

Art. Nr: TW-F200P-2CH

THINKWARE BENELUX



DESCRIPTION

General

Meet your new road companion. The THINKWARE F200 PRO improves on its critically-acclaimed predecessor to deliver you more features in a revamped design that continues to be sleek and discrete.

Boasting an updated Ambarella processor, the F200 PRO is capable of recording both the front and rear views of your vehicle in 1080p Full HD while its embedded Advanced Driver Assistance System helps you stay safe on the roads.

Enhancing THINKWARE'S industry-leading Parking mode, Super Night Vision and Time Lapse for Parking Surveillance mode now allow you to choose the right parking protection for your vehicle.

Features

- Full HD (1920 x 1080) @30fps
- 2.0MP CMOS Sensor
- 140° Wide Angle Lens
- Advanced Video Clear Technology
- Supercapacitor
- Integrated Thermal Protection
- Anti-File Corruption
- Super Night Vision 2.0 (Parking Surveillance Mode only)*
- Parking Surveillance Mode (Motion & Impact Detection, Time Lapse and Energy Saving Mode)*
- Time Lapse (Record @2fps; Playback @10fps)*
- Safety Camera Alert (Speed Camera & Red Light Camera) **
- Road Safety Warning System (LDWS/FCWS/uFCWS/FVDW) **
- GPS Port for GPS Antenna
- Built-In Wi-Fi
- Mobile App (iOS & Android)
- PC Viewer (Windows & Mac OS)
- Supports MicroSD Cards up to 128GB

*Requires Hardwiring Cable or OBD II Power Cable and installation for Parking Surveillance mode (professional installation recommended) ** Requires an optional GPS Antenna

IMAGE

HIGH DEFINITION VIDEO QUALITYCMOS

Image Sensors allow constant Full 1080p HD resolution recording during both daytime and nighttime along with a 140-degree wide angle lens view. This will minimize blind spots to assure recording of all events without fail.

WIDE ANGLE VIEW Front View Camera – 140^o Rear View Camera – 160^o Uncompromised video coverage with the wide viewing angles, so you never miss a moment.





WIDE DYNAMIC RANGE

When you are driving under bright sunlight, coming out of a tunnel, or getting under the shadow of a tall building etc, a sudden change in frontal light exposure levels can result in excessively bright or dark recordings. The WDR function eliminates excessively bright spots on the recording to correct its color balance in order to ensure a clear image: <u>HOW IT WOKS</u>





NIGHTTIME PICTURE QUALITY CORRECTION

Images from the videos recorded during nighttime driving on dark streets are generally difficult to make out. The enhancement Sensors of THINKWARE DASH

CAMs come with a standard function of brightness and color control as well as noise cancellation.





AUTOMATIC EXPOSURE

A sudden rise of light exposure caused by strong sunlight or headlight beams of oncoming vehicle may cause difficulties to assess the situation. Also, lack of lighting in a dark tunnel or night driving may pose the same problem. The automatic light exposure function controls the level of light exposure to maintain vivid and clear video recordings in all circumstances.





SUPER NIGHT VISION 2.0*

Dash cam Videos recorded in a low light environment such as dark alleyway or underground parking lot may not be clearly identifiable. SUPER NIGHT VISION uses ISP (Image Signal Processing) technology and the real-time image processing function to record clear, visible video in a low light environment when the vehicle is parked: <u>HOW IT WORKS</u>



*Requires Hardwiring Cable and installation for Parking mode (professional installation recommended)

SAFETY

FRONT VEHICLE DEPARTURE WARNING (FVDW)

When your car is stopped at an intersection or in traffic, the intelligent guidance system informs you that the vehicle in front has started to move, preventing a delayed response just in case you stop looking ahead: <u>HOW IT</u> <u>WORKS</u>

HIGH SPEED / URBAN FORWARD COLLISION WARNING SYSTEM (FCWS/ uFCWS) Accidents can be avoided by maintaining a safe following distance. Road Safety Warning System in the F200 PRO calculates the real-time distance between your vehicle and the vehicle in front of you, while driving above 30 km/h in expressways or under 30 km/h in a busy city, and issues a 3-level early warning to the driver depending on the danger of collision: $\frac{1000 \text{ IT WORKS}}{1000 \text{ IT WORKS}}$



LANE DEPARTURE WARNING SYSTEM (LDWS)

Drowsy or distracted driving greatly increases the chance of an accident on the road. The Lane Departure Warning System will alert the driver when the vehicle goes off lane in a speed over 50 km/h.: <u>HOW IT WORKS</u>



SAFETY CAMERA ALERT*

The Safety Camera Alert function of THINKWARE DASH CAM actively alerts the driver of any photo enforcement locations on the route while still recording videos. THINKWARE Dash Cam provides active warning for these 5 types of road safety cameras: <u>HOW IT WORKS</u>

Red Light: warning system for the red light. If there is light traffic ahead, camera will inform you.

Speed camera: warning system for speed & red light cameras in 400 & 200 meters. It also tell you the maximum speed of the specific road. **Average speed:** warning system for entering average speed zone (trajectory control).

Mobile zone: the camera let you know areas which are used more often for mobile speed checks













SPEED CAMERA WARNING SYSTEM RED LIGHT & SPEED CAMERA WARNING SYSTEM

AVERAGE SPEED WARNING SYSTEM

MOBILE ZONE WARNING SYSTEM

*Optional GPS antenna required.

RECORDING MODES

CONTINUOUS RECORDING MODE

This mode is activated automatically when you start the engine. Recorded videos are saved in one-minute segments with an auto-looping mechanism.

EVENT RECORDING MODE

The Active Impact Monitoring System will automatically store the video data ten seconds prior to and after a collision registered by the 3-axis G-Sensor.

MANUAL RECORDING MODE

Similar to a video camera, you can use the Manual Recording Mode to capture events that occur in front of your vehicle whether or not it is in motion.

ENERGY SAVING & PARKING RECORDING MODE

Energy saving mode will reduce power consumption by 1/3 less and gives 3x longer video recording than normal parking mode. When you are away for a vacation or leaving your car for quite some time, energy saving parking recording is a recommended solution. When in use, the device will go to sleep and soon after an impact has been detection by built-in G-senor, it will wake up within a second and start recording for next 20 seconds of period.



PARKING SURVEILLANCE MODE

Parking Surveillance mode is automatically activated when you turn off the ignition, and captures footage when a motion or impact is detected so you have video evidence of mishaps like hit-and-runs while you're away from your vehicle.







IMPACT DETECTION

Monitor any impact to the vehicle while it is parked to catch any hit-and-run driver in the act while you are away.



MOTION DETECTION

Monitor and capture any motion around the vehicle for potential vandalism attempts.



TIME LAPS*

Important clips and images may get deleted due to insufficient memory space during long continuous recordings especially in standard parking recording mode which requires large memory for saving 15 to 30 frames per second. TIME LAPSE MODE in the F200 PRO records 2 frames per second reducing the size of the video file. This allows video recordings in parking mode to continue up to 10 times longer than the motion detection recording: <u>HOW IT WORKS</u> *Requires Hardwiring Cable and installation for Parking mode (professional installation recommended). **VIEWER**

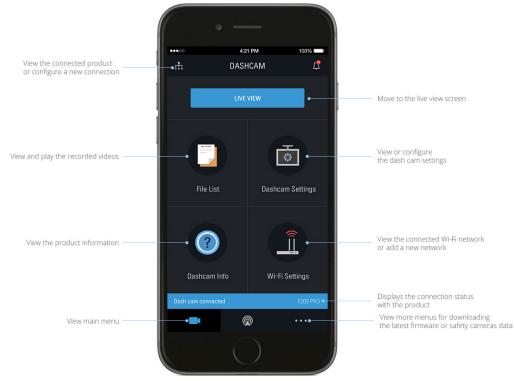
PC/MAC VIEWER

This mode is activated automatically when you start the engine. Recorded videos are saved in one-minute segments with an auto-looping mechanism: <u>HOW IT WOKS</u>



APP

Your smartphone and theTHINKWARE DASH CAM can be connected via the exclusive application, THINKWARE DASH CAM LINK. Check download or delete recorded images, and configure dash cam settings.



OTHER FUNCTIONS

FORMAT FREE TECHNOLOGY

F70 utilizes the FAT (File Allocation Table) system. This allows THINKWARE's proprietary Format Free Technology to eliminate the need for periodical manual formatting of recorded video files on the microSD memory card. It also helps extend the life of your memory card. You can view recorded video files on any PC without having to worry about converting files. THINKWARE DASH CAM F70 saves the hassle of manually clearing memory space.



COMPREHENSIVE DRIVING INFORMATION WITH GPS

With the optional GPS Tracker, the THINKWARE DASH CAM F70 can record the vehicle's driving speed and provide its precise location and routes identification on the map. The GPS Tracker helps you to accurately assess the details of the surrounding area by providing you with the vehicle speed and the time of a collision, and the severity of impact. The video recording feature not only stores driving footages in case of an event, but it can also be used to track your holiday travel routes.



HIGH-TEMPERATURE PROTECTION SYSTEM

The specially designed heat discharge construction and the built-in thermal sensor of the F70 protect the device and its data against intense heat by automatically turning it off to prevent overheating: <u>HOW IT WORKS</u>



FAIL-SAFE RECORDING

In the event that the power gets disconnected after an accident, the fail-safe recording uses the Super Capacitor for backup power to ensure safe storage of any recording in progress – so you can be assured that your valuable data will be securely stored under any circumstances.

NOTES

- PARKING MODE: Requires Hardwiring Cable or OBD II Power Cable and installation for Parking Surveillance mode (professional installation recommended)

- SAFETY CAMERA ALERT: requires the optional GPS antenna

- Check the other tabs for "Compatibility" - "Package contents" - "Product specifications"

THINKWARE BENELUX

NOTES

- PARKING MODE: Requires Hardwiring Cable or OBD II Power Cable and installation for Parking Surveillance mode (professional installation recommended)

- SAFETY CAMERA ALERT: requires the optional GPS antenna

- It is possible to upgrade the SD card up to $64 {\rm GB}$

DOWNLOAD

APP

Use the below link to download the THINKWARE APP for your device:



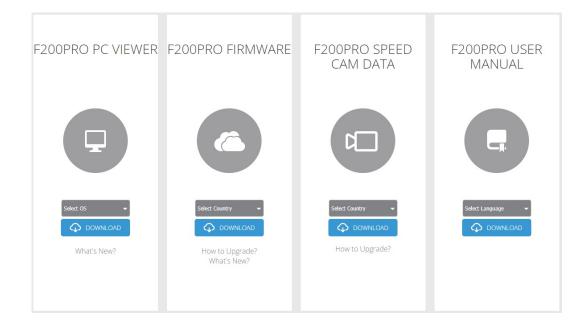




OTHER DOWNLOADS Press below button for --> F200PRO PC viewer --> F200PRO Firmware update --> F200PRO Speed camera data

--> F200PRO User manual

DOWNLOAD



RECORDING TABLE

Q1000	Front	Front + Rear
Video Quality	2K QHD @30fps	2K QHD + 2K QHD @30fps
	32GB 240 min	120 min
Capacity	64GB 483 min 128GB 971 min	241 min 485 min
	256GB 1947 min	973 min
111000	Front	Front + Rear
U1000	FIOIL	FIGHT + Redi
	4K UHD @30fps	4K UHD @30fps + 2K QHD @30fps
Video Quality	or	or
	2K QHD @60fps	2K QHD @60fps + 2K QHD @30fps
	32GB 99min	65min
Capacity	64GB 200min	132min
	128GB 402min	265min
X1000	Front	Front + Rear
Video Quality	2K QHD @30fps	2K QHD @30fps + 2K QHD @30fps
	32GB 228min	114min
Capacity	64GB 458min	229min
	128GB 918min	459min
X800	Front	Front + Rear
Video Quality	2K QHD @30fps	2K QHD @30fps + Full HD @30fps
	32GB 105min	105min
Capacity	64GB 208min	208min
	128GB 400min	400min
Q800PRO / QA100	Front	Front + Rear
Video Quality	2K QHD @30fps	2K QHD @30fps + Full HD @30fps
	32GB 140min	70min
Capacity	64GB 283min	141min
	128GB 569min	284min
1080p Full HD	Front	Front + Rear
Video Quality	Full HD @30fps	Full HD @30fps + Full HD @30fps
	16GB 121min	60min
Capacity	32GB 246min	123min
-	64GB 496min 128GB 996min	248min 498min
F790	Front	Front + Rear

Video Quality	Full HD @30fps	Full HD @30fps + Full HD @30fps
Capacity	16GB 180min 32GB 377min 64GB 752min 128GB 1506min	90min 188min 376min 753min
M1	Front	Front + Rear
Video Quality	Full HD @30fps	Full HD @30fps + Full HD @30fps
Capacity	32GB 354min 64GB 714min	177min 357min

Note: Each Continuous Driving Video clip is 1 minute long.