Abstract: We study the strong magnetic field limit for a nonlinear Iwatsuka-type model, i.e. a nonlinear Schrödinger equation in two spatial dimensions with a magnetic vector potential that only depends on the x-coordinate. Using a high-frequency averaging technique, we show that this equation can be effectively described by a nonlocal nonlinear model, which is no longer dispersive. We also prove that, in this asymptotic regime, inhomogeneous nonlinearities are confined along the y-axis.