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## Kappa Product News | April 2020 Switchgear Viewing Systems for Power Grids: Safe, Live Switch and Breaker Imaging

Unique product line from portable, ready-to-go solutions to comprehensive clientspecific solutions for new substations and running systems

"Keeping the distance": how our switchgear viewing systems improve occupational safety

Reliable switch device status is a safety requirement in power grids. However, hard-to-access viewports and sparks from switching processes make direct visual observation difficult and dangerous in power plants today. Live monitoring of switches using specialized cameras minimizes risks to human operators by monitoring switches from a safe distance, either locally using a portable video unit or remotely centralized from the control room.

What makes our line of switchgear viewing systems special? Kappa provides a unique, comprehensive range of extremely robust switchgear cameras designed for safe, live monitoring of GIS, Hybrid Switchgear, GCB, and air-insulated applications in the typically harsh environments of medium- and high-voltage networks. All switchgear cameras can be adapted to any type of viewport/equipment and specific customer requirements. Scalable stationary or mobile solutions with a portable video unit are available for new substations or to upgrade running systems. This plant-focused concept assures quick, easy, and safe installation of the switchgear cameras. Reliable, user-friendly software is provided for easy and safe operation.

The latest (and smallest) member of our switchgear product line: our new PVU portable video unit for comfortable mobile switchgear monitoring — ready to go! Quick, comfortable mobile viewport monitoring without "big" network-dependent solutions? That's where our new battery-powered PVU comes into play: a smart mobile solution for viewport monitoring. 3 cameras can be connected for 3 phases. The image is directly displayed on the integrated monitor; it's as easy as that. This solution is also ideal for service technicians.

You can fully rely on our expertise! Kappa optronics is an experienced partner for IEEE C.37.20.9-compliant switchgear camera systems (SGC). We work closely with major clients in the area of power grids/power technologies and thus can offer mature solutions that meet all specific requirements on site. Our switchgear camera systems are in use in plants worldwide, contributing to occupational safety. We provide test equipment, demo material — and of course expert advice!Please get in touch!



Press web section: https://www.kappaoptronics.com/en/news.cfm

## Photo 1:

Kappa Switchgear camera systems.

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## Kappa optronics - Footer

Cameras and Vision Systems for Anything that Drives or Flies.
Kappa has 40 years of experience with application-specific cameras and vision systems in rugged and certifiable design — in small and mid-sized series.

We offer innovative vision solutions for day and night operations, ensuring maximum performance of higher-level systems. Our solutions are especially suitable for safety-critical applications. We provide on-site consulting, dynamic project management, and a highly experienced development team.

Special signal processing, mechanical modifications and customer-specific interface configuration are all part of the Kappa concept, as are integration of optical components, illumination and video management.

We are leaders in technology. Moreover, we meet all safety requirements on design assurance procedures in hardware and software development, qualification and certification (up to SIL 2/ASIL-B/ DAL-B, ISO 26262, DO-254, DO-160, DO-178, MIL STD 810/704, Nato-Supplier Code C4792).

Your benefits at a glance

Extremely rugged design | High integration capability | ITAR free | Certifiable maximum safety | Vision (sub) systems, glass-to-glass, board level cameras | Latency-free images | Long-term availability & functional warranty | Day & night vision, 24/7