

## **Weidmüller Industrial IoT solution: topGuard load monitoring system with communication with IO-Link. – Continuous communication from field level to the cloud.**

In the industrial Internet of Things (IoT), all of the components in a production environment are connected to one another via a digital infrastructure, making them stakeholders in the process. Digital, data-based IoT solutions are essentially based on five core functions: data collection, data processing, data communication and data analysis, as well as operator interaction. This creates new opportunities for generating added value. Weidmüller offers a comprehensive product portfolio for digitalisation and the intelligent networking from the sensor to the cloud. The latest addition to the portfolio: topGUARD – the load monitoring system with communication interface via IO-Link. The communication-compatible load monitoring system provides the user with options for remote-controlled operation, provides operating data for optimal condition monitoring, offers reliable monitoring as well as protection of the 24 V system voltage. This intelligent networking between the machine, the control cabinet and the IT system makes it possible to create completely new control, monitoring and analysis solutions. Weidmüller already offers future-oriented Industry 4.0 and IoT solutions that combine automation and digitalisation.

IO-Link is considered key technology for the implementation of Industry 4.0 and IoT concepts. With regard to this technology, Weidmüller now offers the load monitoring system topGUARD, which intelligently safeguards DC loads and communicates via IO-Link. This gives users the option of continuous communication from field level right through to the cloud. The communication-compatible load monitoring system topGUARD follows the innovative approach of integrated potential distribution, which helps to save both space and time during device installation. The IO-Link module simply needs to be connected and an IODD file integrated in order to carry out parameterisation and control and to provide the user with all operating data. The communication module can be used both for PROtop power supplies as well as for topGUARD load monitoring.

The standardised IO-Link technology (IEC 61131-9) allows users to transmit data

while also ensuring data transparency and the option of remote-controlled operation of the topGUARD load monitoring. topGUARD also features integrated potential distribution, with which users will be familiar from the innovative maxGUARD concept. The integrated potential distribution significantly reduces the amount of space that is required, while also saving valuable installation time. The migration from maxGUARD to topGUARD is also extremely simple. For IO-Link communication, the communication module simply needs to be plugged into the topGUARD station. The modular overall system has been expertly thought out right down to the smallest detail, and guarantees maximum flexibility for tailor-made solutions. The voltage-adaptive class-2 load monitoring allows for the continual application of an operating voltage of between 18 V and 30 V DC for the very first time.

With the communication-compatible solution topGUARD, Weidmüller is enabling machine and system operators to develop new services for the optimisation and diagnostics of their processes for the first time. Simply put, the solution generates added value from machine data. With this solution, Weidmüller is providing the foundation for fully networked production facilities. Together with the communication module, topGUARD is setting new standards and tapping into the full potential of Industry 4.0 and the Internet of Things (IoT). The selective fusing is fit for digitalisation.

***Weidmüller – electrical connection, transmission and conversion of power, signals and data in the industrial environment. – Let's connect.***

**Keyword: Weidmüller topGUARD und maxGUARD**

**Additional information: [www.weidmueller.com](http://www.weidmueller.com)**

## Captions:

**Fig. 1: Weidmüller Industrial IoT solution: topGuard load monitoring system with communication with IO-Link.**

*Fig. no.: GR\_topGUARD\_IO-Link.jpg*

**Fig. 2: Weidmüller topGUARD: The modular overall system has been expertly thought out right down to the smallest detail, and guarantees maximum flexibility for tailor-made solutions.**

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