



# Tolka

## CastMark Forensic Watermarking

The increase of web-based content distribution raises the risk of revenue loss due to illegal sharing, copying, and redistribution. To protect valuable content, conditional access systems commonly allow broadcasters to generate a secure link which grants content access between the head end and the individual set-top boxes. The protection of conditional access and DRM stops once access is granted. Another form of protection is then needed to prevent illegal redistribution.

CastMark is a software-based solution that addresses the needs of the broadcasters to protect content from illegal redistribution and revenue loss. The development of elaborate watermarking techniques is essential. CastMark implements our patented technology, the Digital Signature Engine (DSE), to insert an invisible digital signature at each playout device.

The digital signature is unique to each playout device. If illegally redistributed content from the operator's network is found, CastMark can see the matching Digital Signature ID. Follow-up action can then be taken against the identified playout device.



### System Benefits

- The most affordable CastMark solution on the market
- Software-based, eliminating the cost of dedicated hardware
- Compatible with set-top boxes and various smart devices
- Simplified decoding and ease of implementation
- Durable security based on variety, making it harder to bypass



## System Functions

- Registration of set-top boxes and smart devices through the CastMark Server
- Coordination with selected CA servers
- Assignment of CastMark IDs to each set-top box and smart device
- CastMark combination scheduling
- Assignment of CastMark ID to specific playout devices
- Cloud-based CastMark analysis and decoding
- Identification of playout devices
- Warning or blackout functions in the playout devices



## System Requirement

- CastMark server with internet access
- CastMark ready set-top boxes
- Tolka Player or CastMark module
- 25-50 kbps available in the distribution path

