



PNG//smart  
Making Industries Smarter  
**Photoelectronic Sensors**



# The Advantages of the PNG//smart Formats at a Glance

The PNG//smart generation combines optimal performance and maximum communication capability – across all formats.



## High Degree of Protection

- Sturdy plastic housing with **IP67/IP68** degree of protection
- Robust 316L stainless steel **IP69K** housing for washdown and heavy-duty environments



## A Real Lightweight

- Conscious avoidance of full encapsulation production
- Low weight of the sensors with plastic housing enable **use on moving system parts**



## Wide Temperature Range

- Reliable even in extreme cold (down to **-40 °C**) and heat (up to **+60 °C**)
- Can be used in the deep-freeze area in the food industry



## weGreen: Intelligent Energy Saving

- Low current consumption up to 20 mA
- **Low energy and resource consumption**

## The Perfect Size

wenglor offers the right sensor in the perfect size for every application. Space-saving designs combined with high-performance components ensure maximum flexibility during system planning.



### 2K Format

Housing dimensions: 35.5 × 18.5 × 17 mm



### 1M Format

Housing dimensions: 54.5 × 27 × 16 mm



### 1P Format

Housing dimensions: 50 × 50 × 20 mm



### 1K Format

Housing dimensions: 32 × 16 × 12 mm



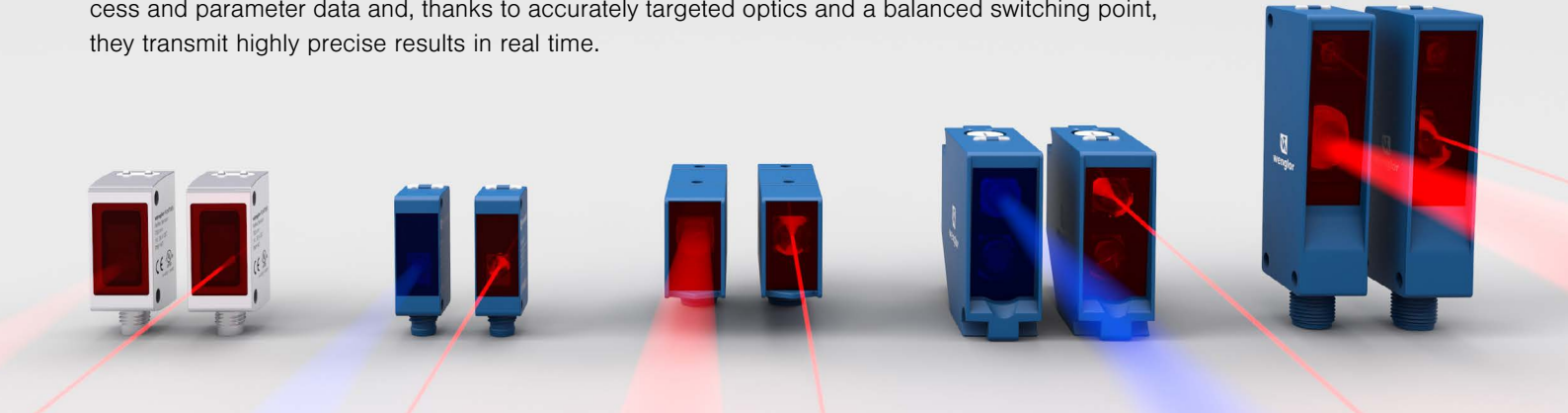
### 1N Format

Housing dimensions: 75 × 32.5 × 18 mm



## Unique in Performance and Communication

PNG//smart stands for “Photoelectronic Next Generation” – sensors from this series are a unique combination of precise wenglor technology and an intelligent interface. They flexibly exchange process and parameter data and, thanks to accurately targeted optics and a balanced switching point, they transmit highly precise results in real time.

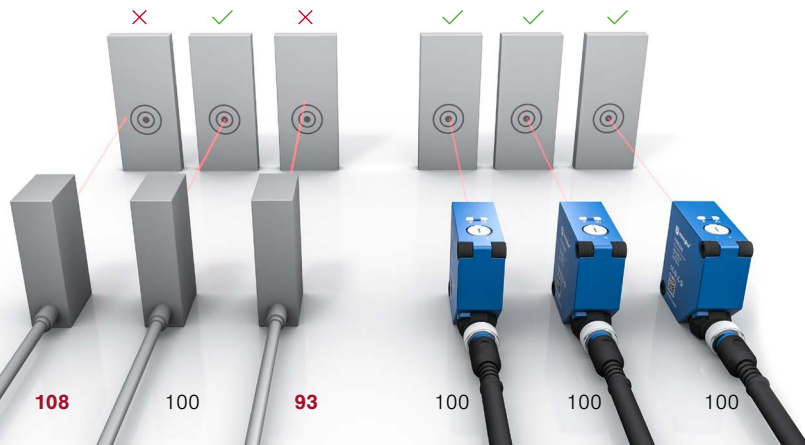


## With Targeted Optics and Balanced Switching Point

The position of the spot varies in the case of sensors without targeted optics.

Acquired data vary as well in the case of non-balanced switching points. Consequently, data communicated from different sensors are not comparable.




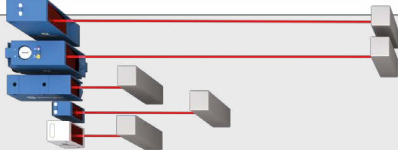







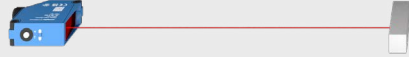
In the case of targeted optics and balanced switching points, data obtained from the different sensors are comparable.



Further information is available on our website.



# Product overview

Functional principle	
 <p>Energetic Reflex Sensors</p>	
 <p>Reflex Sensors with Background Suppression</p>	
 <p>Universal retro-reflex sensors</p>	
 <p>Retro-Reflex Sensors for Transparent Objects</p>	
 <p>Through-Beam Sensors</p>	
 <p>Reflex Light Barriers</p>	

## Features

- **Fast duplication:**

Set up once – duplicate as often as you like

- **Condition monitoring:**

Sensors generate diagnostic and status data

- **Insensitive to interference:**

Suitable for applications in confined spaces and simplifies installation

- **Flexible switching or measurement:**






Switching status and signal values available via IO-Link

- **Factory-balanced light spot and switching point:**

Reproducible performance and sensor properties



**2K****1K****1M****1P****1N**

Light source	Detection range [mm] up to				
<ul style="list-style-type: none"> <li>● Laser light</li> <li>● Red light</li> <li>● Blue light</li> </ul>	– 700 –	– 700 –	– – –	– – –	– – –
<ul style="list-style-type: none"> <li>● Laser light</li> <li>● Red light</li> <li>● Blue light</li> </ul>	120 200 150	250 300 150	200 200 –	300 1,200 400	400 1,200 400
<ul style="list-style-type: none"> <li>● Laser light</li> <li>● Red light</li> <li>● Blue light</li> </ul>	12,000 5,000 –	12,000 5,000 –	20,000 6,500 –	9,500 11,000 –	9,500 11,000 –
<ul style="list-style-type: none"> <li>● Laser light</li> <li>● Red light</li> <li>● Blue light</li> </ul>	– 2,000 –	– 2,000 –	– 4,500 –	– 3,500 –	– 3,500 –
<ul style="list-style-type: none"> <li>● Laser light</li> <li>● Red light</li> <li>● Blue light</li> </ul>	10,000 6,000 –	10,000 6,000 –	– – –	– 20,000 –	– 60,000 –
<ul style="list-style-type: none"> <li>● Laser light</li> <li>● Red light</li> <li>● Blue light</li> </ul>	– – –	– – –	– – –	– 1,000 –	– – –
Technical Data					
Plug on housing	M8×1	M8×1	M12×1	M12×1	M12×1
NFC variants	×	×	✓	✓	✓
Cable variants	×	✓	×	×	×
Housing material	Stainless steel 316L	Plastic	Plastic	Plastic	Plastic
Degree of protection	IP68/IP69K	IP67/IP68	IP67/IP68	IP67/IP68	IP67/IP68
To the product portfolio					



**wenglor**  
the innovative family



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