I will report on a joint work with Giacomo Mezzedimi concerning the moduli spaces of elliptic K3 surfaces of Picard number at least 3, that is \$Uloplus Vangle -2k \rangle\$polarized K3 surfaces. We prove that such moduli spaces are of general type for $\$ k \operatorname{lgeq}$ 220\$. The proof relies on the low-weight cusp form trick developed by Gritsenko, Hulek and Sankaran. Furthermore, explicit geometric constructions of some elliptic K3 surfaces lead to the unirationality of these moduli spaces for $\$ k<11 \$$ and for other 19 isolated values up to $\$ k=64 \$$.

