

Kobo/XCSoar Hardware Options - N.B. Only the main options of which I have experience are shown here. They will reflect my own preferences. There are other options.

Feature	Function	For	Against	Other Notes
Kobo Mini	5 inch screen	Easier to work on than Touch.		Good size to use alongside another instrument on PG flight deck
Kobo Touch	6 inch screen	Easier to read map and gauges.	Higher power consumption than Mini.	Good size to use alone on PG flight deck.
Black Kobos	Coated with silicone rubber.		Poor adhesion of tapes and Velcro	Sugru adheres well. Coating may be scraped off. White Kobos are uncoated.
GPS Chip PA6C or PA6H	GPS Location	Cheaper than with Glonass		Fitted as standard to Bluefly.
GPS/Glonass Chip GMS-G6	GPS + Glonass Location. 16mm Square	More satellites available. More reliable lock in poor conditions.	Not extensively tested.	May require firmware upgrade to earlier Bluefly modules. Does not significantly increase battery consumption (myth!).
GPS/Glonass Chip GMS-G9	GPS + Glonass Location. 20mm Square	Better reception than GMS-G6. Larger pads are easier to solder.	Larger than GMS-G6. Will overhang edge of Kobo Mini.	Similar to GMS-G6 but larger size gives better reception. Fits OK on Kobo Touch.
GPS/Glonass Chip V.Kel VK2828U7G5LF	GPS + Glonass Location. 28mm Square	Best reception of modules shown here. Pre-wired connector.	Very large. Large overhang on Kobo Mini	Just fits on Kobo Touch. Internal backup (no external backup supply needed).
Backup Supply	Retains memory in GPS module	Assists with fast GPS locking if unit is switched off and on.	A bit fiddly to fit.	Does not significantly increase battery consumption (myth!).
Bluefly TTL Module	Audio variometer	Good response	Adjustment of settings with Telnet or TTL lead is awkward. Not very loud without external speaker. Audio takes large amount of power.	Connecting external speaker(s) improves loudness and low frequency response. Takes very little power with audio off (10mA).
	Pressure input to XCSoar for altitude and variometer functions	Works well and is accurately calibrated. Better than GPS altitude for glide computations.		XCSoar automatically sets baro. altimeter on switch on (see Bluefly notes).
Kobo standard battery	Internal 1Ah cell			Duration with GPS only approx. 6 to 10 hours for Mini (4 to 6 hours Touch). Reduced by approx. 1/3 with Bluefly if audio is on. May be supplied from powerbank through USB connector.
Large Battery Modification	Increases battery capacity to 3Ah (Mini) or 4Ah (Touch).	Should eliminate concerns about power consumption.	More construction. Increases thickness of unit by 4mm. Increases weight by about 60g (Mini) or 80g (Touch).	Duration should exceed 30 hours GPS only or 20 hours with Bluefly audio on.