Free sample from The Drone Kit & Flight Planner. This is worksheet 3 of 11. Get all 11 worksheets: dronegearsetup.com/kit/drone-kit-flight-planner

Flight Time Against Payload

What the pack really gives you, not the box figure

Pilot	**Date**
Aircraft	**Pack**

Real endurance is normally 70 to 85 percent of the rated figure once wind, payload and a landing reserve are accounted for. The rated number is measured hovering in still air at sea level with nothing attached, which is not a flight anyone makes.

The calculation

Input	Your figure	Notes
Pack capacity (mAh)		
Cell count and nominal voltage		
Pack energy (Wh)		mAh / 1000 x nominal volts
Usable fraction		Land at 20 to 25 percent, so 0.75 to 0.80
All-up weight (g), from sheet 1		
Hover power (W)		Scales almost linearly with weight
Endurance (min) = Wh x usable / W x 60		
Manufacturer rated time (min)		
Your figure as a percentage of rated		Expect 70 to 85

Run it on the flight time calculator at dronegearsetup.com, then fly it and write the real number in the log on sheet 8. Your measured figure beats every calculation after the first flight.

What each addition costs you

Fly the same route twice, once clean and once loaded, and record the difference. This table is worth more than any published figure.

Configuration	AUW (g)	Measured time (min)	Cost vs clean
Clean, no accessories			Baseline
Plus prop guards			
Plus ND filter			
Plus strobe			
Plus Remote ID module			
Plus payload			
Full working configuration			

Pack health record

Pack ID	Cycles	Storage voltage per cell	Swelling?	Retire?

Notes on this aircraft

What it actually does in your conditions, at your field, with your kit

What it actually does in your conditions, at your field, with your kit

What it actually does in your conditions, at your field, with your kit

Researched guidance, not professional advice. FAA weight thresholds, Remote ID rules and airspace authorizations change. Confirm the current rule at faa.gov/uas before you rely on this kit, and treat every figure here as a planning aid rather than an authorization.