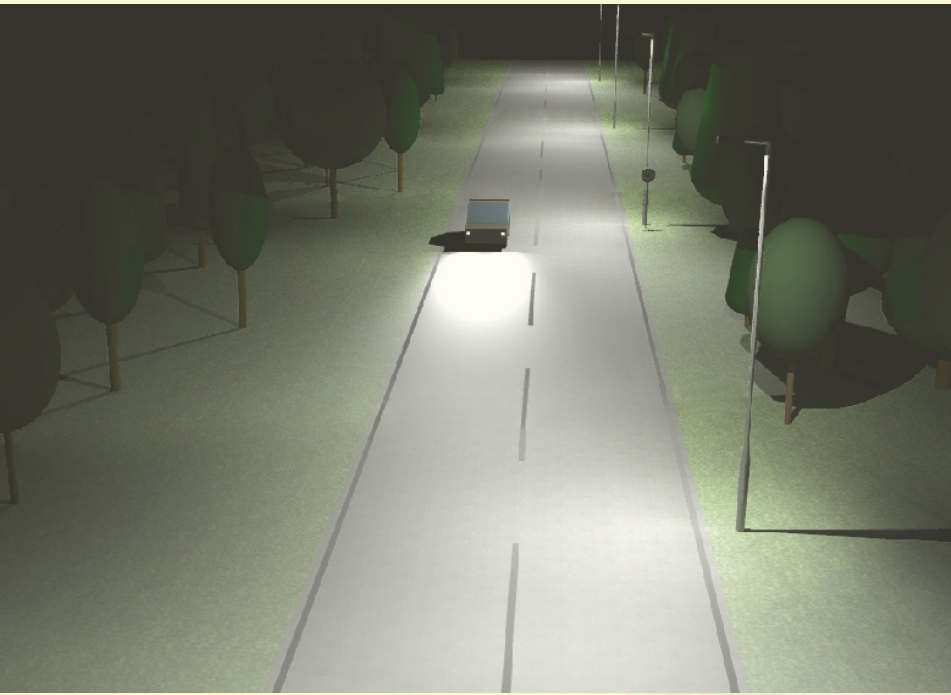


# STRADA 6IN1 MODULE FOR STREET LIGHTING

The latest addition to our well-known Strada family.



At the moment LEDs are competing with gas discharge lamps to be the most efficient street light solution on the market. LEDs have improved greatly in the past years and together with well-designed optical solutions LEDs will be replacing older products in the near future. The extremely long lifetime of LEDs and harsh weather conditions create different aspects which need to be taken into account in optical design. The new Strada module strives to combine all this into one package.

The 6in1 Strada module is the latest addition to our well-known Strada family and fully compatible with all the older Strada models. This time we wanted to create a module which is easy to use and works well on its own without a need to combine it with other lenses. The 6in1 module helps to speed

up the assembly process because fewer parts are needed. We have also added distinctive markings on the module which enable a fully automated assembly.

The light distribution in the 6in1 module is designed on the basis of the experience we have obtained while working with the earlier Strada versions. Extra care was taken to achieve the longitudinal uniformity values needed in the more demanding street light standards. We have also designed the lenses so that there will be less glare than before. Full cutoff is quite hard to achieve with normal lens design, but it is easy to reduce glare with the lamp design. The 6in1 module can be used to fulfill even the most demanding street light standards.

Big size is a problem with many of the high power LED street lamps, and the new Strada 6in1

module is designed to solve this problem. Strada modules can be arranged as close to each other as possible without blocking the light distribution on wider angles. There are grooves at the edges of the module designed for the adding of adhesive in order to help with the sealing. With proper materials, an IP65 sealing can be achieved easily without affecting the light transmission. The top surface of the module is also designed to be easily cleaned with water spray. In optimal conditions, the optical efficiency can be as high as 94 %.

Weather conditions and especially UV-light have a negative effect which needs to be taken into account when choosing the materials. Most of the clear plastics turn yellow over time when exposed to UV-light. This results in more light being absorbed by the material. We at Ledil trust in a synthetic polymer called Plexiglas 8N, produced by Evonic. This material has very good optical qualities and can withstand weather conditions and UV-light for more than 30 years without any notable changes in quality.

