



HC20000  
HC30000  
HC40000

# HyperCast™

SoftIron's high-density, concurrent 4K transcoding solution. Purpose-built for multi-screen, multi-format delivery.



# Slightly controversial. Quietly confident.

SoftIron® creates the world's best appliances for scale-out data center solutions, delivering industry-leading performance on all critical metrics including density, efficiency, capacity, speed and heat emission.

## Choose SoftIron for:

### Superior, task-specific appliances

- » We do not optimize commodity hardware or configure the cheapest components.
- » They're purpose-built to optimize their specific role in the data center.



### High Performance

- » Specialization fosters performance breakthroughs.
- » Task-specific design reveals opportunities for improvement at a granular level.



### Secure Provenance

- » SoftIron not only controls the entire design and build process, but manufactures and assembles all products in-house.
- » The result is auditable provenance on all of our data center appliance and SoftIron is the only manufacturer to offer it.



# HyperCast™

HyperCast is our custom-designed, dedicated transcoding appliance, purpose-built for multi-screen, multi-format OTT delivery. It runs at wire-speed at less than 500 watts per 1U appliance and out-performs traditional software transcoders in power and space efficiency, without sacrificing quality.

## Hardware

- » **1U rack enclosure**
- » **Power Supply:**  
Dual redundant
- » **Modular Design:**  
Hot-swappable transcoder and storage modules

## Streaming & Data

- » **Video Transcode Acceleration:**  
Up to 32x Socionext MB86M30 SoCs
- » **Video Streams:**  
Up to 32x 4K / 128x FHD / 256x HD AVC, HEVC or MP2
- » **Output Streams:**  
6000+ multi-resolution streams for ABR support
- » **Networking:**  
Dual 10/25/100GbE ports
- » **Storage:** Up to 56TB SSD or 40TB HDD

UP TO 32x 4K  
CONCURRENT  
INPUT STREAMS

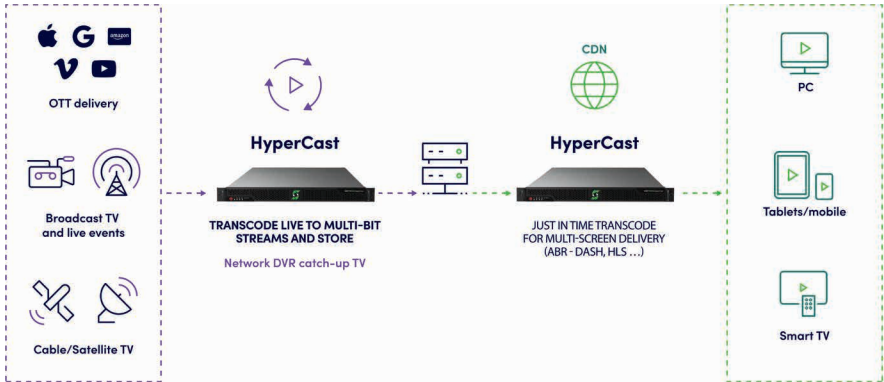
AVC, HEVC,  
MPEG2

RUNS AT LESS THAN  
8W PER STREAM



HyperCast™

## HyperCast™ Workflow example:



HyperCast streamlines the delivery of live and on-demand videos to multiple devices including phones, tablets, PCs, and TVs, while integrating seamlessly with your broadcast center infrastructure to drive massive space, power, and storage efficiencies compared to existing software-based solutions.

### With HyperCast™ you can easily and confidently:

- ✓ Reduce cost per stream compared to x86-based software transcoding
- ✓ Increase transcoding power efficiency
- ✓ Reduce physical transcoding footprint
- ✓ Modularly scale transcoding capabilities
- ✓ Future proof your transcoding solution
- ✓ Integrate transcoding into existing data center infrastructure

When coupled with HyperDrive®, SoftIron's custom-designed, dedicated Ceph storage appliance, you can unleash the full potential of Ceph and realize truly wire-speed performance for your data center.

# Purpose-built solutions for the hyperscale enterprise data center.

## Storage Hardware

- » Task-specific, scale-out ready
- » Wire speed throughput performance front-side and back-side networking
- » Solid state disks for journal
- » Preconfigured and tuned for balanced read and write performance
- » Low wattage power design

## Ceph

- » Compatible with clusters running Ceph
- » Interfaces for file, block, and object storage
- » Support for OpenStack, Kubernetes, VMware, and HyperV
- » Interfaces for file, block, and object storage

## Storage Management

- » Configurable cluster-level resiliency
- » Health monitoring
- » Full hardware configuration and management
- » Workflow-based Ceph management

## Networking

- » Wire speed on all ports at all times
- » Simplified, core networking functionality
- » Optimized for hyperscale data center performance (1GbE-100GbE)



## Take HyperDrive<sup>®</sup> for a Test Drive

Try out a HyperDrive storage cluster in your environment for 90 days – no long term commitment necessary.

[softiron.com/testdrive](https://softiron.com/testdrive)

# Product Specifications

Model	HC20000	HC30000	HC40000
Video Codes	AVC & HEVC 8/10bit HDR, MPEG2	AVC & HEVC 8/10bit HDR, MPEG2	AVC & HEVC 8/10bit HDR, MPEG2
Resolution	4K60	4K60	4K60
Adaptive Bit Rate	Yes	Yes	Yes
Input/Output Protocol	MPEG-2 Transport Streams	MPEG-2 Transport Streams	MPEG-2 Transport Streams
Networking	2x Interfaces (10GbE, 25GbE, 100GbE)	2x Interfaces (10GbE, 25GbE, 100GbE)	2x Interfaces (10GbE, 25GbE, 100GbE)
Input Streams	8x 4K / 32x FHD / 64x HD AVC or HEVC or MP2	16x 4K / 64x FHD / 128x HD AVC or HEVC or MP2	32x 4K / 128x FHD / 256x HD AVC or HEVC or MP2
	128 (Resolution Dependent)	256 (Resolution Dependent)	512 (Resolution Dependent)
Output Bundles	6x Video Streams per input stream	6x Video Streams per input stream	6x Video Streams per input stream
	2x Audio Streams per input stream	2x Audio Streams per input stream	2x Audio Streams per input stream
Management	1x 1GbE, IPMI	1x 1GbE, IPMI	1x 1GbE, IPMI
Power Supply	Redundancy Power (Dual Supplies) 120–240V, 50–60Hz	Redundancy Power (Dual Supplies) 120–240V, 50–60Hz	Redundancy Power (Dual Supplies) 120–240V, 50–60Hz
Power Consumption	< 300W	< 400W	< 500W
Dimensions	H 43.7 mm / 1.72 in W 429 mm / 16.9 in L 637 mm / 25.1 in	H 43.7 mm / 1.72 in W 429 mm / 16.9 in L 637 mm / 25.1 in	H 43.7 mm / 1.72 in W 429 mm / 16.9 in L 637 mm / 25.1 in