



## FTMD-X5NPro-12CH • MDVR Technical Datasheet



### FTMD-X5NPro-12CH MDVR - Highly Integrated Design



GPS Tracking



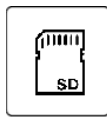
Geo Fencing



Playback Trips



Wi-Fi



SD Card



Live Tracking



CE UK CA PTCRB

### Product Summary

FTMD-X5NPro-12CH is a cost-effective device specially developed for mobile video surveillance and remote video monitoring, featuring high functional scalability. It is equipped with a high-speed processor and an embedded operating system, integrating state of the art H.265 video compression/decompression technologies, 3G/4G/Wi Fi network transmission technologies, and GPS/BDS positioning technologies in the IT industry. It adopts the latest processor solution and supports recordings in formats of 1080p, 720p, WD1, WHD1, WCIF, D1, HD1, and CIF. Moreover, it allows real time local recording and wireless uploading of vehicle status data and monitoring data.

### Key Features:

- Embedded Linux operating system
- H.265/H.264 encoding and decoding to improve the memory space utilization
- 3.5-inch hard disk storage, hard disk heating & hard disk power off protection technologies
- SD card backup
- Connection with storage units such as a fireproof box for disaster recovery backup
- Outstanding anti-vibration performance and high reliability, providing comprehensive functions

## Technical Specification

### Model

FTMD-X5NPro-12CH

### Function Overview

Preview, video recording, playback, network transmission, and positioning

### System

#### Operating System

Linux 4.9

#### Control Mode

CP4, mouse, Easy Check, and network (3G/4G/Wi-Fi)

### Video

#### Input

8-channel AHD + 4 channel IPC (PON power supply)

#### Output

1-channel CVBS + 1 channel VGA

#### Total Resource

AHD:  
8\*720P@25FPS(PAL)  
or 8 × 1080p  
@ 15 FPS (PAL)  
or 8 × 720p @ 30 FPS (NTSC)  
or 8 × 1080p @  
15 FPS (NTSC)  
IPC:  
4\*1080P@30FPS(IPC)

#### Video Signal Standard

Level: 1 Vpp; impedance: 75 ohms  
NTSC/PAL (optional)

### Audio

#### Input

8-channel AHD + 4 channel IPC

#### Output

2-channels

#### Audio Signal Standard

Level: 2 Vpp; input impedance: 4.7 kilohm

### Display

#### Display Split

1/4/9-screen display

#### Screen Display

Time/Date, Vehicle Plate, Vehicle Number, Alarm, Speed, Location Information, Channel Name, ACC Information

	Operating Interface	GUI	
Recording			
	Audio/Video	Video	H.264/H.265
	Compression Format	Audio	ADPCM, G.711U, G.711A
		AHD:	
		PAL:	
			1080p (1920 × 1080), 720p (1280 × 720), WD1 (928 × 576), WHD1 (928 × 288), WCIF (464 × 288), D1 (704 × 576), HD1 (704 × 288), CIF (352 × 288);
	Image Resolution	NTSC:	
			1080p (1920 × 1080), 720p (1280 × 720), WD1 (928 × 480), WHD1 (928 × 240), WCIF (464 × 240), D1 (704 × 480), HD1 (704 × 240), CIF (352 × 240);
		IPC:	
			1080p (1920 × 1080), 720p (1280 × 720);
	Image Quality	Levels 1-8 adjustable (preferably Level 1)	
	Recording Mode	Start-up/Scheduled/Alarm event recording	
	Alarm Prerecording	0-60 min	
	Alarm Recording Delay	0-30 min	
	Mirrored Recording	Supported	
Playback			
	Playback Channel	1-channel local playback	
	Search Mode	By date/time, channel, or event	
Network			
	3G/4G	EVDO/TD-SCDMA/WCDMA/TDD-LTE/FDD-LTE (optional)	
	WI-FI	W217 module. Supported protocol: 802.11a/b/g/n/ac Supported frequency band: 2.4/5.0 GHz	
	Ethernet	1 × RJ45 (10/100 M/1000 M)	

Positioning		
	GPS/BD	Positioning, speed detection, and time Synchronization
Sensor		
	G-Sensor	Built-in 6-axis inertial sensor
Storage		
	HDD	1 × 3.5" SATA HDD + 1 × M.2 SSD, hard disk heating supported
	SD	Hot-swapping 32/64/128/256 GB SDXC
Port		
	USB	1 × USB2.0 (5pin aviation connector) + 1 × USB2.0 (Type B)
	SD	1 × SD card slot
	SIM	2 × SIM card slot
	Serial Port	2 × RS232, 3 × RS485 (1 × R-WATCH)
	CAN	2 × CAN
	IO	8-channel input and 2 channel output
	Pulse	Speed Detection 1 channel
	Control Panel	CP4
	Intercom	1 × MIC port (CP4)
	VGA	1 × VGA
Power Supply		
	Input	DC 8~36V
	Output	5 V @ 500 mA & 12 V @ 500 mA
	Maximum Typical Power Consumption	100W
	Standby Power Consumption	≈ 0 W

## Physical Characteristics

### Dimensions(mm)

342.4 × 189.5 × 118.0  
(With rear shield and bracket)

### Weight (kg)

4.1kg (without hard disks)

## Environment

### Operating Temperature

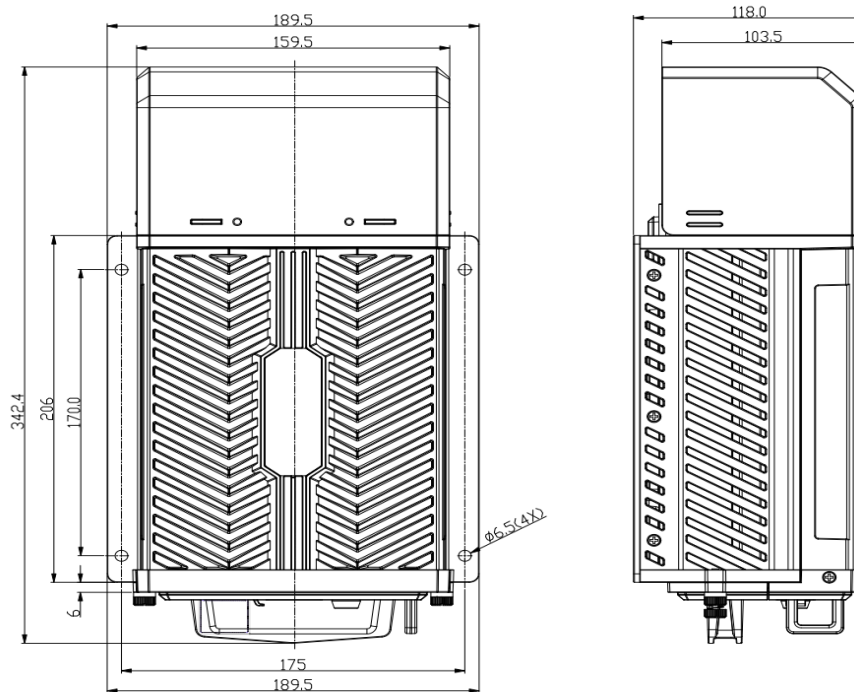
−40°C to +70°C  
(Heated, without hard disks)

### Operating Humidity

8% to 95% (non-condensing)

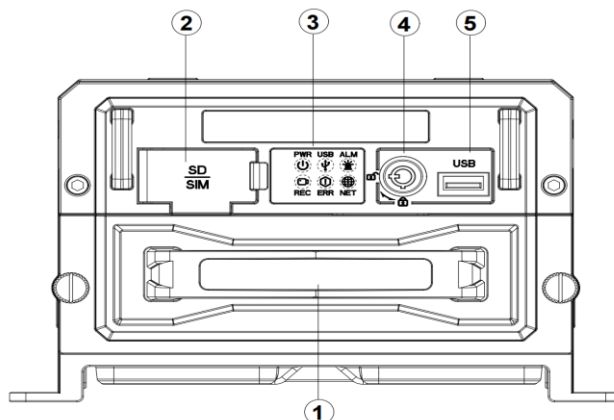
## Dimensions

(Unit: mm)

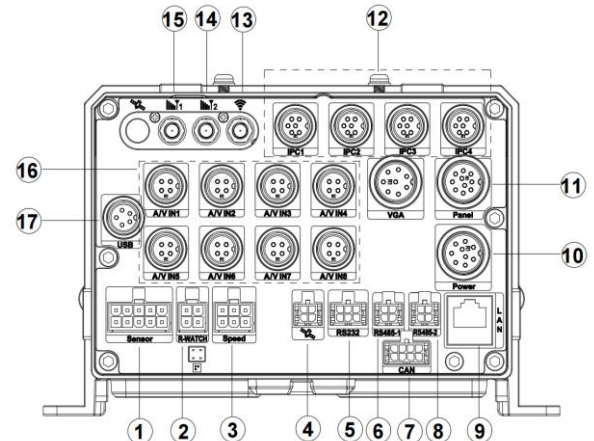


## Panel Ports





### Front panel



### Rear panel

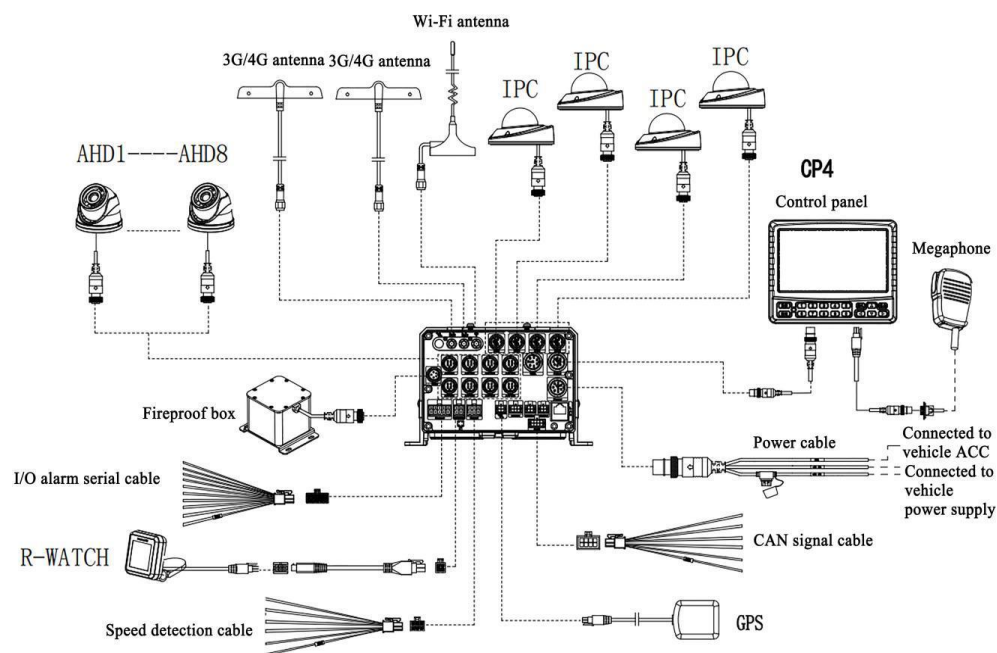


S/n	Name
1	Hard disk case (for holding a hard disk)
2	SD/SIM card slot
3	Indicator: power (PWR), USB, alarms (ALM), recording (REC), errors (ERR), network (NET)
4	Device lock
5	USB interface

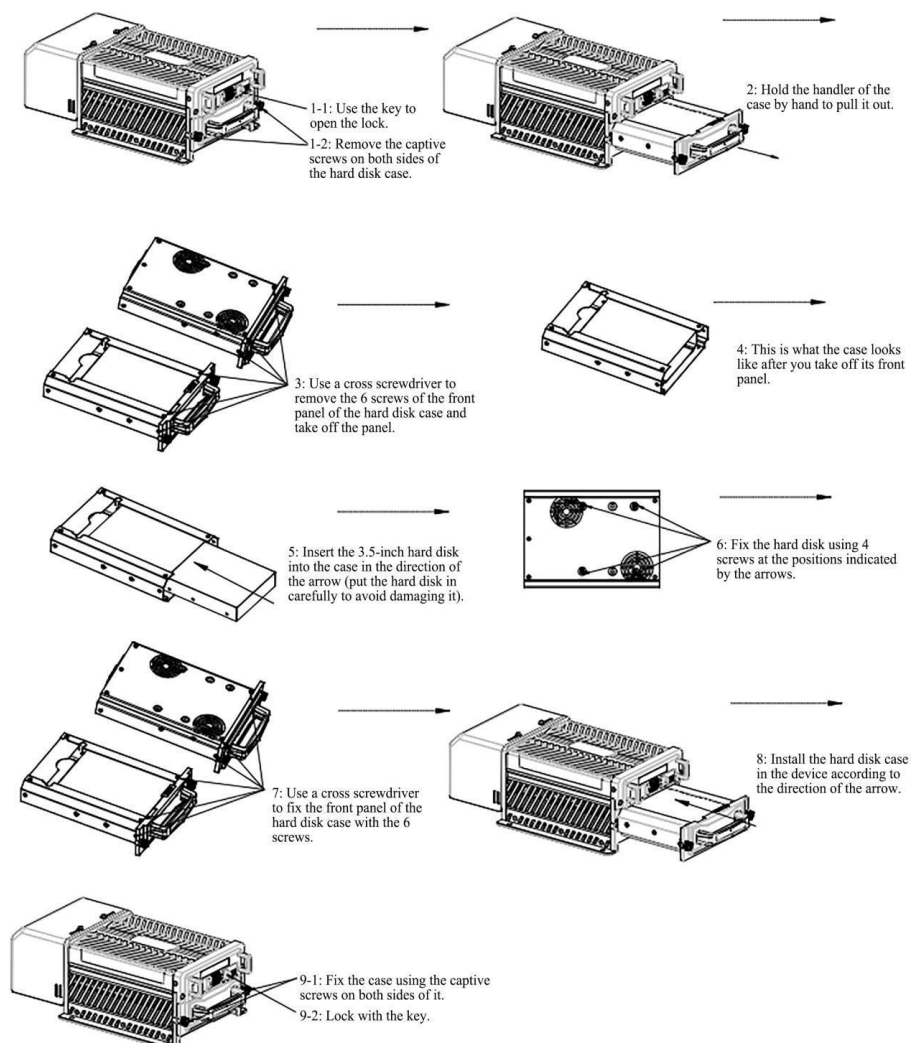
S\N	Silk Screen	Description
1	Sensor	Serial port
2	R-WATCH	R-WATCH port
3	Speed	Pulse velocity measurement input port/alarm output port
4		External positioning module port
5	RS232	2-RS232 ports
6	RS485-1	1-RS4 85 port
7	CAN	2-CAN ports
8	RS485-2	1 RS485 port
9	LAN	LAN port
10	Power	Power Input
11	Panel	CP4 port
12	IPC1~IPC4	IPC (PON power supply) audio/video input ports 1-4
13		Wi-Fi antenna port
14		3G/4G antenna port
15		3G/4G antenna port
16	A/V IN1~A/V IN8	Analog audio/video input ports 1 to 8
17	USB	USB interface

## Installation

### Typical Wiring Diagram



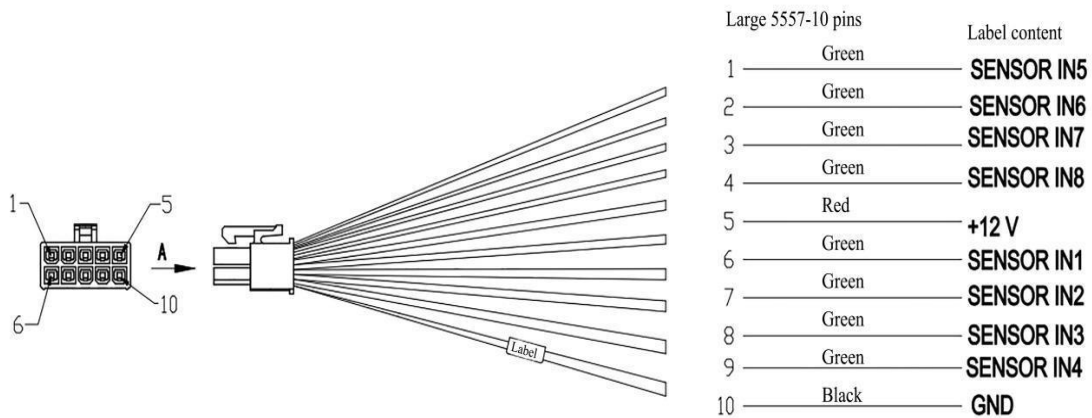
### Hard Disk Installation



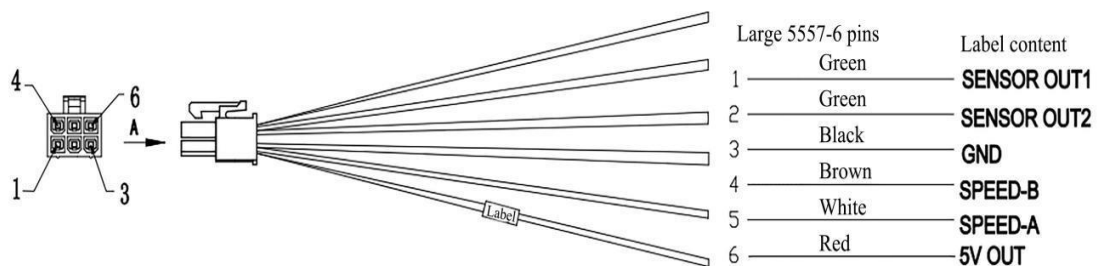


## External Cable Connector Pinouts

I/O alarm and serial cable connector pinouts:



Speed detection cable connector pinouts:



CAN signal cable connector pinouts:

