

CLASSIFIED: INTERNAL // OWNER: RIOS-IND

SOVEREIGN SENTRY (PRO EDITION)

Technical Dossier // Network Defense & AI Inference Node

VERSION:
4.1

STATUS:
ACTIVE PRODUCTION

SKU:
RIOS-SS-PRO



AUTH: LEVEL 5



MISSION PROFILE: ACTIVE WORKLOAD MANAGEMENT

STANDARD SENTRY



Role: Passive Efficiency.
Pure Routing.

SOVEREIGN SENTRY (PRO)



Role: Active Defense. Route.
Analyze. Secure. Train.

*“The Standard Sentry is a shield;
the Sovereign Sentry (Pro) is a sword.”*

TARGET:
WISP OPERATORS /
SECURITY PROS /
LARGE-SCALE FARMS

THE IRON: HARDWARE ARCHITECTURE

8 Cores of Silence.

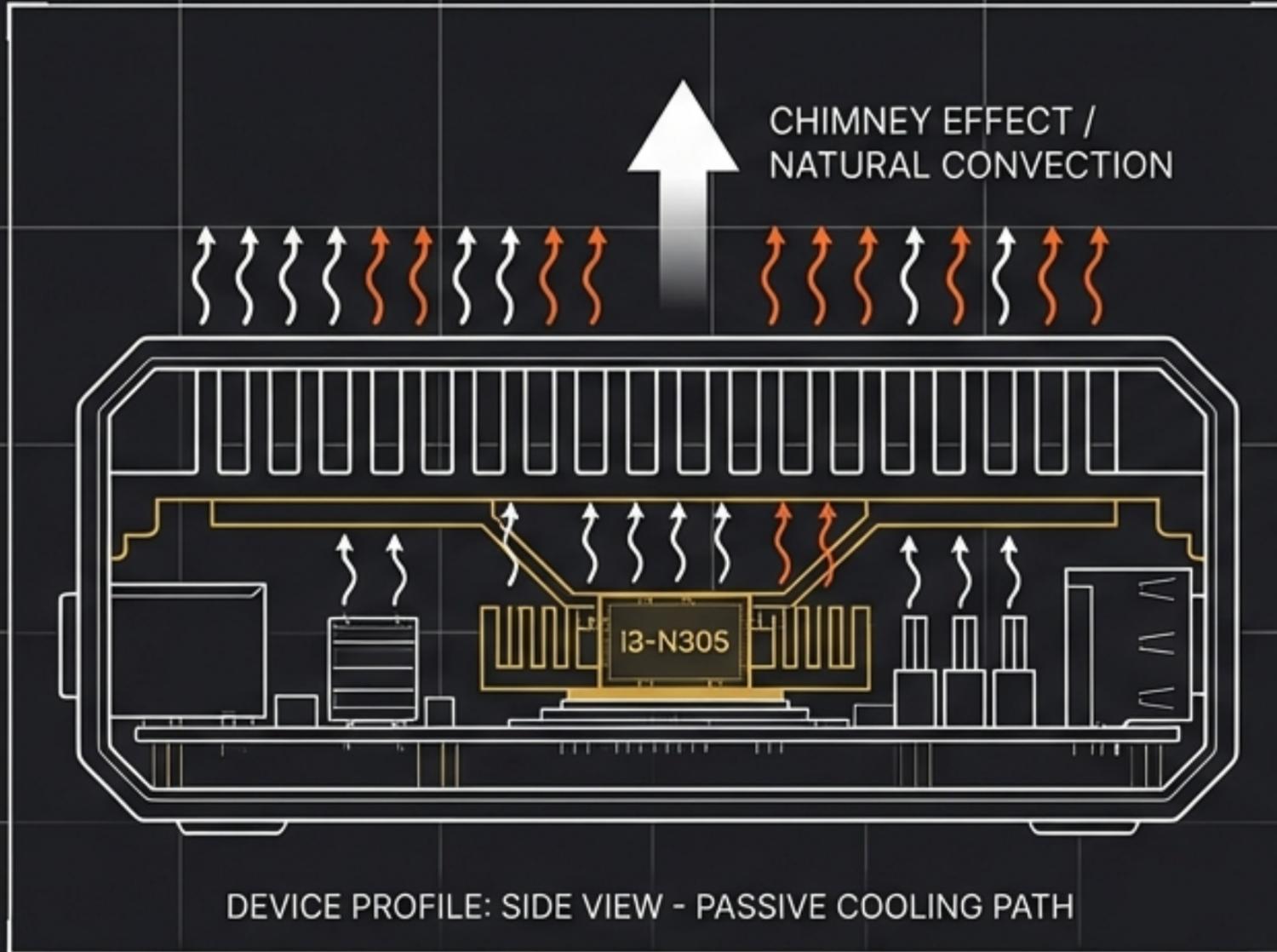


CPU	RAM	STORAGE	CHASSIS
Intel Core i3-N305	32GB DDR4	2TB NVMe SSD	Anodized Aluminum
8 Cores @ 3.8GHz	3200MHz SODIMM	PCIe Gen 3/4	Passive Cooling

ENGINEERING SPOTLIGHT: THE THERMAL CHALLENGE

REV 1.2

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THERMAL UPGRADE PROTOCOL

- **PROBLEM:** i3-N305 generates **15W TDP**. Risk of thermal saturation.
- **SOLUTION:** **Honeywell PTM7950** Phase Change Material applied directly to die.
- **RESULT:** Zero throttling in **>40°C** ambient environments (Arizona Tested). ✓

RISK REGISTER: R-HEAT-01 // MITIGATION ACTIVE.

THE TRINITY SOFTWARE STACK

Proxmox VE 8.x Architecture

VM 100: THE GATEKEEPER



JetBrains Mono
pfSense / 4 vCores
8GB RAM

Routing, VPN
Encryption, IDPS.

VM 101: THE LEDGER



JetBrains Mono
RIOS Core / 2 vCores
16GB RAM

Proof of Storage, Smart
Contracts.

VM 102: THE AUDITOR



JetBrains Mono
Kali Linux / 2 vCores
8GB RAM

PRO EXCLUSIVE. Offensive
Security & AI API.

FEATURE DEEP DIVE: OFFENSIVE SECURITY

VM 102 - The Auditor

CAPABILITY: AUTOMATED RED TEAMING

Why Kali Linux? To find the weak points before they do.

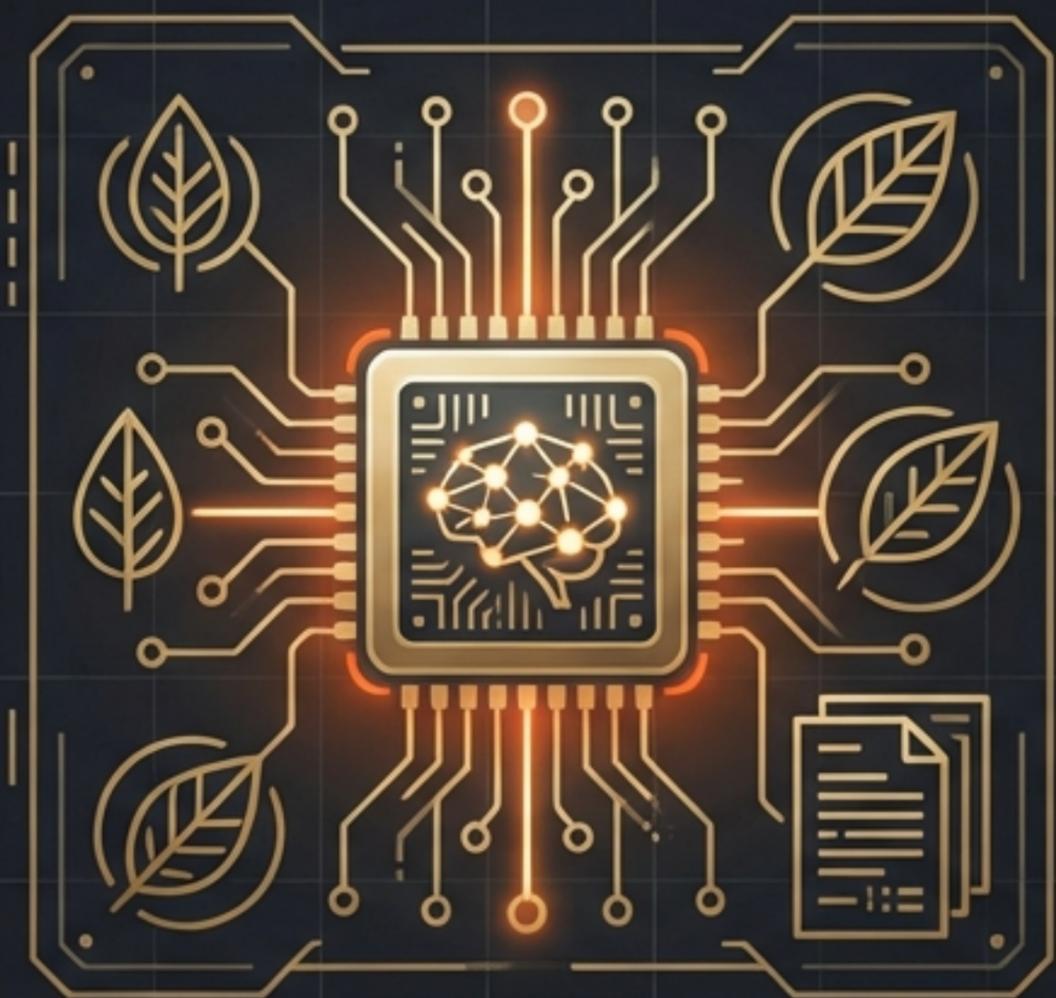
-  OpenVAS: Continuous vulnerability scanning.
-  nmap: Port mapping and discovery.
-  aircrack-ng: Wireless auditing.

```
Nmap scan report for 192.168.1.10... /nmap scans 378.5.8106137
Nmap scan report for 192.168.1.10
Host is up (00.00000/3011s!).
Host is down (00.00000/3011s!).
STATE  SERVICE
ms-glawn
ne-cloud
opening
usedown
portatds command
mainst discovery
npxnpxmrazn -unagen khvling --vack+
170:
Kot:(?lshdxra/styste fwe81:33*18)
J-kgg-(stansers)
e deat)
Zf0N
pr 268 730, aircrack-ng 05 08)
```

SAFETY PROTOCOL: CONFIG LOCK
Scans restricted to private subnets (192.168.x.x) by default.

FEATURE DEEP DIVE: AI AT THE EDGE

VM 102 - The Auditor



LOCAL INTELLIGENCE.

Hardware Enabler: 32GB RAM + i3 Multi-threading.

Use Case: HempGrade optical grading & Local LLM inference.

Privacy Benefit: Data is processed on-device. Proprietary agricultural yield data never leaves the farm.

STATUS: DISCONNECTED FROM CLOUD

THE DEEP ADMIN KIT

Physical Security Controls Included



Inventory Card

ITEM: SOVEREIGN KEY

YubiKey 5C NFC (Pre-paired).
No Key = No Admin Access.

Value: \$75.00 Included.

Inventory Card

ITEM: RESCUE DRIVE

Military-grade USB. "Break Glass"
script for Golden Image restoration.

Value: \$89.00 Included.

OPERATIONAL SCENARIOS

THE WISP

Traffic shaping for mesh beacons. Billing logic for multiple households.

THE SMART FARM

Real-time biomass grading. Edge Inference ensures only certificates hit the blockchain.

THE MICRO-GRID

Red-teaming solar inverters. Preventing firmware exploits on critical infrastructure.

FULFILLMENT PROTOCOL (SOP)

Node 3 Workshop, Arizona | Lead Time: 48 Hours



THE THERMAL MOD

Manual application of **PTM7950**. Precision torque assembly.



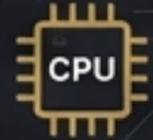
THE HANDSHAKE

Manual generation of **FIDO2/SSH keys** via **Sovereign Key**.



THE BURN-IN

24-Hour **'stress-ng'** Matrix Math test. Must remain **<85°C**.



TECHNICAL SPECIFICATIONS & FINANCIALS

Barebones Chassis (i3-N305)	\$220.00
RAM (32GB) + Storage (2TB)	\$175.00
Sovereign Key + Rescue Drive	\$55.00
Power/Thermal/Pkg/Labor	\$79.00
ESTIMATED BOM COST	\$529.00
GROSS MARGIN	~41%



COMMAND YOUR NETWORK.

MSRP \$899.00 | AVAILABLE NOW

Unit, PSU, Sovereign Key, Rescue Drive, VESA Plate.

Rajdhani THE NODE THAT WATCHES THE WATCHMEN.