

M C P S E R V E R

N O C O D E

C L O U D H O S T E D

Curtain Panel Calculator MCP

Get exact panel counts and fabric requirements for any window.

Curtain Panel Calculator MCP handles the math for your window treatment projects. Instead of guessing how much fabric you need or how many panels to buy, your AI client calculates the exact counts, validates fullness requirements, and estimates total costs based on your specific window dimensions.

A+ Quality Score 100/100

curtains

window-treatments

home-decor

fabric-calculation

interior-design



The connectivity layer between AI and the world's software.



Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

Your AI Connections Run Through Vinkius Cloud

The world's largest
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.

— Architecture principle

Four Pillars of the Vinkius Runtime

01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

AES-256

Encryption at rest

Ed25519

PKI vault signatures

24h TTL

Ephemeral session keys

V8 Isolate

Sandboxed execution

One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

MCP ENDPOINT`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

01 — Ed25519 PKI Vault

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

02 — V8 Isolate Sandboxing

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

03 — SSRF Guard

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

05 — Cryptographic Audit Trail

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

04 — DLP & PII Redaction

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

06 — Honeypot Trap System

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

Emergency Kill Switch

EU AI Act Art. 14(1)
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

01 — Server deactivated

The MCP server is immediately taken offline across the entire cluster.

02 — All tokens revoked

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

03 — WebSocket connections killed

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

Control Plane

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

FinOps

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

Firewall & DLP

PII redaction activity, sensitive data protection counters, and security event timeline.

Agent Activity

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

Tool Health

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

Incident Log

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at cloud.vinkius.com — connect your AI agent in under 60 seconds.

Curtain Panel Calculator MCP

4 tools available

Cloud-hosted on Vinkius

Planning window treatments usually involves a lot of manual math to ensure the curtains look right. This MCP removes the guesswork by letting your AI client handle the calculations for you. You provide the window width, the width of the panels you want to use, and your desired fullness, and the tool gives you the exact numbers.

You can use it to figure out if a specific number of panels will actually look good on a window or if they'll look too thin. It also calculates the total fabric width you'll need to buy and gives you a rough idea of what the project will cost. It's a practical way to move from a design idea to a shopping list without errors in your measurements.

Core Capabilities

01 — Panel Counting

Your agent calculates the specific number of panels to buy for any window size.

02 — Fullness Validation

The AI checks if your chosen panel count meets your desired aesthetic fullness.

03 — Fabric Measurement

Your client determines the total width of fabric needed for the project.

04 — Budget Estimation

The tool generates a rough cost estimate based on the panel count.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/en/ai-agent-connect/curtain-panel-calculator — connect your AI agent in three steps.

- 01 Connect your AI client to the MCP via Vinkius.
- 02 Provide window width and desired fullness to your agent.
- 03 The agent runs the specific calculation tool needed.
- 04 You receive the exact panel count, fabric width, or cost estimate.

The MCP connects your AI client to specialized window treatment math tools.

Built For

This MCP is built for anyone managing interior design projects or home decor budgets.

Interior Designers

They hand off window dimension math to the AI to quickly generate client quotes.

Homeowners

They use the tool to ensure they buy the right amount of fabric for DIY projects.

Window Treatment Professionals

They use it to validate coverage requirements for custom orders.

What Changes When You Connect

- 01 Eliminates manual math errors in fabric and panel counts.
- 02 Provides instant cost estimates for project budgeting.
- 03 Ensures curtain fullness meets design requirements.

- 04 Simplifies the transition from window measurements to a shopping list.

Real-World Applications

DIY Home Decor

A homeowner calculates exactly how many panels to buy for a new living room window.

Fabric Sourcing

A designer determines the total fabric width needed before placing an order.

Client Project Quoting

An interior designer uses the cost estimation tool to provide quick budget ranges to clients.

Design Validation

Checking if a specific set of panels will look too flat or provide enough fullness.

Patterns to Avoid

Guessing panel counts

❌ AVOID

You assume three panels will look good on a wide window without checking the math.

✓ INSTEAD

Use ``get_required_panel_count`` to find the exact number of panels needed for your specific window setup.

Ignoring fullness requirements

❌ AVOID

You buy fabric based only on the window width and end up with flat, skimpy curtains.

✓ INSTEAD

Run ``validate_fabric_coverage`` to ensure your selected panel count actually meets your design goals.

Underestimating total fabric needs

❌ AVOID

You calculate the window width but forget to account for the extra fabric required for fullness.

✓ INSTEAD

Use ``calculate_total_fabric_width`` to get the true total width required for your desired aesthetic.

The Right Fit

Interior designers and DIYers should connect this MCP to automate window math. People who don't work with textiles or window treatments have no use for it. You should use it if you want to turn measurements into a shopping list without manual errors.



4 Tools for Precision Curtain and Fabric Calculations

These tools handle the math for window dimensions, panel counts, fabric widths, and project costs.

#	TOOL	DESCRIPTION
01	calculate_total_fabric_width	This tool calculates the total fabric width required to hit a specific fullness or aesthetic goal.
02	estimate_curtain_cost	This tool provides a rough cost estimate based on the number of panels you need to buy.
03	get_required_panel_count	This tool determines the exact number of curtain panels you need to purchase for a specific window setup.
04	validate_fabric_coverage	This tool checks if the number of panels you've selected provides enough coverage and fullness for your window.

See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

U How many 50-inch panels do I need for a 100-inch window with double fullness?



You will need 4 panels.

U Will 3 panels of 40 inches each be enough for a 60-inch window if I want a fullness of 2.0?



Yes, 3 panels will provide a fullness of 2.0, which meets your requirement.

U What is the total fabric width needed for a 72-inch window with a fullness of 2.5?



The total fabric width required is 180 inches.

Frequently Asked Questions

01 How does this MCP help with curtain shopping?

It tells you exactly how many panels you need to buy and how much total fabric width is required so you don't overbuy or underbuy.

02 Can I use this with Claude or Cursor?

Yes, you can connect this MCP to any MCP-compatible client like Claude, Cursor, or Windsurf.

03 How accurate are the cost estimates?

The tool provides a rough cost estimate based on the number of panels required for your specific window setup.

04 What is 'fullness' in these calculations?

Fullness refers to how much extra fabric is used beyond the window width to create folds and aesthetic depth.

05 Do I need to host this myself?

No, Vinkius hosts and manages the MCP for you, so it is ready to use immediately after connection.

06 How do I know how many panels to buy?

You can use the ``get_required_panel_count`` tool. Simply provide the window width, the width of a single panel, and your desired fullness factor.

07 What is a fullness factor?

The fullness factor is a multiplier that determines how much extra fabric is used to create folds. A factor of 2.0 is standard for decorative pleats.

08 Can I estimate the total cost of my curtains?

Yes, the ``estimate_curtain_cost`` tool allows you to input the price per panel to get a total estimated cost for your window setup.

Go Live in 60 Seconds

Get your connection token from cloud.vinkius.com, then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

`https://edge.vinkius.com/[TOKEN]/mcp`

CLIENT	WHERE TO CONFIGURE
 Claude AI	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 Cursor	Settings → Features → MCP Servers → "+" Add New MCP Server" → Type: SSE → Paste endpoint
 VS Code	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"curtain-panel-calculator": { "url": "..." }</code>
 Windsurf	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 ChatGPT	Settings → Tools & plugins → Add MCP server → Paste endpoint
 Gemini	Extensions → Add MCP Server → Paste endpoint URL

ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  Ask ChatGPT 
-  Ask Claude 
-  Ask Perplexity 
-  Ask Gemini 
-  Ask Grok 

READY TO CONNECT

Curtain Panel Calculator is live on Vinkius Cloud.

Get your connection token, paste it into your AI agent, and
start building. No SDK. No deployment. Just results.

Start at cloud.vinkius.com →

vinkius.com · support@vinkius.com

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DOCUMENT INFORMATION

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Platform	Vinkius Cloud for AI Agents
Endpoint	<code>https://edge.vinkius.com/{token}/mcp</code>

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