LumeTrax
Buyer checklists

EVALUATION PACK

EVALUATION PACK · FOUR CHECKLISTS

Buyer checklists.

Four self-scoring checklists used by procurement, asset-management, and lender's IE teams during platform evaluation. Vendor-neutral. Apply against any vendor on your shortlist — including this one.

1	**Multi-OEM Portfolio Readiness**	12-row scorecard. For asset owners running plants from multiple OEM ecosystems.
2	**Hybrid PV + BESS + DG EMS Readiness**	12-row scorecard. For sites combining solar, storage, and back-up generation.
3	**Lender Reporting Readiness**	12-row scorecard. For lender-financed projects with covenant + DSCR reporting cadence.
4	**SCADA-EMS Evaluation Rubric**	14-row rubric. Architecture, security, openness, methodology — the four categories that dec

lumetrax.com/resources · info@lumetrax.com · Use against any vendor — including this one.

HOW TO USE THIS PACK

Four checklists, one scoring discipline.

Each checklist is a fixed list of evaluation rows with a weight, a three-state answer (YES / PARTIAL / NO), and a weighted-score column you fill in. The criteria are vendor-neutral — the goal is to surface what actually matters in operation, not to pick a winner. We publish them because the checklists make the evaluation faster and the outcome more defensible — even if you choose a different vendor.

Scoring scheme

State	Score factor	Apply when
YES (Y)	**1.0 × weight**	Capability is delivered, evidenceable, and operating at the scope under evaluation.
PARTIAL (P)	**0.5 × weight**	Capability exists but is gated, manual, regional-only, conditional, or scheduled rather than c
NO (N)	**0.0 × weight**	Capability is absent, on a future roadmap with no committed date, or out of scope for the er

Reading the result

The maximum score for each checklist is the sum of weights. A vendor that scores at ≥ **80%** of maximum is generally fit-for-purpose. **60–79%** is workable with documented gaps and a remediation plan. **< 60%** on any checklist that's central to the engagement is usually a re-scoping or re-shortlisting signal.

Don't average the four totals. Each checklist is independent — a strong score on Multi-OEM Portfolio Readiness doesn't compensate for a weak score on Lender Reporting Readiness, and vice versa. Cross-checklist gaps are the most common failure mode in vendor selection.

Evidence discipline

For every YES, the buyer should be able to name where the evidence lives — a reference deployment, an architecture diagram, a clause in the customer security pack, a methodology document, an exportable audit log, or a clause in the customer agreement. PARTIAL answers should record the gap. NO answers should record whether the missing capability is critical to the engagement or acceptable.

CHECKLIST 1 · 12 ROWS

Multi-OEM Portfolio Readiness

USE THIS CHECKLIST WHEN · the asset owner runs plants built around two or more inverter or BESS PCS ecosystems and needs one operating layer across all of them. Apply against any vendor on the shortlist.

#	Evaluation criterion	Wt.	Y	P	N	Weighted
1	Ingestion is protocol-first — Modbus, IEC 61850, SunSpec, OPC UA, MQTT, OEM API — not OEM-specific connectors only.	5	Y	P	N	
2	Adding a new OEM ecosystem to an existing portfolio is a configuration step, not a development engagement.	4	Y	P	N	
3	One tenant hierarchy spans the full portfolio (Client Org → Portfolio → Plant → Subsystem → Asset → Tag).	5	Y	P	N	
4	Tag and point names are normalised to a single dictionary across OEM ecosystems — same KPI definition everywhere.	5	Y	P	N	
5	Alarm philosophy is unified across OEM ecosystems — one taxonomy, one severity scale, one routing rule set.	4	Y	P	N	
6	Historian retention, resolution, and replay are uniform across OEM ecosystems — not gated by the most-restrictive vendor.	4	Y	P	N	
7	Cross-site benchmarking is supported under one roof — same KPI definitions, same period boundaries, same source classification.	3	Y	P	N	
8	Edge gateway buffers locally on WAN failure and replays the gap on reconnect — for every supported OEM ecosystem.	4	Y	P	N	
9	Vendor is neutral by business model — no OEM allegiance, no take-or-pay obligations, no preferred-vendor commercial structure.	5	Y	P	N	
10	OEM warranty evidence packs (alarm + duration + remediation chain) are generated automatically and exportable.	3	Y	P	N	
11	Adding a plant under a new ownership entity (M&A scenario) is a tenant-tree step, not a re-deployment.	3	Y	P	N	
12	Customer can run the platform on cloud, private-cloud, on-prem, or air-gapped — same software, same scope.	3	Y	P	N	

Multi-OEM Portfolio Readiness Total / 48

Pass ≥ 38 / 48 · Workable 29–37 · Re-shortlist < 29 if multi-OEM is central to the engagement.

CHECKLIST 2 · 12 ROWS

Hybrid PV + BESS + DG EMS Readiness

USE THIS CHECKLIST WHEN · the site combines PV, battery storage, and back-up diesel or gas generation behind a shared point-of-delivery, and the EMS has to coordinate them in real operation.

#	Evaluation criterion	Wt.	Y	P	N	Weighted
1	Optimization is advisory — the on-site OT controller closes the loop, the optimizer never bypasses it.	5	Y	P	N	
2	Dispatch envelopes account for state-of-charge bounds, ramp-rate limits, and PCS thermal limits — not just kW headroom.	5	Y	P	N	
3	Diesel runtime, fuel consumption, and fuel-side cost are first-class inputs to dispatch — not a post-hoc reporting layer.	4	Y	P	N	
4	Solar-plus-storage curtailment policy is configurable per asset — not a single global rule.	3	Y	P	N	
5	Behind-the-meter vs in-front-of-the-meter site topologies are both supported as primary use-cases.	3	Y	P	N	
6	Tariff structure (TOU, capacity charge, demand charge, PPA flat, PPA escalating) is a first-class input — not a manual reconciliation.	4	Y	P	N	
7	Black-start and islanding modes have an explicit operating envelope — not a configuration footnote.	4	Y	P	N	
8	Frequency support and grid-code-driven setpoints (where applicable) operate inside the OT layer, not on the platform.	5	Y	P	N	
9	Source classification (MEASURED / CALCULATED / ASSUMED / JUDGED) is applied to every EMS output — not just the analytics layer.	4	Y	P	N	
10	Historian captures every dispatch decision, the inputs to it, and the realised outcome — for post-hoc audit.	4	Y	P	N	
11	Revenue stack and operating cost are reconciled in the same tool — not split across two systems.	3	Y	P	N	
12	Vendor publishes the optimization-methodology document — not just the screenshots.	3	Y	P	N	

Hybrid PV + BESS + DG EMS Readiness — Total / 47	Pass ≥ 38 / 47 · Workable 28–37 · Re-shortlist < 28 if hybrid EMS is central to the engagement.

CHECKLIST 3 · 12 ROWS

Lender Reporting Readiness

USE THIS CHECKLIST WHEN · the asset is project-financed and the operating data feeds covenant tests, DSCR reporting, or quarterly lender or IE updates. Use this with the lender's IE alongside procurement.

#	Evaluation criterion	Wt.	Y	P	N	Weighted
1	Outputs are source-classified end-to-end — MEASURED, CALCULATED, ASSUMED, JUDGED kept distinct on every report row.	5	Y	P	N	
2	P50 expected energy is calculated to a published methodology — not a black-box benchmark.	5	Y	P	N	
3	Loss-attribution waterfall reconciles to within ±2% on a typical period — and the reconciliation is exportable.	5	Y	P	N	
4	Availability decomposition aligns to IEC 61400-26-1 (wind) and IEC 61724-1 (PV) — not vendor-bespoke.	4	Y	P	N	
5	Methodology is versioned — changes are dated, rationale documented, prior-period restatements are explicit.	5	Y	P	N	
6	Counterparty allocation rules (curtailment vs OEM warranty vs O&M vs availability liquidated damages) are written, not implicit.	4	Y	P	N	
7	Reports include the input chain — telemetry source, calculation step, assumption set, judgment note — not just the final number.	4	Y	P	N	
8	Audit trail is exportable to a client-controlled storage location at lender or IE request — not platform-locked.	4	Y	P	N	
9	DSCR-relevant inputs (revenue, opex, lender fees) reconcile to the operating data without manual mapping.	4	Y	P	N	
10	Quarterly lender pack template is bundled — not a $30k professional-services engagement.	3	Y	P	N	
11	Independence is contractual — vendor's customer agreement explicitly bars resale of operating data and OEM data-sharing.	5	Y	P	N	
12	Vendor neutrality is structural — no OEM allegiance, no EPC stake, no IPP customer-conflict on the same plant.	4	Y	P	N	

Lender Reporting Readiness Total / 52	Pass ≥ 42 / 52 · Workable 31–41 · Re-shortlist < 31 if the asset is project-financed.

CHECKLIST 4 · 14 ROWS · ARCHITECTURE · SECURITY · OPENNESS · METHODOLOGY

SCADA-EMS Evaluation Rubric

USE THIS CHECKLIST WHEN · selecting between a SCADA + EMS vendor offering. Cuts across the three earlier checklists — useful as the consolidating rubric in a final shortlist decision meeting.

#	Evaluation criterion	Wt.	Y	P	N	Weighted
1	**ARCHITECTURE** · Mission-critical control stays on the OT side — supervisory + interlocks + safe-state in PLC / RTU / on-site controller.	5	Y	P	N	
2	**ARCHITECTURE** · Edge-gateway-to-platform sync uses buffered local cache + replay on reconnect — no platform dependency for safe operation.	4	Y	P	N	
3	**ARCHITECTURE** · Cloud, private-cloud, on-prem, and air-gapped are all first-class deployment shapes — not bolt-ons.	4	Y	P	N	
4	**ARCHITECTURE** · Tenant hierarchy is unified across the portfolio with per-tenant data segregation by architecture.	4	Y	P	N	
5	**SECURITY** · Internal SDLC is aligned to IEC 62443-4-1 — and the alignment is evidenceable, not a slide.	5	Y	P	N	
6	**SECURITY** · SSO via SAML 2.0 / OIDC is a default configuration step, not a paid integration.	3	Y	P	N	
7	**SECURITY** · Audit log is comprehensive (action, actor, timestamp, before/after, source IP) and exportable to customer SIEM.	4	Y	P	N	
8	**SECURITY** · Trust roadmap (ISO 27001, SOC 2, third-party pen-testing) is published with dated status per item — not a generic claim.	4	Y	P	N	
9	**OPENNESS** · Customer can run the data-egress export at any time — historian + configuration + audit log — without vendor mediation.	4	Y	P	N	
10	**OPENNESS** · Sub-processor list is published with notice and right-to-object embedded in the customer agreement.	3	Y	P	N	
11	**OPENNESS** · Customer agreement contains a published data-neutrality policy with explicit no-resale, no-OEM-sharing commitments.	5	Y	P	N	
12	**METHODOLOGY** · Source classification (MEASURED / CALCULATED / ASSUMED / JUDGED) is applied to every analytical output.	5	Y	P	N	
13	**METHODOLOGY** · Loss-attribution methodology is published, versioned, and reconciles to within ±2% on a typical period.	5	Y	P	N	
14	**METHODOLOGY** · Standards alignment (IEC 61724-1 for PV, IEC 61400-26-1 for wind, IEC 62443-4-1 for security) is explicit.	4	Y	P	N	

SCADA-EMS Evaluation Rubric Total / 59

Pass ≥ 47 / 59 · Workable 36–46 · Re-shortlist < 36 — this rubric reflects what tends to break in deployment.

SUMMARY SCORECARD

One row per checklist. Use during the shortlist decision meeting.

Transfer the totals from each checklist into the row below. Don't average across rows — a weak score on the checklist that matters most to the engagement is the result that drives the decision, not the mean.

Checklist	Vendor A	Vendor B	Vendor C	Pass threshold
1. Multi-OEM Portfolio Readiness	/ 48	/ 48	/ 48	≥ 38
2. Hybrid PV + BESS + DG EMS Readiness	/ 47	/ 47	/ 47	≥ 38
3. Lender Reporting Readiness	/ 52	/ 52	/ 52	≥ 42
4. SCADA-EMS Evaluation Rubric	/ 59	/ 59	/ 59	≥ 47
Critical engagement criteria (per shortlist note)				
Decision rationale (1 line per vendor)				

A note on neutrality

These checklists are vendor-neutral by design. The rubric exists because the criteria above are the criteria that actually break in deployment — across operating layers, lender expectations, and OEM portfolios. Whichever vendor scores best against your specific engagement is the right vendor for that engagement, irrespective of who published the rubric.

When evaluating LumeTrax with this pack, every YES the buyer assigns should map to a specific evidence artefact — an architectural diagram, a clause in the customer security pack, a methodology document, an exportable audit log, or a clause in the customer agreement. We'll send the corresponding artefact bundle on request.

Companion documents. Architecture Brief (system overview from edge to platform). Customer Security Pack (full procurement-grade detail). Loss Attribution Methodology (P50, soiling, equipment, contract, unexplained — calculation logic). OT/IT Separation Diagram + Note. All available at lumetrax.com/resources. Talk to engineering at info@lumetrax.com.