



Complete solution for banks and ATMs

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Solid Secure Straightforward

Video surveillance solution for banks and ATMs

Many surveillance & monitoring systems show footage of a crime after the fact. At Tether, we have created a truly proactive security system, which draws your attention to events of interest and raises the alarm at the first opportunity, there by preventing crime.

Tether is a combination of reliable hardware, cutting edge software and a cloud service which integrates with

Control Rooms. Whether providing direct notifications to the owner, or a 24x7 virtual guard monitoring through a control centre, Tether has you covered.

The alarm can be raised using sirens, strobes, custom audio messages and other on-site interventions, warning the intruder. Where linked to a control room, local police can be called immediately to prevent the crime.



Tether Tetherbox (NVR)

- Combines video, audio and alarm
- Supports low bandwidth and works on 2G/4G/WiFi/Wimax Tiny, portable and includes a metal backplate for ease of installation
- Built in storage for 1-6 months
- Two-way audio (call centre to ATM)
- Alarms, Sirens and PA messages to warn possible intruders
- Connects to Motion/Vibration Sensors via alarm panel for logging activity and detecting break-ins
- Live streaming in 4 different sized streams from each camera
- Recording at 1080p and ability to live transcode to lower resolutions
- 3-year warranty on the Intel manufactured hardware

Tether Cloud (VMS)

- Live 24x7 Monitoring
- Event Monitoring – alerts from alarm sensors and analytics
- Storage on cloud for 1-24 months
- Guard tours – virtual site tours at regular intervals
- Video archive and retrieval services
- Custom Monitoring services
- Cutting edge beautiful user interface
- Centralised NVR administration
- Blends real time monitoring and remote deterrents
- Seamlessly combines cameras from various geographic locations
- Analytics and tracking of visitors
- Offers full access to customers from browsers and smart phones

We frequently release new functionality so this is an investment that becomes more intelligent over time, you will not need to replace it like a traditional NVR years from now.

Key problems solved

Tether has been tested at hundreds of installations in the UK, Monaco, Denmark, Spain, Africa and Russia. Environments including Luxury Retailers, Construction Sites, Residential, Amusement Parks, Restaurants, Dentist Clinics and of course Banks. Our platform has proven itself to be scalable and the time it takes to manage 100 or 1,000 or 10,000 vlocations is not significantly different.

Networking Challenges

- Tether provides secure communication for point to point as well as machine 2 machine communication
- Works in an extremely low bandwidth, low quota and fluctuating bandwidth environments

Administration Challenges

- Nothing unique is stored on site, no credentials/configuration to backup.
- Configure/Reconfigure/Update 100, 1,000 or 10,000 sites at a touch of a button - even if some of those sites are offline
- Automatic security updates (no manual firmware updates)
- Know when each location goes offline, why it went offline and what happened before it went offline

Installation/Maintenance Challenges

- Just plug into the network, done. No monitors, keyboards/ mice, router configuration, NVR configuration, camera configuration. No network engineer required on site
- Less power consumption and heat dissipation

Use & Access to Information Challenges

- Centralised access and admin. No keeping spreadsheets of access details to each site
- Combines Video, Audio, Alarms, Sensors and Router technology into one
- No client software to install/configure/update
- Just pick up any device, go to a website and see everything (no Java/ActiveX plugins)
- Integrates with control rooms for virtual guard services and to monitor the premises 24x7
- Intelligent 'best image' analytics search saves vast amounts of time/bandwidth when searching for footage
- Checksums (proof of no camper) is stored in the Cloud for legality of footage in court)
- Around the clock reduced frame rate recording for evidence of no evidence
- Full audit log of all access and notifications for any suspicious access
- Proprietary Software package which provides analytics and prompt warning on potential theft

Cost savings at every turn

The key advantages are not necessarily the upfront cost reduction, but rather the administrative and running cost reductions and major problems we solve to make the system far superior to existing solutions:

Provides MPLS and VPN

MPLS connectivity is set up automatically and included in the price competitive single monthly fee. Removes existing MPLS/VPN monthly fees and provides secure remote access.

Does not require a VPN router

Removed the setup/admin time, cost and complexity of adding an additional router and/or setting up the firewall and port forwarding.

Storage efficiency

Intelligent use of storage, including use of analytics and 'best' images and increasing framerate only when required, we can record 2-10x more footage per GB compared to traditional DVRs/NVRs.

80% reduction in bandwidth use/costs

Using built-in analytics and 'best-snapshot' technology, reduces required bandwidth by a factor of 2-5 compared to traditional DVRs/NVRs (e.g. Hikvision).

Reduced installation costs

All Tetherbox NVRs are configured in a central location, no engineer is required on site and there are no credentials/ configuration to backup as nothing unique is stored on site. This leads to 2-3x reduction in installation time and cost.

Reduces admin costs

Hundreds or thousands of NVRs can be pre-configured or reconfigured simultaneously, even before they are plugged in. Since Tetherboxes are managed and monitored centrally, this allows detection and remote diagnoses of any issues such as high temperatures, imminent hard drive failure, if a camera feed disappears, if internet connection is lost, etc.

Reduced usage costs

Analytics and "best" snapshot technology allows efficient and quick access to relevant footage. Needless to say, it also saves 80% over security guards.

Quota friendly cloud storage modes

Video is very bandwidth heavy. One minute of video is anywhere from 3MB to 25MB depending on noise/motion and resolution. With a 3G router or dongle limited to 5GB per month, you can potentially stream/record as little as 3.5 hours of video to the cloud before you have used up your entire monthly quota.

This is where the Tether solution shines. It allows you to be flexible and only store analytics driven 'best' snapshots and/or relevant videos. If any images or footage are missing on the cloud (either by intention or they have not copied yet), the system automatically and transparently streams directly from the unit.

Available modes: (multiple can be enabled)



Event Thumbnails

5MB/camera/day. Stores a 'best' thumbnail image for every 1 minute of footage.



Timelapse Images

150MB/camera/day. Stores a 'best' snapshot every 5 seconds around the clock.



Alarm video

Varies on number of alarms. Only footage that triggered an alarm is transferred to the cloud.



Event Images

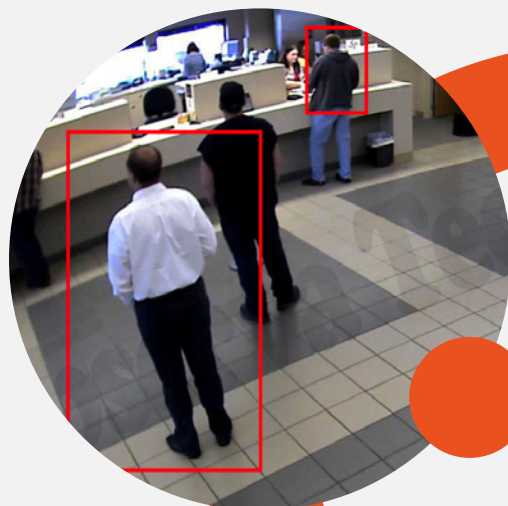
10-20MB/camera/day. Stores a 'best' snapshot for every 1 minute of footage.



Event Video

2.5-5GB per camera per day (varies with motion).
Stores all relevant footage.

These 'best' snapshots are not just an image - the system uses analytics to figure out the 'best' image. If a person runs past the camera, this image will have the person in the centre and a red box drawn around him. Other DVRs/NVRs often miss the person entirely as they are not analysing the footage. These 'best' snapshots allow you to narrow down and find the specific minute of interest and stream it directly from the unit. This not only allows you to stay within the confines of quotas as low as 500MB per month, it also vastly speeds up finding relevant events and continues to work on very slow/ fluctuation bandwidths, even with 1080p video recording.



Hardware flexibility

Tether use Intel to manufacture their hardware. This offers unrivalled reliability and increases trust in the system. However, users may load the Tether software directly onto any hardware of their choice - for example, several have successfully used Raspberry Pi mini PCs in mobile applications.

Our software requires: ARMv7 or x86 processor architecture (1ghz or above), 512MB of ram, 6GB storage. Our software can also record from any IP cameras, including MJPEG over HTTP cameras, MPEG4 or H264 over RTSP cameras, all ONVIF cameras and others. If in doubt, please contact us, but we work with the vast majority of cameras.

We recommend IP cameras because:

10x the resolution of Analog, essentially the same resolution as installing 10 analog cameras.

Single cat5 cable with reliable RJ45 connectors. Unlike separate power/video/audio with often unreliable BNCs connectors and separate fused power supplies.

IP adapters are also available to retrofit older analog cameras.

Time to Choose Tether. Time to Choose Smarter Security!

Get in touch with us today! - we would love to take a step with you towards safety and security.