



LuxCarta

SuperRes

SuperRes is an advanced, fully automated super-resolution technology that enhances satellite imagery by a factor of 4. Designed for geospatial applications, it combines AI-driven clarity, efficiency, and simplicity to deliver ready-to-use, lightweight outputs for GIS, CAD, and simulation tools.

Source Sentinel 2 10m

SuperRes x4 factor

Key Benefits

AI-Powered Super-Resolution

Automatically enhances satellite imagery by a factor of 4, producing sharper, more detailed data ready for analysis.

Fast & Scalable Processing

Delivers enhanced imagery for large areas in minutes, enabling cost-efficient, high-throughput production.

Optimized, Lightweight Outputs

Creates clear, easy-to-handle files that simplify storage, integration, and visualization workflows.

Seamless Integration & Control

Available as SaaS or On-Premises, ensuring data sovereignty, security, and predictable costs within your infrastructure.

Deliver sharper, ready-to-use satellite imagery in standard formats, ensuring seamless integration with your existing tools and workflows.

SuperRes x4 on Low Resolution Imagery



Estonia 10m



Estonia SuperRes 2.5m

SuperRes x4 on High Resolution Imagery



Calgary Native 50cm



Calgary SuperRes 12.5cm

Performance & Formats

Processes a **full 100×100 km Sentinel-2 tile** in **under 7 minutes**

Inputs: satellite imagery from **10m to 30cm** resolution

Outputs: enhanced imagery at **4× resolution** improvement
Ready for **GIS, CAD, and 3D** visualization tools

Why SuperRes?

SuperRes solves the challenge of maximizing satellite data by delivering sharper, clearer imagery ready for analysis. Fully automated, scalable, and easy to deploy, it enhances value, simplifies workflows, and produces consistent, high-quality outputs compatible with your tools.

Looking to improve the speed and accuracy of your derived geospatial data?

Contact us today for a personalized demo: sales@luxcarta.com | www.luxcarta.com



SuperRes is powered by LuxCarta, one of the world's leading map data companies.

SuperRes is LuxCarta's automated platform for enhancing satellite imagery using AI-driven super-resolution. Designed for large-scale and high-resolution applications, it delivers lightweight, regularized, and detailed outputs ready for GIS, CAD, and visualization. Available as a private network deployment (On Premises), or directly from LuxCarta's Production Services, it builds on over 30 years of geospatial expertise to deliver standardized, interoperable data for your workflows.