

**Media Release**  
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## **New NIR Bandpass Filters SP for distance metering and safety applications**

**Balzers, Liechtenstein – Optics Balzers AG, the successor to Oerlikon Optics, has rolled out a new generation of NIR Bandpass Filters designed for very high blocking of visible light. The NIR Bandpass Filters SP are produced with advanced sputtering coating technology, resulting in high stability of the filter's spectral performance under stringent application conditions.**

Optical sensing applications in the fields of automotive, industrial safety, and instrumentation are increasingly requiring higher quality and better performance of the optical thin film coated components. In response to this market need, Optics Balzers has developed another key product – a new-generation NIR Bandpass Filters SP. They are produced with sputtering coating technology using online process control to ensure consistently high quality in volume production.

Optics Balzers is a pioneer in the application of sputtering technology for volume production of optical thin film filter coatings. Filter coatings made by this method are characterized not only by their excellent spectral and environmental stability, but also by their superior surface adhesion and scratch resistance. Sputtered thin film filters are used in numerous high volume optical applications such as projection displays, professional studio lighting, automotive sensors, and various others requiring narrow spectral tolerance filters in volume production.

NIR Bandpass Filters SP are used in optical sensor applications for blocking ambient light both in the visible and in the longer wavelength infrared range while selectively transmitting near infrared (NIR) signal light of a specific range for sensing. With its excellent blocking characteristics and

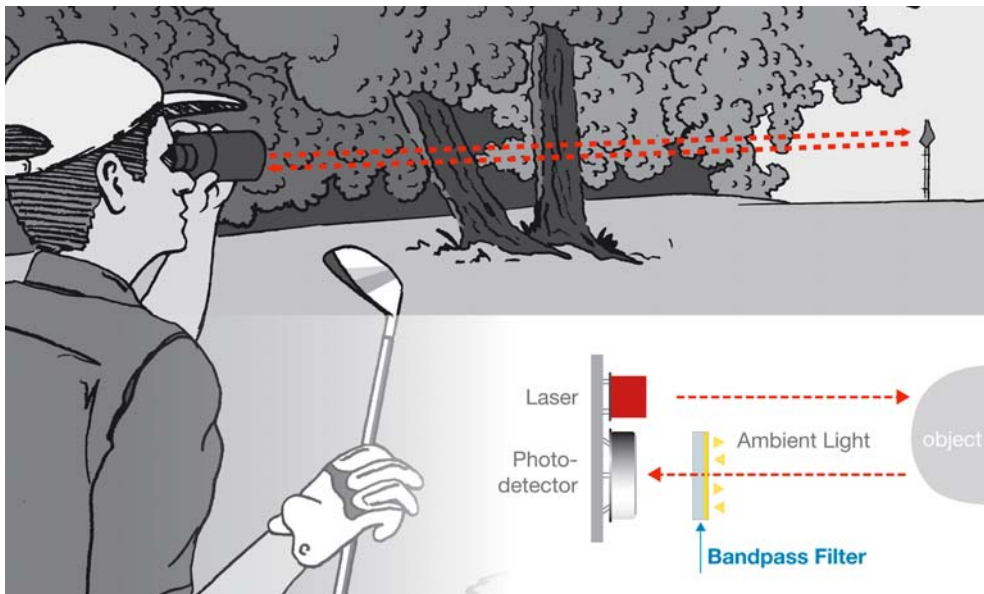
high transmission in the narrow NIR band, NIR Bandpass Filters SP are key components for achieving very high signal-to-noise ratios in optical sensing and distance measuring applications. This superior signal-to-noise performance allows either accurate distance measurements with lower signal light power, or higher sensitivity, faster detection cycles and greater precision with standard signal light levels. The very high temperature and environmental stability of the NIR Bandpass Filters SP ensures minimal signal drift and superior reproducibility in optical distance measuring and sensing applications.

#### Application benefits at a glance

- Superior blocking characteristics enabling improved signal-to-noise-ratio in NIR sensing applications
- Very stable optical characteristics under varying temperature and humidity conditions
- High design flexibility for central wavelength, transmission bandwidth, blocking ranges, and blocking levels
- Excellent long term stability
- Various customer specific sizes and shapes, on standard flat glass substrates
- Consistent volume production capabilities based on proven sputtering technology
- RoHs compliant

Sputtered NIR Bandpass Filters SP from Optics Balzers are ideally suited for high accuracy distance metering and range finding, industrial safety and security, and advanced automotive applications such as Adaptive Cruise Control (ACC), as well as other optical sensing techniques using NIR light.

Optics Balzers will be present at the SPIE Photonics West in San José, California, USA, from January 27 – 29, 2009.



**Caption:**

Sensor with Optics Balzers NIR Bandpass Filter SP for measuring the distance in golfing.

Optics Balzers AG (former Oerlikon Optics) enables innovative optical solutions for more than 60 years. As a global leader in optical thin-film components and subassemblies, Optics Balzers focuses on selected markets such as Advanced Lighting, Automotive, Biophotonics, Projection Display, and Sensors & Imaging. The company possesses a comprehensive know-how in optical thin-film coatings, glass processing, patterning, sealing, and optical subassemblies. Optics Balzers has 150 employees and generates annual sales of about CHF 35 million. The company is headquartered in Balzers, Liechtenstein.

More information: [www.opticsbalzers.com](http://www.opticsbalzers.com)