Sensaka / DCOS

PRODUCT **DATASHEET** REV. **2026.05**

DATA CENTER OPERATION SYSTEM

The hardware layer, finally visible.

Unified monitoring, control, and resilience for the physical infrastructure that runs modern AI, cloud, and enterprise workloads.

Modern data centers are getting harder to operate. AI servers, GPU clusters, heterogeneous hardware, higher rack density, and multi-vendor environments all increase the risk of blind spots. Traditional monitoring tools focus on operating systems, applications, and network traffic — but they miss a critical layer: **the physical hardware and out-of-band management layer.**

Sensaka DCOS gives infrastructure teams a unified way to monitor, manage, and control physical IT assets across servers, storage, network, security, and power environment equipment — moving operations from manual inspection and reactive troubleshooting to proactive, hardware-level control.

AT A GLANCE

8 modules
Monitoring, alarms, assets, vKVM, control, energy, reporting, integration

0 agents
Out-of-band collection — independent from production OS & network

1 source of truth
Component-level asset, configuration & lifecycle data

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Automated inspection in place of manual server-room walks

COVERAGE

Servers · GPU clusters · Storage · Switches · Firewalls · UPS · PDU · Precision AC · Temp / Humidity · Fire / Access

ONE PLATFORM

For the hardware layer of the data center. § 01

Sensaka DCOS is built for large-scale operations where hardware visibility, asset accuracy, remote control, energy optimization, and fast fault response are business-critical — covering AI infrastructure end-to-end, from compute and storage to the room-level power and environment systems behind them.

CORE CAPABILITIES § 02

01

Out-of-band Hardware Monitoring

Collect status, alarms, power, temperature, and component data through the management layer — no agents on production systems, no dependency on the OS or production network.

02

Automated Inspection & Fault Detection

Replace manual server-room rounds with continuous hardware checks. Catch component failure, overheating, and power anomalies before they become service-affecting incidents.

03

Lifecycle Asset Management

Automatically maintain component-level configuration, location, warranty, and change history — giving CMDB and operations teams a trustworthy view of what's actually deployed.

04

Remote vKVM & Control

Power on/off, reboot, remote console, and virtual media for servers and devices — reducing onsite dependency and accelerating incident response across remote and lights-out sites.

05

Energy & Thermal Management

Device-level power and temperature data drives rack planning, hotspot detection, and safer density — optimizing PUE without relying on room-level assumptions alone.

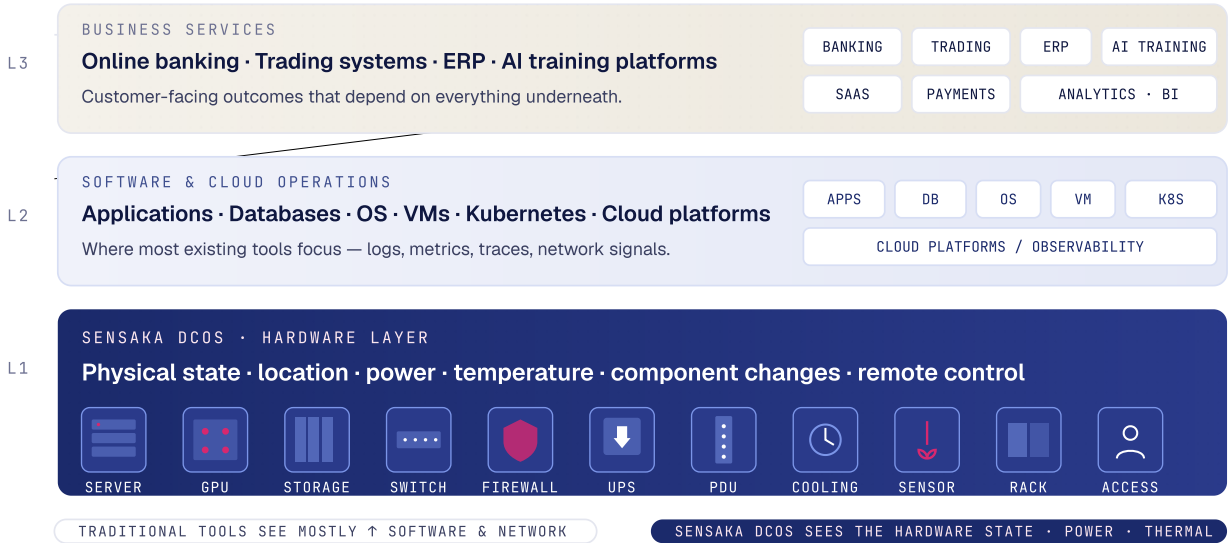
06

Integration with IT Operations

Connect to CMDB, ITSM, asset workflows, and higher-level monitoring through RESTful APIs — pushing hardware data, alarms, and control capabilities upstream.

Hardware visibility below the software stack.

FIG. 01 / STACK MODEL



WHY SENSAKA DCOS

A reliable operating layer *for* the physical infrastructure.

THE PROBLEM

Hardware faults found late. Data found wrong.

Teams are under pressure to keep infrastructure reliable while managing more devices, more vendors, more sites, and more power density. Many still depend on manual inspection, spreadsheet-based asset records, fragmented vendor tools, and delayed troubleshooting — so faults are found late, asset data drifts, thermal risks stay invisible, and incident response often means walking the floor.

WHAT DCOS CHANGES

One hardware source of truth, wired into every workflow.

Sensaka DCOS unifies hardware monitoring, asset accuracy, remote control, energy data, and operations workflow on one platform. It gives infrastructure teams a hardware-level source of truth that feeds existing ITSM, CMDB, and monitoring systems — not another silo.

KEY USE CASES § 03

Hardware fault prevention

Detect fan, power supply, disk, memory, and temperature issues earlier — before they degrade service.

AI & high-density monitoring

Track inlet/outlet temperature, power usage, and risk indicators for dense GPU compute environments.

Remote operations

vKVM and remote power control to troubleshoot and recover devices without sending staff onsite.

Asset & configuration governance

Auto-capture hardware configuration, component changes, warranty, rack location, and lifecycle records.

Rack planning & energy

Real power and temperature data informs safer rack density, capacity planning, and cooling decisions.

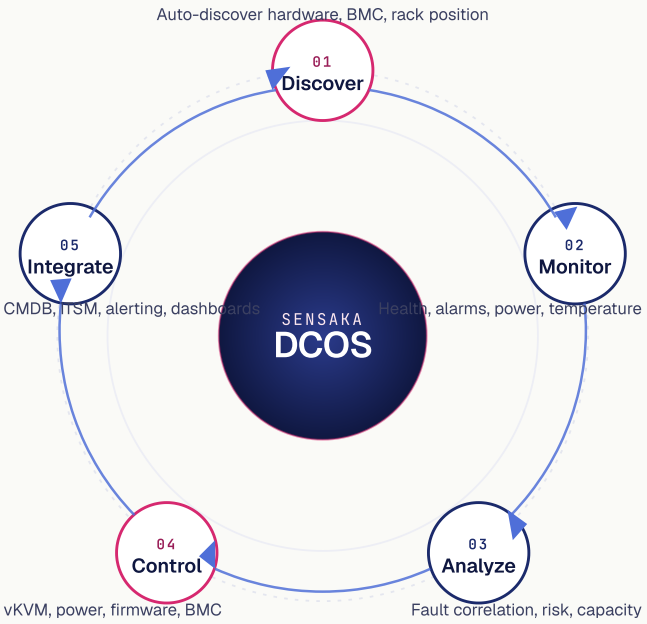
Compliance & audit

Traceable device configuration and change records replace manual updates and fragmented spreadsheets.

THE DCOS OPERATING LOOP

Discover · Monitor · Analyze · Control · Integrate.

§ 04



OUTCOMES

- **Reliable infrastructure**
  Hardware faults caught before they affect service.
- **Accurate asset data**
  CMDB matches the rack — component to lifecycle.
- **Faster recovery**
  Remote console & power cuts time-to-recover.
- **Lower onsite workload**
  Automated inspection replaces manual rounds.
- **Safer rack density**
  Real power & thermal data informs planning.
- **Energy visibility**
  Device-level PUE inputs, not room-level guesses.

PRODUCT MODULES § 05

MODULE	WHAT IT DOES
Monitoring Management	Real-time hardware monitoring, automated inspection, and fault detection across compute, network, storage, and environment.
Alarm Management	Alarm rules, filtering, consolidation, escalation, and multi-channel notification.
Asset Management	Component-level asset data, configuration, warranty, location, and lifecycle records.
vKVM	Remote console, virtual media, and remote power operation.
Control Management	Batch BMC settings, BIOS settings, firmware control, and server log collection.
Energy Management	Power, current, inlet/outlet temperature, and rack/room-level energy views.
Reports & Dashboards	Operational reports, custom reports, and large-screen visualization.
Integration	CMDB, ITSM, asset workflow, cloud management, and monitoring platform integration via RESTful APIs.

WITHOUT DCOS — BEFORE

Manual, fragmented, reactive.

- Manual server-room inspection rounds
- Fragmented vendor consoles & tools
- Delayed hardware fault discovery
- Spreadsheet-based, inaccurate asset data
- Onsite troubleshooting as default

WITH SENSAKA DCOS — AFTER

Automated, unified, proactive.

- Continuous automated hardware monitoring
- Unified asset & configuration records
- Real-time alarms with correlation & routing
- Remote control across sites & vendors
- Energy & thermal visibility, integrated workflows