WarpKVM

WKVM-CAT-001 · REV B · 2026-09-23

KVM OVER IP · SERIAL CONSOLE · RACK INFRASTRUCTURE

Enterprise Catalog

KVM over IP, serial console, and power control. One management plane.

01 KVM CHASSIS

IN DEVELOPMENT

WK chassis family · 8 / 16 / 32 ports

Every port is its own KVM. Dedicated capture and encode hardware behind each connector means all ports stream 4K simultaneously with nothing to install on the target: two cables and the machine is on the plane. Firmware boots from a golden SPI image and updates A/B on per-port eMMC: a bad flash rolls back, and any module can be power-cycled without leaving the console.

Start at eight ports on a desk, land at thirty-two in 2U, and run it all as one system: one IP, one login, one audit trail. Session recording lands on onboard NVMe. Pricing stays flat: from $306 per port, no per-node licensing, no client seats.

WK-1616-4K30-1U, 1U FULL-WIDTH

SKU	DESCRIPTION	PRICE	PER PORT
WK-0808-4K30-HR	8-port chassis, 1U half-width / desktop	$2,795	$349
WK-1616-4K30-1U	16-port chassis, 1U full-width	$4,995	$312
WK-3232-4K30-2U	32-port chassis, 2U, two federated units	$9,795	$306

Connectivity

Targets	HDMI and USB cable per port, no dongles
USB-A	Per-port host connector for serial adapters, peripherals, and ATX control cards
Ethernet	Redundant Ethernet inputs
Power	Dual redundant 250 W inputs
Management	Serial and USB management ports

Capture

Ports	Dedicated capture and encode per port
Resolution	3840 × 2160 @ 30 Hz, all ports concurrent
Encode	Hardware H.264 / H.265
Firmware	Per-port golden SPI image · A/B updates on 8 GB eMMC
Recovery	Remote power cycle per port · failed updates roll back

Management

Access	Browser-native console, no client software
Federation	Any WK or WO unit: single IP, single login
Access control	RBAC, per-port permissions
Audit	Session recording to onboard NVMe
Isolation	Port modules isolated from the customer network

Options

-DC	DC power input
-TAA	US assembly and US PCBAs · +$700 per unit

WK-1616 · FRONT

WK-1616 · REAR

02 SINGLE-PORT KVM

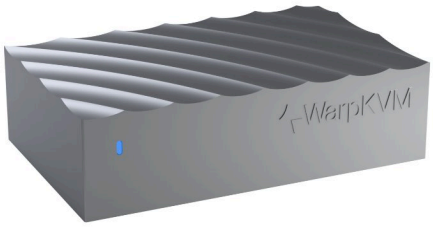
IN DEVELOPMENT

MASS PRODUCTION: EARLY 2027

Single-port KVM over IP

The whole management plane, one node at a time. Each unit is a complete KVM over IP endpoint that joins the same federation, RBAC, and audit trail as the rack line, so the box in a branch closet gets the same treatment as a chassis port. Start with one, add the rack later: nothing changes but the port count.

One PoE cable powers and connects it. Wi-Fi rides along as a second management path, the HDMI output drives a local display for crash-cart work, and the 4K60 model carries dual hardware encoders to sustain full 4K at 60 Hz. At $220 and $140, remote hands stop being a line item.



WK-0101-4K60, MACHINED ALUMINUM

SKU	DESCRIPTION	PRICE
WK-0101-4K60	Single-port KVM, 4K @ 60 Hz · dual hardware encoders	$220
WK-0101-4K30	Single-port KVM, 4K @ 30 Hz · single hardware encoder	$140

Connectivity

HDMI	1 × input · 1 × output for a local display
USB	Target emulation: keyboard, mouse, mass storage
Ethernet	2 × Gigabit, daisy-chain capable
Wireless	Wi-Fi
Power	PoE (802.3af, 12.95 W) · USB-C PD

Physical

Enclosure	4K60: machined aluminum · 4K30: plastic
Cooling	Passive, no moving parts
Dimensions	88 × 56 × 26 mm · ~150 g (aluminum model)
Mounting	M3 inserts · rack and DIN brackets available

Performance

Latency	40 ms median click-to-photon, 1 Gb LAN
Encode	Hardware H.264 / H.265
Control	BIOS-level: reboot, re-image, boot order

WK-0101-4K60 · REAR

WK-0101-4K30 · REAR

03 OOB SERIAL CONSOLE

IN DEVELOPMENT

WO series · serial console

Same system. Serial density. Up to 48 RJ45 ports and 8 USB-A host ports in 1U join the federation you already run: the switch console and the server BMC live one login apart, inside the same audit trail.

Every port speaks Cisco-standard rollover and senses DTE or DCE on its own, so any cable in the drawer works. A per-port RGB matrix answers the three questions that matter from across the aisle: is something plugged in, is someone on it, and which one am I looking for. Four configurations, built on demand.

WO-3208, 1U: 32 × RJ45, 8 × USB-A

SKU	DESCRIPTION	PRICE
WO-1608	Serial console, 16 × RJ45 + 8 × USB-A	$2,195
WO-3208	Serial console, 32 × RJ45 + 8 × USB-A	$3,295
WO-4008	Serial console, 40 × RJ45 + 8 × USB-A	$3,795
WO-4800	Serial console, 48 × RJ45, no USB	$3,795

Serial

RJ45	RS-232, Cisco-standard rollover pinout
Sensing	Auto DTE / DCE per port
USB-A	Host ports for USB-native console devices
Adapters	EEPROM auto-identify

Connectivity

Ethernet	Redundant Ethernet inputs
Power	Dual redundant 250 W inputs
Management	Serial and USB management ports

Port status

LED matrix	Per-port RGB: present / session / fault / locate
Presence detect	Read from RS-232 TX idle voltage

Options

-DC	DC power input
-TAA	US assembly and US PCBAs · +$700 per unit

WO-3208 · FRONT

WO-3208 · REAR

Ethernet-combo variants on request.

04 MAC SYSTEMS

IN DEVELOPMENT

2U 3-bay Mac mini tray

Mac minis, run like servers. Three bays in 2U with A/B power feeds through an automatic transfer switch, per-bay fusing and current telemetry, and the same capture pods as the WK line watching every screen.

The hard part of Mac hosting is the power button. A servo-driven actuator works it with timed tap, force-off, and DFU hold sequences, and a per-bay USB-PD controller on the DFU port adds programmatic reboot, DFU entry, and a serial console. Customer traffic rides passive passthroughs and never touches the tray's electronics. Start with the bare enclosure and upgrade in the field, or ship managed from day one. Design-partner inquiries invited.

WM-2U03, 2U, THREE BAYS

SKU	DESCRIPTION	PRICE
WM-2U00E	Enclosure only: no electronics, front USB passthrough and power buttons	$349
WM-2U03	Fully managed: built-in per-bay KVM capture and control	$2,795
WM-2U03-UK	Upgrade kit, enclosure to fully managed, field-installable	$2,500

Power

Feeds	2 × C14 (A / B), automatic transfer switch
Per bay	Relay, fusing, current telemetry
Input	100 to 240 VAC · ~30 W idle · 500 W max
Cooling	Fanless: bottom-intake plenum, rear exhaust

Chassis

Customer traffic	3 × passive Ethernet passthroughs
Service	Front SVC USB-C to any bay's DFU path †
Indicators	Feed A / B, ID / STAT, recessed reset
Restore host	Automated restore on the roadmap: design-partner program †

Per-bay control

DFU control	USB-PD controller: reboot, DFU entry, serial console †
Power button	Servo actuator: tap / force-off / DFU holds, spring-return failsafe
Capture	HDMI + USB, same pods as WK ports
Front panel	Power button, RGB LED, label window

Connectivity

Ethernet	Redundant Ethernet inputs
Management	Serial and USB management ports

WM-2U03 · FRONT

WM-2U03 · REAR

Mac minis not included.
† Preliminary. Subject to change before release.

05 ADAPTERS · ACCESSORIES

• BUILD TO ORDER

LEAD TIME: 6 TO 8 WEEKS

Adapters and accessories

Serial and control adapters, mounting hardware, and field-replaceable units for the full line. Every adapter carries an identification EEPROM: plug it in and the port configures itself, no per-port setup.

Adapters

	SKU	DESCRIPTION	PRICE
	WA-RJ45	USB-A to RS-232, RJ45 rollover · Cisco-style console ports	$39
	WA-DB9	USB-A to DB9 serial · legacy serial equipment	$39
	WA-TTL	3.3 V TTL / JTAG · embedded debug consoles	$35

Accessories

	SKU	DESCRIPTION	PRICE
	WK-RK-HR	Rack kit, half-width 1U (two-up or single with blank)	$49
	WK-RK-1U	Rack kit, full-width 1U / 2U	$49
	WK-BR-RK	Rack bracket, single-port KVM	$89
	WK-BR-DIN	DIN rail bracket, single-port KVM	$24
	WM-RL-2U	Sliding rail kit, Mac tray	$99
	WM-ACT	Servo power-button actuator, Mac mini: timed tap / force-off / DFU holds	$79
	WK-ATX	WarpKVM ATX, PCIe-slot card: front-panel power / reset control	$49
	WK-ATX-CBL	WarpKVM ATX cable	$19
	WK-ATX-INL	WarpKVM ATX Inline	$19
	WK-CBL-KIT	Cable kit, HDMI + USB-C	$24
	WK-FRU-PSU	PSU, 250 W, field-replaceable unit	$149
	WK-FRU-FAN	Fan module, field-replaceable unit	$39

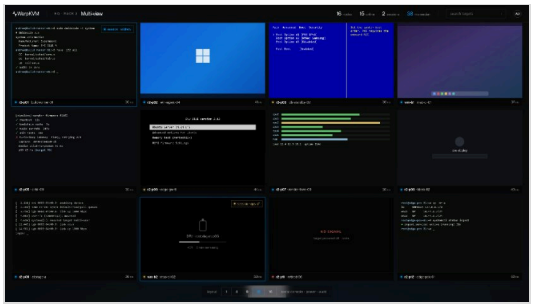
Rack and DIN brackets fit both single-port models. Rail kits include square and round-hole hardware.

06 ABOUT

One management plane

The software

Every WarpKVM product runs the same management software. A browser is the only client: every KVM port, serial line, and Mac bay on the federation appears in one pane, behind one IP and one login, with RBAC, session recording, and a full audit trail. It scales from one node to racks of chassis with no client installs and no per-seat licensing.



MULTI-VIEW: TWELVE TARGETS, ONE BROWSER TAB

The company

WarpKVM builds datacenter access appliances under Ground Plane Studio, LLC: KVM over IP, serial console, and power control in one system. The management plane is built into every unit; there is no overlay management server to deploy, license, or patch.

Security posture is structural, not configured. Port modules are never reachable from the customer network; management and production networks are physically separate.

Pricing is flat, with no per-node licensing or client seats. -TAA variants with US assembly and US PCBAs are available across the line at additional cost.

Our products are listed with their current status: Available, Build to order, or In development. Many are in development today, and we are looking for design partners. If that is you, write to us.

Ground Plane Studio was founded by Andrew Douglass, with more than ten years in hardware development, including SpaceX.

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