Wireless communication and transmission of data plays an important role today and in the future. In buildings, trains and vehicles, however, mobile phone reception is often very weak or impossible. This is due to the fact that windows and glass facades today are generally coated with low-e or sun protection layers, which serve to save energy but block or greatly weaken mobile phone reception. This is caused by the electrical conductivity of the energy saving layers. Although these allow short-wave light to pass through, they are impermeable to long-wave mobile radio radiation due to the Faraday effect.

If a fine and hardly visible line network is introduced into the energy saving coating with the LASER, it also becomes permeable to mobile radio frequencies without the energy-saving function being significantly reduced.

These are your benefits:

- Digital and flexible machining process.
- Line widths of only 20-80 μm.
- The structures can be transferred directly to the glass without intermediate steps.
- Structuring is also possible in insulating glass laminates.
- The LASER process is suitable for surface stripping as well as for structure sizes of only 20 μm.
- The glass surface remains undamaged and the strength of float and tempered glass is not affected.

Use the LASER structuring also for applications like: Switchable glass, bird safe glass, edge stripping, increase of mobile radio transmission, glass breakage detection, alarm systems, general electrical signal and power line tasks, transponder technology, inductive charging systems, glass control panels, glass keyboards, photovoltaics, heating glass applications, antenna technology on glass.
Thanks to linear motor technology with direct position measurement, the c-vertica is highly precise and dynamic. It can optionally be operated in combination with a magazine truck or as a station in an automatic production line and is easy to integrate into production thanks to laser class 1.

The Cerion laser GmbH is specialized in developing and manufacturing LASER-machines for glass processing. Benefit from more than 16 years of experience and over 300 machines sold for glass processing. We offer LASER machines for marking, edge deletion, structuring and ablation of thin coatings, for drilling/cutting/3D-structuring of glass as well as for frosting and decorating. We are happy to advise you also on other LASER processes and your requirements.