YANC AI FACTORY OS / SAMPLE EVIDENCE

Cluster Passport

A signed, machine-readable production acceptance record for compute, fabric, storage, cooling, power, schedulers, and end-to-end training readiness.

CLUSTER ID	**TWQ-B300-1024-REF**	STATUS	**CERTIFIED**
GPU COUNT	1,024 x NVIDIA B300	VERIFIED	2026-09-03 22:14 UTC
RECIPE	B300-SX-FS-1.7	SOAK	72 hours completed

EXECUTIVE ACCEPTANCE

COMPUTE	**1,024 / 1,024**	DCGM level 4 passed; HBM ECC clean; no sustained thermal throttling.
FABRIC	**450 GB/s**	Reference 455 GB/s; acceptance >= 440 GB/s; observed 450 GB/s; PASS.
STORAGE	**18.4 TB/s**	Checkpoint write throughput exceeded the 17.5 TB/s acceptance threshold.
RELIABILITY	**0 drops**	No packet loss during the 72-hour full-cluster stress and soak window.

SHA-256 VERIFICATION HASH

90d18f8ca8b3934ee3af6c47fe228fe0e26c71ac5fd4db40e42a7b11ad8cf574

SIGNATURE VALID - EVIDENCE MANIFEST INTACT

01 / ACCEPTANCE MATRIX

Production gates and measured evidence

Every threshold is agreed before bring up. YANC retains raw outputs, versions, topology, exceptions, approvals, and signatures behind each result.

DOMAIN	TEST	RESULT	THRESHOLD	STATE
GPU	DCGM level 4 diagnostics	1,024 passed	100% mandatory	PASS
GPU	Sustained full-load burn-in	72 hours	72 hours	PASS
Fabric	NCCL all-reduce	450 GB/s	>= 440 GB/s	PASS
Fabric	Packet loss and FEC	0 drops	0 drops	PASS
Storage	Checkpoint sequential write	18.4 TB/s	>= 17.5 TB/s	PASS
Training	Distributed framework run	Completed	No job failure	PASS
Resilience	Node loss and restart	Recovered	< 12 minutes	PASS
Cooling	Rack delta-T at full load	7.4 C	6-9 C	PASS
Power	Dual-feed balance	0.2 kW delta	< 2.0 kW	PASS

Configuration identity

FIRMWARE	**Aligned**	GPU, NIC, BMC, BIOS, switch, and storage client versions match recipe.
TOPOLOGY	**Verified**	Rail, NUMA, PCIe, NVLink, switch-port, PDU, and cooling mappings retained.
SCHEDULER	**Healthy**	Slurm partitions, GRES, prolog/epilog, drain, and recovery flows validated.

02 / PERFORMANCE AND FACILITIES

Measured under full synthetic load

NCCL	**450 GB/s**	1,024 GPUs; reference 455 GB/s; acceptance >= 440 GB/s; PASS.
STORAGE	**18.4 TB/s**	Reference 18.8 TB/s; acceptance >= 17.5 TB/s; observed 18.4 TB/s; PASS.
RACK POWER	**87.4 kW**	Feed A 43.8 kW; Feed B 43.6 kW; dual-feed balance passed.
COOLANT FLOW	**142 LPM**	Motivair CDU pressure 2.8 bar; leak status clear.
RDHX	**7.4 C delta-T**	Acceptance 6-9 C; observed 7.4 C; Motivair RDHx; PASS.

Fabric evidence

SIGNAL	REFERENCE	ACCEPTANCE	OBSERVED	STATE
Links	Design topology	100% expected up	100% up	**PASS**
BER	Vendor target	<= 1.0e-11	1.2e-12	**PASS**
PFC storm	No storm	None	None	**PASS**
ECN marks	< 0.10%	<= 0.10%	0.02%	**PASS**
Optics	Vendor range	Within range	Within range	**PASS**
Routing	Expected paths	All validated	All validated	**PASS**

Evidence interpretation

A pass indicates that the measured result met the pre-agreed gate for this reference architecture. It does not guarantee future workload performance. YANC continuously monitors drift and reissues the Passport after material maintenance, firmware, topology, or policy changes.

03 / SIGNATURE AND OPERATING CONTINUITY

Evidence that survives hand-off

The Passport is not a one-time PDF. It is a signed projection of YANC's evidence graph, tied to the exact asset, configuration, recipe, and acceptance run.

ISSUER	**YANC**	TerawattIQ AI Factory OS evidence service.
MANIFEST	**Immutable**	Raw logs, benchmark outputs, versions, topology, and approvals indexed by hash.
VALIDITY	**Current**	Remains current until a material configuration or maintenance event occurs.
RENEWAL	**Automatic**	YANC drains, repairs, revalidates, and reissues evidence before return to service.

Day-2 re-certification chain

DETECT	DRAIN	DIAGNOSE	REPAIR	REVALIDATE	REISSUE
Health or drift event	Protect workloads	Isolate root cause	RMA or remediate	Run scoped gates	Sign new Passport

Commercial hand-off

This sample is designed to show operators, tenants, procurement teams, lenders, and insurers what a production acceptance artifact can contain. The exact test plan, thresholds, signatures, and contract acceptance language are agreed during the AI Factory Bring Up & Certification engagement.

REQUEST ARCHITECTURE REVIEW & PRICING	**terawattiq.com/#architecture-review**
Day 1 - AI Factory Bring-Up & Certification: $999/GPU; $75,000 minimum engagement	Day 2 - AI Factory Managed Operations: $399/GPU/month