-carry and low power consumption, the DP-2504HMI/GW series Mobile DVR is widely applied to the surveillance projects of public transportation, school bus, etc.

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#### **Available Models:**

DP-2504HMI/GW series; DP-2504HMI/BNC series

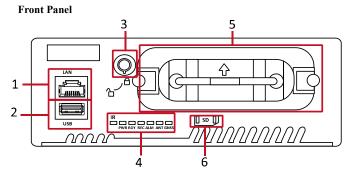
NOTE

- The Wi-Fi function is only supported by the "/WI" devices.
- The 3G dialing function is only supported by the "/GW" devices.
- The 2G network function is only supported by the "/GG" devices.

#### Main Features:

- User-friendly GUI providing easy and flexible operations
- Standard 1DIN dimensions, supporting embedded and bracket installation
- Pluggable 3G (WCDMA), Wi-Fi (optional), and 2G (optional) module providing flexible data transmission solutions
- pluggable GNSS (Global Navigation Satellite System) module precisely positioning the vehicle via the satellite and recording the location information in the stream
- 4 analog channels of audio & video inputs connectable; each channel supporting up to WD1 resolution with H.264 encoding technology
- one 2.5-inch HDD/SSD and one SD/SDHC card pluggable, adopting hard disk vibration damping technology
- Information collection interfaces collecting driving information such as left/right turn, braking, backing up, etc.
- Hard disk box with USB interface supporting intelligent temperature control and data export
- Specialized aviation connectors ensuring signal stability
- Delay (0~6h) shutdown and 24-hour scheduled startup/shutdown
- Wide-range power input (+8VDC ~+36 VDC)
- Power-off protection avoiding key data from loss
- Tensile aluminum chassis with no fan design well adaptable to working environment

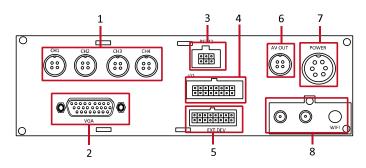
#### **Physical Interfaces:**



Index	Name	Description
1	LAN	10M/100M self-adaptive Ethernet interface
2	USB	USB interface
3	Hard disk lock	Lock/Unlock the hard disk box.
	Indicators	IR: IR Receiver Receive IR signal from remote control.
		PWR: Power indicator
		Light in green after device startup; light in
		red when device standby.
		REY: Ready indicator
		Light in green after device starts up
		properly.
		REC: Record indicator
		Light in green during recording process.
4		ALM: Alarm indicator
•		Light in red when alarm occurs.
		ANT: 3G dialing indicator
		Light in steady green during dialing
		process; flash in green after dialing
		succeeded; The light is out when the dialing
		module is abnormal.
		GNSS: GNSS indicator
		Light in steady green during positioning
		process; flash in green after positioning
		succeeded; The light is out when the
		positioning module is abnormal.
_	Hard disk box	Insert one 2.5-inch SATA HDD/SSD for
5		data storage.
6	SD card slot	Insert one SD card for data storage.

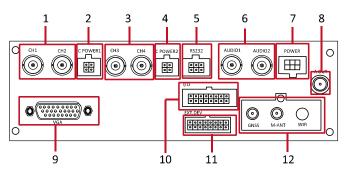
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#### Rear Panel of DP-2504HMI/GW series



Index	Name	Description
1	СН1~СН4	4-pin aviation plug, audio & video input of
		channel 1~4, providing 12V power supply
2	VGA	VGA interface
3	RS232	RS-232 interface
		7-ch high / low level signal trigger
4	I/O	including 3-ch alarm inputs, 4-ch sensor in;
		1-ch pulse signal input
	EXT.DEV	RS-422 communication interface, two-way
5		audio, video output signal, RS-485 and
		power supply
6	AV OUT	4-pin aviation plug for audio & video
0		output
7	POWER	6-pin aviation plug for power supply and
7		start control
0	Pluggable	3G module, Wi-Fi module (optional), 2G
8	Module	module (optional), GPS module

#### Rear Panel of DP-2504HMI/BNC series



Index	Name	Description
1	CH1~CH2	BNC interface; video input of channel 1~2
2	C POWER1	Provide power supply for connected camera
3	СН3~СН4	BNC interface; video input of channel 3~4
4	C POWER2	Provide power supply for connected camera
5	RS232	RS-232 interface
(	AUDIO1	Audio input of channel 1~2 (no audio input
6	AUDIO2	supported for channel 3~4)
7	POWER	Provide power supply
8	AV OUT	BNC interface for video output
9	VGA	VGA interface
10	I/O	<ul><li>7-ch high / low level signal trigger</li><li>including 3-ch alarm inputs, 4-ch sensor in;</li><li>1-ch pulse signal input</li></ul>
11	EXT.DEV	RS-422 communication interface, two-way audio, video output signal, RS-485 and power supply
10	Pluggable	3G module, Wi-Fi module (optional), 2G
12	Module	module (optional), GPS module



• Part function is optional. For details, see the actual device model.

• Pin definition of aviation plugs is for reference only. For details, see the tag on the corresponding component.

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### Specifications 1: DP-M2504HMI series:

Model		DP-2504HMI/GW series
		4-ch
А	Analog video input	Aviation plug (1.0 Vp-p, 75 $\Omega$ ), PAL / NTSC self-adaptive
Video/Audio input		4-ch
А	Audio input	Aviation plug (linear level, $1k\Omega$ )
П	P video input	None
	1	1-ch
	/GA output	Resolution: 1920×1080, 1280×1024, 1280×720, 1024×768
Video/Audio	CVBS output	1-ch;
output C		Aviation plug (1.0 Vp-p, 75 $\Omega$ ); resolution: PAL: 704 × 576, NTSC: 704 × 480
A	Audio output	1-ch; aviation plug (linear level, $600 \Omega$ )
v	/ideo compression	H.264
		Main stream: WD1 / 4CIF / 2CIF / CIF
E	Encoding resolution	Sub stream: CIF / QCIF
	Frame rate	PAL: 1~25fps; NTSC: 1~30fps
	/ideo bitrate	32Kbps~2Mbps; custom (Max.: 4Mbps)
parameters A	Audio compression	G.711
A	Audio bitrate	16Kbps
S	Stream type	Video, Video & Audio
D	Dual stream	Supported
Т	уре	One 2.5-inch SATA HDD/SSD
С	Capacity	Up to 1TB capacity supported
Hard disk Ir	nstallation	Pluggable
Р	Protection	3-generation hard disk box
В	Backup	USB interfaces on hard disk box and device front panel supporting data backup
	G	WCDMA (2G module optional)
Wireless Network	Vi-Fi (optional)	802.11 b/g/n supported, 2.4GHz
<b>Positioning</b> G	GNSS	GPS; BDS (optional)
Т	wo-way audio	G.722
А	Alarm in	7-ch high/low level signal input; 1-ch pulse signal input; 3mm connector
А	Alarm out	2-ch; 3mm connector
N	Jetwork interface	1; RJ45; 10M/100M self-adaptive Ethernet interface
External interface A	Antenna interface	SMA interfaces on pluggable module including one for 3G, one for Wi-Fi and one for GPS
S	Serial interface	RS-232, RS-485, 3mm connector
U	JSB port	1 × USB2.0
S	SIM card	1, standard SIM card slot
S	SD/SDHC card	1, standard SD/SDHC card slot
C	Operating system	Linux
0	Deprating method	IR remote control
General P	Power supply	Input: +8~ +36VDC; Output: 12VDC/2A, 5VDC/1A
С	Consumption	Standby: Max. 0.5W; Full load: Max.20W (without 7-inch screen)
W	Vorking temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)
W	Vorking humidity	10%~90%
D	Dimensions (W×D×H)	178mm×170mm×50mm
W	Veight	Aprox.1.6kg (without hard disk or SD/SDHC card)