

# Body Worn Camera Enables Transparent and Accountable Law Enforcement

Whitepaper by Hytera

# CONTENTS

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## 1 INVESTMENT IN TECHNOLOGY JUSTIFIED BY ECONOMICAL IMPACT AND BEYOND

### 2 BWC OFFERS TRANSPARENCY, EFFICIENCY AND SAFETY

- ◆ Better transparency
- ◆ Increased civility
- ◆ Quicker resolution
- ◆ Corroborating evidence
- ◆ Training program
- ◆ Complement to the city surveillance system

### 3 HIGHLIGHTS OF HYTERA'S BWC SOLUTIONS

- ◆ Easy to use
- ◆ Professional design
- ◆ Built-in encryption & anti-tamper mechanism





# **INVESTMENT IN TECHNOLOGY JUSTIFIED BY ECONOMICAL IMPACT AND BEYOND**

*Terrorism and crime are great challenges in the 21st century. This is a time when nations need to pull together and present a unified front against terror groups. An increase in crime rates will decrease GDP. It has been well established that violence has a marked negative impact on economic activity and social development. Many studies have demonstrated the direct and indirect economic impacts of criminal violence, organised conflict and outright war, as well as the costs of state responses to violence in the form of policing, incarceration and maintenance of justice and rule of law. The uncertainty associated with unsafe environment will reduce investment and the pace of economic development. A stable environments fosters economic growth.*

*IEP (Institute for Economics and Peace) defines violence containment costs as economic activity that is related to the consequences or prevention of violence, where the violence is directed against people or property. Results stemming from the analysis suggest that the economic impact of violence containment to the world economy is significant, amounting to \$9.46 trillion per annum, or almost 11 percent of world GDP. This is the equivalent of \$1,300 for each person in the world, and almost double the value of world agricultural production.*

*Body Worn Cameras (BWC) are seen as one way to address the challenges faced by law enforcement. The technology offers real-time or recorded information when used by officers on assignments that bring them into contact with members of the community. BWC also provides law enforcement with a mobile surveillance tool to promote officer safety and efficiency to deter crime.*

*A report published by the Office of Justice Program's National Criminal Justice Reference Service of the U.S. in December 2017 examined the costs and benefits of BWCs and estimated that one BWC costs between \$828 and \$1,097 per user per year, and generates net annual savings of between \$2,909 and \$3,178 per user. BWC's are capable of providing savings like this via their increased speed for dealing with investigations.*

# ***BWC OFFERS TRANSPARENCY, EFFICIENCY AND SAFETY***

*There has been a dramatic increase in the criminal justice use of body worn cameras (BWCs) in the last few years. As a result of governmental and news media scrutiny of law enforcement interactions with the public, many think that BWCs have the potential benefit of increased legitimacy and accountability for both citizens and the law enforcement community.*

*In the wake of the police shooting of Michael Brown dated back in August 2014 in the U.S., as well as the subsequent protests in Ferguson, Missouri and around the United States, there has been a call to mandate the use of BWCs to promote accountability and transparency in police-civilian interactions. In December 2014, President Obama proposed the Body-Worn Camera Partnership Program, which aims to invest \$75 million through a 50% investment matching arrangement with states and localities to cover video storage and equipment expenses, with the goal of underwriting the costs of 50,000 body-worn cameras.*

*In China, on 1st July, 2017, Regulations Concerning the Public Security Authorities Using Audio-Video Technologies to Record Their Work was released by the Ministry of Public Security. It is clearly stated that all levels of policing organisations are required to equip the officers with BWCs, to enhance the*

*management and utilisation of on-scene audiovisual recording data, and all officers are required to use audiovisual recording in a list of specific circumstances, including all the investigative procedures in administrative and criminal cases.*

*Studies also have shown that the implementation of BWC solutions may result in a decrease in assaults on officers by 30%, decline in complaints against officers by 90%, reduction in the amount of force used by policemen by 50%, and increase in early guilty pleas by 90%. Major benefits brought by BWCs are as below.*

## Better Transparency

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BWCs bring better transparency and accountability, thus improving law enforcement legitimacy. In many communities, there is a lack of trust and confidence in law enforcement. This lack of confidence is exacerbated by questions about encounters between officers and community members

that often involve the use of deadly or less-lethal force. Audiovisual footage captured during these officer-community interactions provides better documentation to help confirm the nature of events and support accounts articulated by officers and the public.

## Enhanced Communication Capabilities

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BWCs not only capture critical evidence in the field, but they also offer the user with a quick and easy way to communicate with their teams over cellular and Wi-Fi networks. BWCs have a dedicated push-to-talk (PTT) button that allows

for reliable communication to be delivered when needed. This allows for enhanced communication capabilities and better decision making.

## Increased Civility

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BWCs also result in higher rates of compliance to officer commands during encounters and fewer complaints lodged against law enforcement. Citizens often change their behaviour toward officers when they are informed that the encounter is being recorded. This “civilizing

effect” may prevent certain situations from escalating to levels requiring the use of force and also improve interactions between officers and citizens.

## Quicker Resolution

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BWCs lead to a faster resolution of complaints and lawsuits against excessive use of force and other forms of officer misconduct. Investigations of cases that involve inconsistent accounts of the encounter from officers and citizens are often found to be the dilemma, and are subsequently closed when there is no audiovisual footage nor independent or corroborating witnesses. This, in turn, can

decrease the public's trust and confidence in law enforcement and increase perceptions that claims of abuse brought against officers will not be properly addressed. Audiovisual footage captured by law enforcement recorders may help corroborate the facts of the encounter and result in a quicker resolution.





## Corroborating Evidence

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Audiovisual footage captured may also be used as evidence in arrests or prosecutions.

Proponents have suggested that audiovisual footage captured by BWCs will help document the occurrence and nature of various types of crime, reduce the overall amount of time required for officers to complete paperwork for

case files, corroborate evidence presented by prosecutors, and lead to higher numbers of guilty pleas in court proceedings.

## Training Program

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The use of BWC also offers potential opportunities to advance policing through training and regulating within the industry. Law enforcement trainers and executives can assess officer activities and behaviour captured by law enforcement recorders, either through self-initiated investigations or those that result from calls for service, to advance

professionalism among officers and new recruits. The footage can provide law enforcement executives with opportunities to implement new strategies and regulations, and assess the extent to which officers carry out their duties in a manner that is consistent with the assigned initiatives.

## Compliments Surveillance Systems

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The deployment of CCTV cameras brings great value to the security of any city. However, as the complexity of the city is increasing, the fixed cameras cannot cover every small corner, while BWC can provide access to any scene that the police can reach, and the livestreaming capability works as a good complement to CCTV and decreases the blind spots of the city

surveillance system, providing more support for decision making across all levels.



# HIGHLIGHTS OF HYTERA BWC

*Hytera provides a full series of 4G or LTE body worn cameras for audio and video recording, together with the live video streaming and PoC communication capability over public carriers' network. The following features are well received by both the officers and the administrators, since Hytera BWCs are designed for the field with the evidence management in mind.*



## Easy to Use

### ◆ Built-in 3G, 4G, and WLAN Modules

With the built-in 3G, 4G, and WLAN modules, the BWC can stream live video or other data from the field back to command and dispatch centre. This helps the dispatcher know exactly what is happening to enhance situational awareness and facilitate improved decision-making.

### ◆ Quick Switch On

A dedicated switch with the slider is available for fast operation to start or stop the video recording. The design is simple and convenient for use to avoid video recording being interrupted by misoperation.

### ◆ Night Vision

With infrared technology, the BWC can capture clear images in low light conditions. It has a light sensor and several high-intensity infrared LEDs which automatically turn on in dim light to enhance night vision capabilities, without missing any important evidence in the dark.

### ◆ Rotatable Lens

The BWC is equipped with a rotatable lens. This lens can be rotated vertically by up to 216 degrees, which provides optimal angle of view for users to capture photos or videos with added flexibility.

### ◆ Large PTT Button

A large push-to-talk (PTT) button allows the user to initiate the calls over cellular network.

### ◆ Loud and Clear Audio

Whether the BWC plays videos, or serves as a remote speaker microphone for a two-way radio, it delivers loud and clear audio. With dual microphones and noise reduction algorithms, it picks up more of the voice in the highly noisy environment while effectively cancelling the ambient noise.

### ◆ Voice Prompt

Voice prompts are played when the BWC starts or stop recording, takes photos, and more. The prompt is available in different languages as per the customers' requirements.

## Professional Design

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### ◆ Pre-event Recording

The BWC can automatically record the most recent 30 seconds of video and audio before the user actually presses the button to record. This feature helps increase the capability of recording the entire activity, especially at critical moments.

### ◆ Event Mark In-field Tagging

The BWC allows you to mark the captured footage as important evidence in the field.

### ◆ Emergency Recording

When the emergency button is pressed, the BWC automatically starts recording and tags the captured footage as important evidence.

### ◆ Post-event Recording

Each time the BWC is de-activated, the device automatically post-records and saves 30 seconds of video from the moment the system was de-activated.

The BWC can automatically continue to record and save 30 seconds of video after the recording button is released.

### ◆ Positioning

The BWC ensures precise positioning through GPS, GLONASS, BDS, and A-GPS. It sends its location data to the command or dispatch centre, facilitating the track of the user in real time on a geographical map.

### ◆ Live Streaming

The BWC can stream live video over 3G, 4G, or WLAN networks to increase situational awareness and help decision making.





# Encryption and Anti-Tamper Mechanism

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## ◆ Post-event Recording

The BWC has the ability to embed a visual watermark containing GPS information, date, time, device ID, or user ID in the captured videos or photos.

## ◆ Data Security

The BWC can encrypt the recorded videos, audios, and photos with AES256 algorithm, so that they can only be played back or viewed after decryption. To play back the captured evidence on the device, the user needs to input the correct password first, ensuring the security of the evidence even when the BWC is lost or stolen.

## ◆ 1.1.1 Anti-tamper Mechanism

If the BWC is disassembled without authorisation, it will immediately send an alarm to the dispatch platform. The BWC users are prevented from tampering or erasing the digital evidence directly from the device. The data stored in BWCs can be exported only by the evidence collection station. And only the authorised personnel can log in to the system to query and manage the digital evidence.





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