AeriScout

Pricing

Drone Inspection Rate Guide 2026

Real pricing data — hourly rates, per-asset costs, and sensor-specific fees across every inspection type

- Rates by inspection type (roof, solar, wind, tower, bridge, pipeline)
- Pricing by sensor payload (RGB, thermal, LiDAR, multispectral)
- Hidden fees to watch for (mobilization, data processing, reporting)
- How to negotiate better rates and maximize inspection ROI

How Drone Inspection Billing Works

Drone inspection billing differs from traditional inspection pricing. Unlike a simple hourly rate, invoices combine flight fees, data processing, and reporting as separate line items. The flight itself is often the cheapest component — post-processing and engineering analysis typically equal or exceed the flight cost. Understanding this structure is the key to comparing quotes accurately and controlling your total spend.

Billing Model Overview

Component	Description	Typical Range
Flight fee (hourly)	Pilot + drone on-site, capturing imagery/data	$150–$400/hour
Per-asset / per-structure fee	Flat rate per roof, tower, turbine, or facility	$150–$2,500/asset
Sensor surcharge	Premium for thermal, LiDAR, or multispectral sensors beyond RGB	$100–$1,500/session
Data processing	Post-flight stitching, 3D modeling, anomaly detection, annotation	$200–$1,500/project
Engineering report	Formal findings report with severity classification and recommendations	$300–$2,000/report
Mobilization / travel	Crew and equipment transport to the site	$150–$1,000

Quick Budget Reference

- Residential roof inspection (visual): $150–$400
- Commercial roof (thermal + visual, 50,000 sf): $500–$1,500
- Solar farm (thermal, per MW): $500–$1,500/MW
- Wind turbine blade inspection (per turbine): $300–$600
- Cell tower (per structure): $300–$2,500
- Bridge / highway infrastructure: $1,500–$10,000+
- Construction monitoring (monthly retainer): $2,000–$8,000/month

Rates by Inspection Type

What Does Each Type of Drone Inspection Cost?

Inspection Type	Price Range	What's Included (Typical)	Key Price Variables
Residential roof (visual)	$150–$400	RGB imagery, basic condition report	Roof size, pitch, obstructions
Commercial roof (thermal + visual)	$500–$1,500	RGB + thermal, moisture mapping, annotated report	Building footprint, number of roof sections
Solar farm (thermal)	$500–$1,500/MW	Thermal anomaly scan, hotspot map, defect report	Farm capacity, panel density, deliverable detail
Wind turbine (blade inspection)	$300–$600/turbine	High-res blade imagery, defect annotation per blade	Number of turbines, turbine height, weather windows
Cell / telecom tower	$300–$2,500/tower	360-degree structural imagery, equipment audit	Tower height, carrier requirements, climb comparison
Power line / transmission	$1,500–$5,000/mile	Vegetation clearance, conductor condition, LiDAR profile	Terrain, voltage class, BVLOS requirements
Bridge / highway structure	$1,500–$10,000+	Deck/underside imagery, crack mapping, 3D model	Bridge length, traffic control needs, FAA coord.
Pipeline ROW surveillance	$500–$2,000/mile	Leak detection, encroachment monitoring, thermal	Length, terrain, regulatory requirements
Building facade / exterior	$800–$3,000	Thermal + visual per elevation, moisture intrusion map	Building height, number of facades, urban airspace
Construction progress	$500–$2,000/flight	Orthomosaic, 3D surface model, cut/fill volumes	Site acreage, frequency, deliverable complexity
Insurance loss assessment	$300–$800	Adjuster-quality imagery, damage documentation	Property size, damage scope, urgency

Key Rule of Thumb

> Never compare drone quotes based on flight fees alone. A $200/hour flight quote without processing is not cheaper than a $350/hour all-inclusive quote. Always ask: "What deliverables are included in this price?" Raw photos are not an inspection report.

Rates by Sensor Payload

How Sensor Choice Affects Your Price

Sensor Type	Operator Equipment Investment	Typical Client Surcharge	Best Applications
RGB (standard camera)	$2,000–$8,000	Baseline (no surcharge)	General visual condition assessment, progress photos
Thermal / infrared (FLIR, DJI H30T)	$3,000–$15,000	+$100–$300/ session	Roof moisture, solar panel defects, electrical hotspots
LiDAR (laser scanning)	$15,000–$50,000+	+$500–$2,000/ session	3D point clouds, volumetric calculations, power line clearance
Multispectral (5+ bands)	$5,000–$15,000	+$200–$500/ session	Vegetation health, environmental monitoring, agriculture
Zoom / telephoto (200mm+)	$5,000–$20,000	+$100–$300/ session	Blade defects, tower hardware closeups, facade detail
Gas detection (OGI, methane sniffer)	$10,000–$50,000+	+$500–$3,000/ session	Pipeline leak detection, landfill methane, refinery VOCs
RTK/PPK positioning	$5,000–$15,000 (module)	+$100–$300/ session	Survey-grade accuracy (<2 cm), mapping, volumetrics

Thermal is non-negotiable for most commercial inspections.

For roofs, solar, facades, and electrical — thermal imaging is what separates a professional inspection from aerial photography. RGB alone cannot detect moisture intrusion, failing solar cells, or insulation gaps. Budget thermal as your default, not an add-on.

Cost Comparison: Drones vs. Traditional Methods

The ROI Case for Drone Inspection

Comparison 1 — Commercial Roof Inspection

Component	Manual / Rope Access	Drone Inspection
Scaffolding or lift rental	$3,000–$8,000	$0
Inspector labor (1-2 days on roof)	$1,500–$3,000	$0
Drone flight + thermal	$0	$800–$1,500
Data processing + report	Included in labor	$500–$1,000
Facility disruption / downtime	$2,000–$10,000	Minimal
Safety risk (falls from height)	Significant	None
Time on-site	1–3 days	2–4 hours
Total	**$6,500–$21,000**	**$1,300–$2,500**
Savings	—	**70–85%**

Comparison 2 — Wind Turbine Fleet

Component	Rope Access Team	Drone Inspection
Rope access crew (2 techs x 20 turbines)	$60,000–$100,000	$0
Drone inspection (20 turbines)	$0	$6,000–$12,000
Turbine downtime (8 hrs each)	$40,000–$80,000	$0–$2,000
Timeline	3–4 weeks	3–5 days
Total	**$100,000–$180,000**	**$6,000–$14,000**
Savings	—	**90–95%**

Comparison 3 — Cell Tower

Component	Tower Climber	Drone Inspection
Certified climber (half-day)	$2,000–$5,000	$0
Drone inspection	$0	$300–$2,500
Tower downtime	4–8 hours	30–60 minutes
Safety risk	High (climbing at height)	Minimal
Savings	—	**50–85%**

Drone inspections save 50–90% vs. traditional methods depending on the asset type. The savings are largest when traditional methods require scaffolding, rope access, or equipment downtime. For ground-accessible assets, savings are more modest but scheduling speed and data quality advantages still favor drones.

Hidden Fees & Add-Ons

Always get an itemized, all-inclusive quote. Budget 30–50% above the base flight fee for processing, deliverables, and contingencies.

Add-On	Typical Cost	When It Applies
Mobilization / travel	$150–$1,000	Every project (pilot travel, equipment transport)
FAA airspace authorization	$0 (LAANC) to $500 (waiver)	Any flight in controlled airspace (near airports)
Night operations premium	+25–50%	Thermal inspections often optimal at night; requires waiver
BVLOS waiver operations	+50–100%	Linear assets (pipelines, power lines, rail)
Data processing (orthomosaic)	$200–$800	Stitched aerial maps from multiple flight passes
Data processing (3D model/ point cloud)	$500–$2,000	Volumetric surveys, structural modeling
Engineering report (PE stamp)	$500–$2,500	When findings require a licensed Professional Engineer's review
Expedited report delivery	+25–50%	Report needed in 24–48 hrs vs. standard 5–10 business days
Ground control points (survey targets)	$200–$500	Survey-grade positional accuracy (<5 cm)
Re-flight (weather)	$150–$500	If weather cancels the original flight date
Cloud data hosting	$50–$300/year	Long-term storage of imagery, models, and reports
Multi-sensor flight	+$100–$1,500 per additional sensor	Adding thermal + LiDAR on the same mission
Traffic control coordination	$500–$2,000	Bridge, highway, or rail-adjacent inspections

Ask for an "all-in" quote that bundles flight, processing, and a professional report. Compare all-in quotes across vendors — this eliminates the apples-to-oranges problem of different firms itemizing differently.

How to Negotiate Better Rates

Numbered list

1. **Bundle multiple assets into a single mobilization.** A 10-building portfolio inspection with one mobilization costs 30–50% less than 10 separate trips. NDT firms and drone operators price travel into every standalone job.

2. **Sign an annual or semi-annual contract.** Recurring inspection agreements yield 15–25% discounts. Operators prefer predictable revenue and will sharpen pricing for committed volume.

3. **Match sensors to the decision you're making.** Don't pay for LiDAR when RGB + thermal suffices. A roof moisture survey doesn't need 3D point clouds — it needs thermal annotation.

4. **Schedule during good weather windows.** Wind, rain, and extreme temperatures cancel flights. Build 2–3 backup dates into the schedule to avoid re-flight charges.

5. **Handle site coordination yourself.** Operators charge for time spent getting security clearance, coordinating with tenants, and waiting for access. Do the admin work upfront.

6. **Reduce deliverable complexity when justified.** An annotated photo report costs 50–70% less than a full 3D model with engineering analysis. Choose the deliverable that matches your decision-making need.

7. **Negotiate per-unit pricing for repeat work.** Per-roof, per-turbine, or per-mile pricing becomes highly competitive at volume. A 50-turbine contract should cost far less per turbine than a 5-turbine job.

8. **Get three quotes with identical scopes.** Market pricing varies 40–60%. Use the scope-of-work template in the Planning Checklist (PDF 3) so every vendor is quoting the same deliverables.

9. **Choose standard report turnaround.** Rush delivery (24–48 hrs) adds 25–50%. Standard 7–10 day turnaround is almost always sufficient for non-emergency work.

10 **Ask about seasonal pricing.** Some operators offer off-peak discounts during winter months (fewer daylight hours, less demand). Schedule flexible inspections during off-peak windows.

Budget Planning Worksheet

Use this worksheet to estimate total drone inspection costs. Print and fill in for each project.

Line Item	Estimated Cost	Actual Cost
Flight fee (hours x rate, or assets x per-unit rate)	$_____	$_____
Sensor surcharge (thermal / LiDAR / gas)	$_____	$_____
Mobilization / travel	$_____	$_____
FAA airspace authorization	$_____	$_____
Data processing (ortho / 3D model)	$_____	$_____
Engineering report (PE stamp if needed)	$_____	$_____
Ground control points	$_____	$_____
Expedited delivery surcharge	$_____	$_____
Cloud data hosting	$_____	$_____
Re-flight contingency (weather backup)	$_____	$_____
25% contingency buffer	$_____	$_____
TOTAL ESTIMATED	$_____	$_____

Complete this worksheet before requesting quotes. Knowing your asset count, sensor requirements, deliverable needs, and timeline helps you get comparable all-in pricing from multiple operators.

CTA box

Want a quick sanity check on your numbers? Email this worksheet to contact@aeriscout.com or browse verified drone inspectors at aeriscout.com

AeriScout

AeriScout

The most comprehensive directory of commercial drone inspection services in the United States

Browse inspectors at aeriscout.com