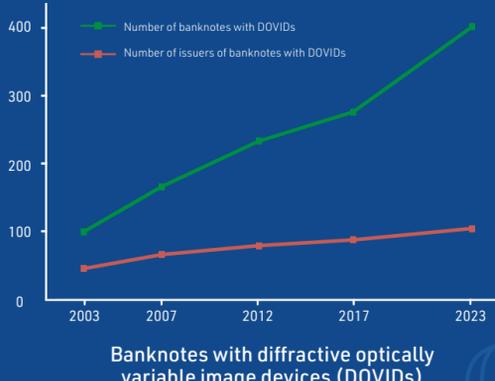


KolourOptik[®] Stripe

Next-generation, nano-optic banknote security feature equipped with an unprecedented combination of three “always-on” visual effects—movement, 3D depth, and multicolor

Banknote Security Feature Market Trends

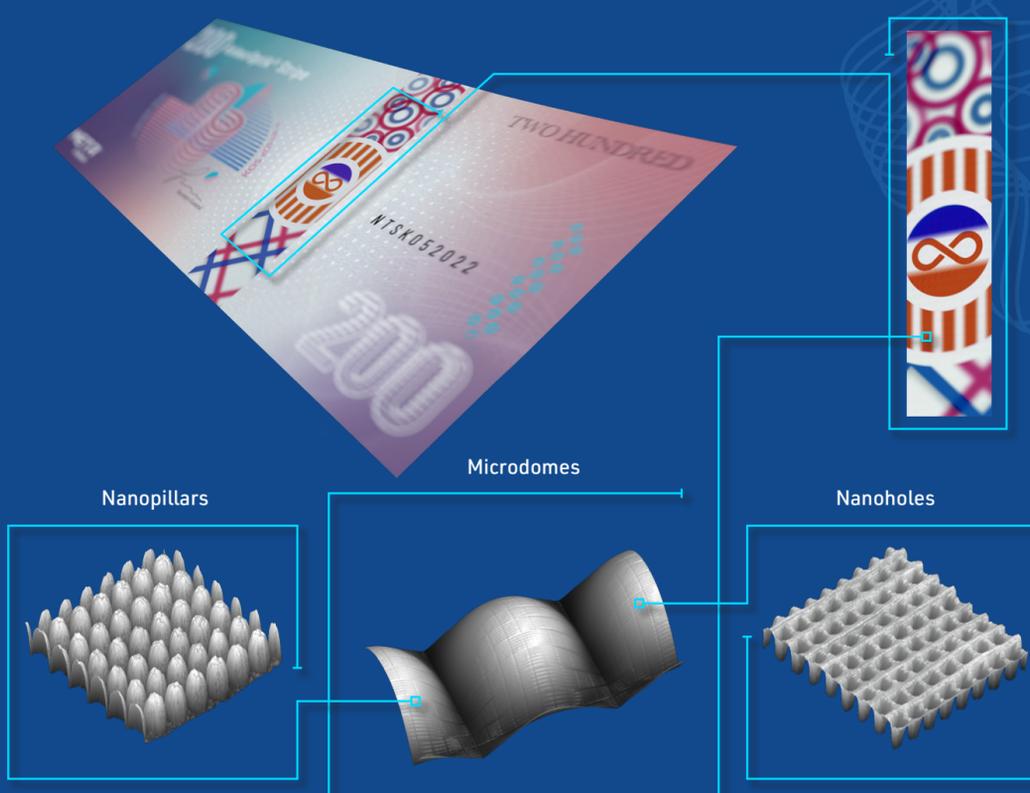


Sources: Smithers Banknote Market Report (2018–2023); Technavio Banknote Market Report (2021–2025); Research and Markets Global Banknote Market Report (2021–2025).

Sources: Reconnaissance International Special Report 2018–Diffraction Features on Banknotes; internal estimates (2023 data).

CAGR: Compound Annual Growth Rate.

KolourOptik[®] Stripe



The light-manipulating effects of a combination of micro- and nanoscale plasmonic metamaterials underpin the three optical cues—movement, 3D depth, and multicolor—offered by the KolourOptik[®] Stripe

Comparison with Legacy Solutions in Visual Effects

	KolourOptik [®] Stripe	Hologram	Microlens
Multicolor	★★★	★★	★
3D parallax	★★★	★	★★★
Movement	★★★	★★	★★★
Animation	★★★	★	★★
Image switching	★★★	★	★★
Range of viewing angles	★★★	★	★★★

★★★ Best ★★ Good ★ Poor

Design and Environmental Advantages

Outstanding durability & counterfeit resilience

A single-layer metamaterial architecture much thinner than microlens solutions with a typical thickness of 20–130 μm

Limitless design & color options

Total artistic license enabled by a pastel color palette as well as 3D and movement effects

Sustainable materials & manufacturing process

Ink-free aluminum structures & production with a low environmental impact

Applications



For paper banknotes (available in 2023)

For polymer banknotes (coming soon)