



HDcctv

The Interface Technology for HD Surveillance Video

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HDcctv Alliance®

23 August 2011

Agenda

- Who is HDcctv Alliance?
- Why is HDcctv the Next-Generation Interface for Video Surveillance?
- Why is HDcctv more reliable than proprietary interpretations of HD-SDI?
- V2.0 HDcctv Preview
- Future Versions of HDcctv
- Summary

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Steering Members



Manufacturing Members



Marketing Members



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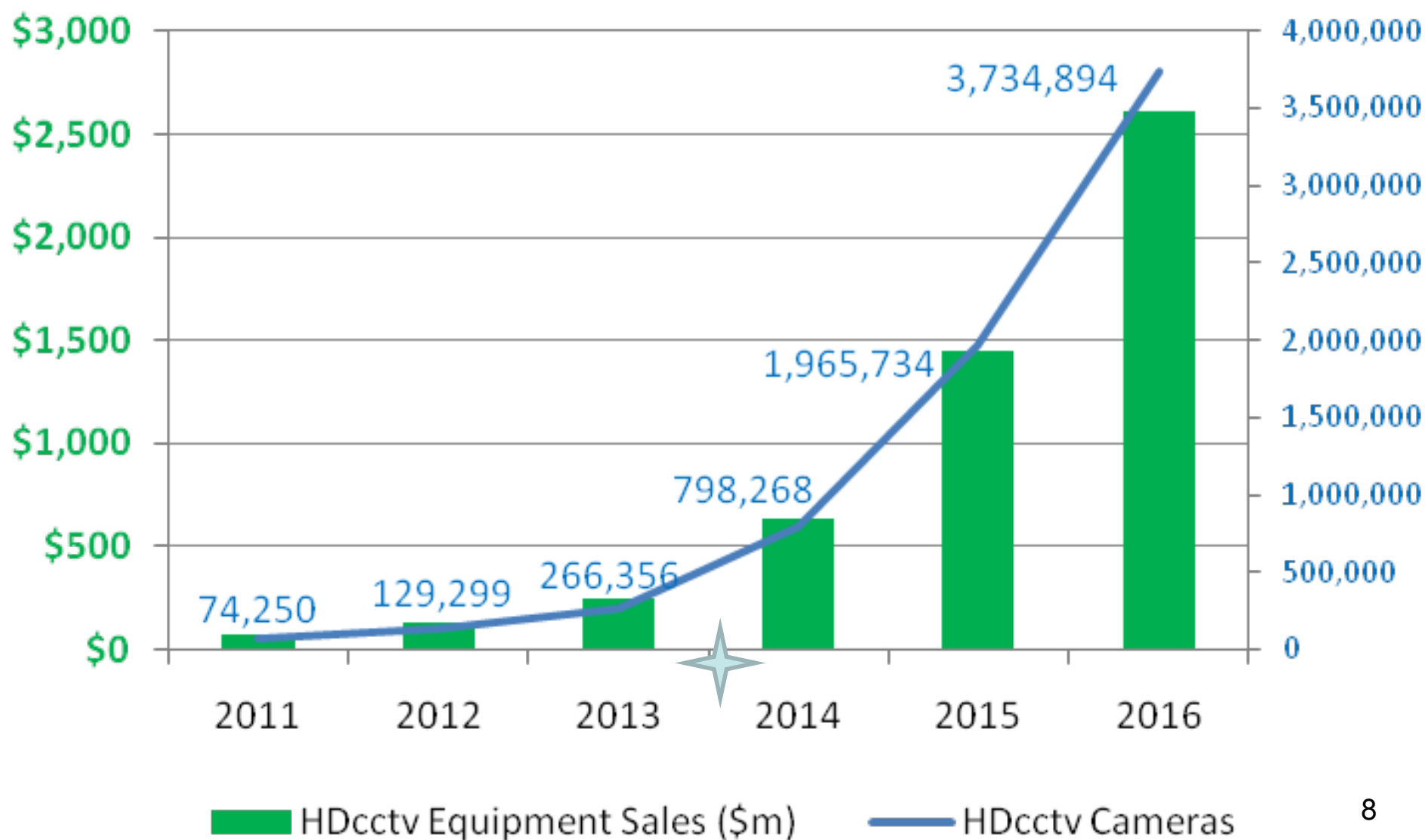
Next-Gen HD Surveillance

- In 2009, the only way to > PAL resolution was MP IP cameras
 - I.T. complexity !
 - Premium I.T. skills needed at the top of every ladder
 - Unreliable IP networks extended to every camera mount
 - Costly switches, hubs, NVRs, VMS's, servers, etc.
 - Degraded video quality !
 - High latency
 - Compression artifacts – sometimes worse than good analogue camera
 - Repeated frames
 - Lost frames
 - Expensive cameras with on-board compression !
 - Large form factor
 - High power consumption
- In 2011, HDcctv delivers the highest-quality HD surveillance video to the control room without any of the hassles of I.T.
 - Video quality of HDcctv at 1.5Gb/s is much higher than MP IP cameras at 1Mb/s or even 15Mb/s
 - HDcctv cams deliver 100 to 1000 times more information per channel than MP IP cams
 - DVRs allow remote access to cameras via IP networks

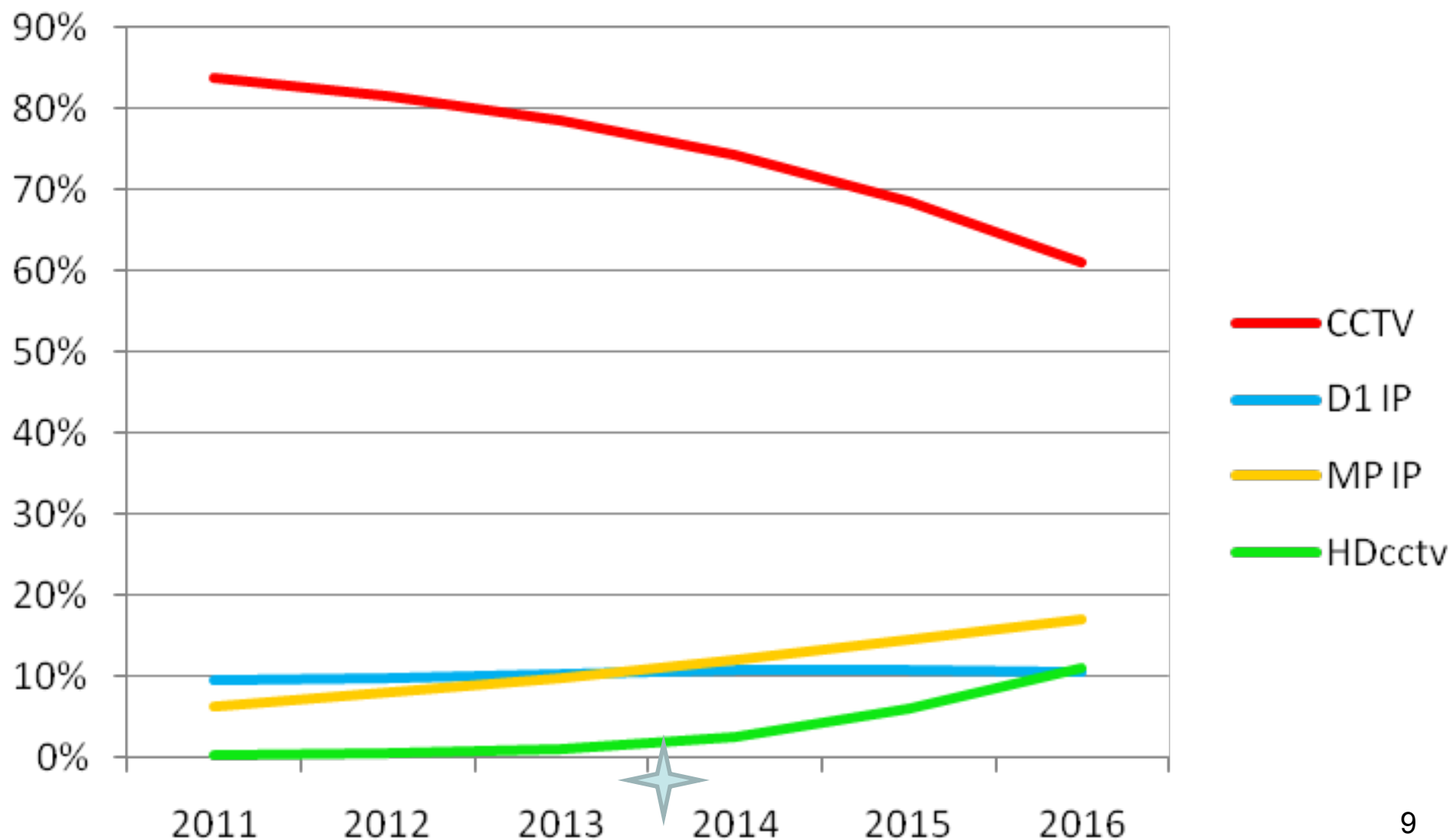
Next-Gen Ordinary Surveillance

- HDcctv works just like CCTV
 - Only difference to installer: larger values (1280x720 and 1920x1080) available on DVR configuration menus
- HDcctv brings all the benefits of digital HD surveillance to the installed base of CCTV
 - No new learning requirements
 - No expensive complexity

HDcctv Market Growth



Camera Units Market Share



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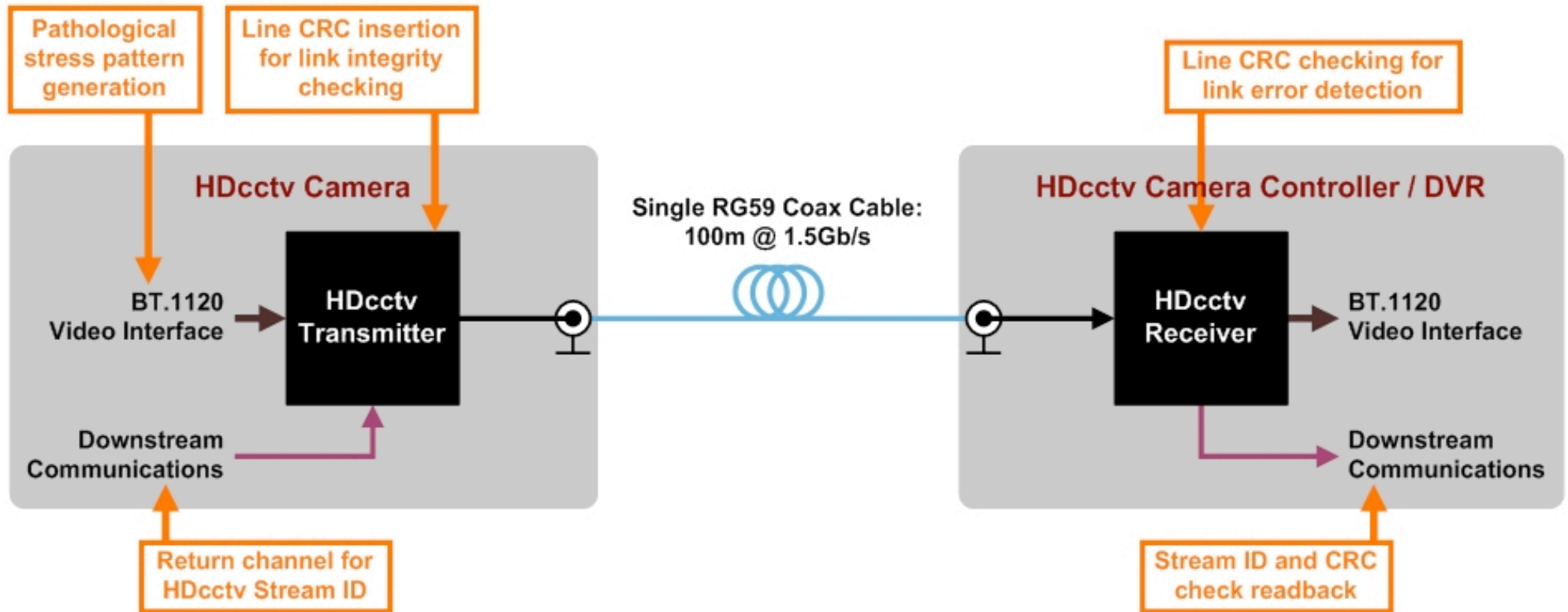
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Standard = Certainty

- HDcctv is the world's only comprehensive interface standard for HD surveillance video
- HDcctv Compliance is a Guarantee
 - Electrical transmission distance
 - Interoperability with products from other manufacturers
 - Interoperability with products compliant with future versions of the standard
- “HD-SDI” is a collection of specifications, not one document
 - No 3rd-party compliance certification protocol
 - A large variety of proprietary interpretations are being made / advertised / sold
- Even if the electrical performance of an HD-SDI solution is good enough for a given project in 2011, every non-compliant product installed in the field is an interoperability failure waiting to happen
- Look for the compliance mark to be sure:



V1.0 HDcctv is more than HD-SDI™



None of the various proprietary interpretations of HD-SDI provides for the capabilities indicated in orange text.

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V2.0 HDcctv Preview

- V2.0 HDcctv will be announced 12 September 2011
- V2.0 HDcctv is a proper superset of V1.0 HDcctv
- V2.0 HDcctv includes capabilities not found in any proprietary interpretation of HD-SDI
- V2.0 HDcctv is backward-compatible with V1.0 HDcctv
- V2.0 HDcctv is **not** guaranteed to work with any proprietary interpretation of HD-SDI
- V2.0 HDcctv Benefits
 - XR (“eXtended Range”) transmission XR transmission allows V2.0 HDcctv to operate over any installed coax capable of carrying a CCTV signal, thereby realizing the retrofit promise.
 - Low-cost HDcctv transmitters embedded in camera ISP chips
 - Low-cost multi-channel HDcctv receiver chips for DVRs
 - Production cost of HD will approach the costs of PAL within just a few years

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Future Versions of HDcctv

- Remote-control Protocol for Universal Interoperability
 - Might resemble ONVIF
- Power Over Coax
- Bi-directional Audio, including High-fidelity Stereo
- High-data-rate Upstream Communications
- Provision for 1080p60 and Higher Resolutions
- 3D (Stereo) Video Streams
- Native Optical Transmission
- Wireless Transmission
- and more ...

Comparison ~ 2015

Video Interface Comparison Version 3.0 HDcctv	V3.0 HDcctv- Compliant Interface	CCTV Interface	MP IP Camera Interface
Pathway to IP Network	DVR or Streamer	DVR or Streamer	NVR or Router
Recording Immune to IP LAN Failure	Yes	Yes	Usually Not
Works with Existing Coax	Yes	Yes	Needs Adapter
Commissioned Cost per Video Channel	Low	Low	Medium
Transmission Distance	300m	300m	90m
Local-Site Live View Immune to IP LAN Failure	Yes	Yes	No
Near Zero Latency	Yes	Yes	No
Comprehensive, Global Interface Standard	Yes	Yes	No
Guaranteed 100% Plug-and-Play	Yes	Yes	No
Cost of High-QoS Transmission	Low	Low	High
Transmission Medium Immune to Virus	Yes	Yes	No
Bi-Directional Data/Control	Yes	No	Yes
2-way Audio	Yes	No	Yes
Power over Cable	Yes	No	Yes
100% Digital	Yes	No	Compressed
Delivers 1- and 2-Megapixel Video	Yes	No	Not 1 Standard
Unadulterated HDTV at full SMPTE frame rates	Yes	No	No
Native Optical Transmission	Yes	No	No
Delivers > 2.2 Megapixel Video	Yes	No	Not 1 Standard

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Take-Away Messages

- Security director: Have you ever wished you could upgrade just a few of your existing CCTV channels to HD? Now you can!
- Security Installer: HDcctv allows you to offer lots of new value to customers without having to learn any new skills.
 - If you do IP networking: HDcctv DVRs supply MP IP video
- Integrator: Draw upon all video interface technologies appropriately, to serve your customer best in each case.
- Distributor: Have no religion about video interface technology, offer your customer as many choices as possible.