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**International IEC 63171-6 standard for uniform $M_3I_3C_3E_3$ single pair Ethernet interface published. This sets complete standards for IIoT networks based on SPE.**

The T1 Industrial Style interface introduced by HARTING in 2016 has been the official SPE interface for industrial applications since January 23, 2020.

**Rahden, February 25, 2020 --- On January 23, 2020, the IEC SC 48B Standards Committee for Copper Connectors published IEC 63171-6. It describes the T1 Industrial Style SPE plug-in face and is the common strong connection for the SPE Partner Network and its members. T1 Industrial is the future interface for single pair Ethernet applications in industry. This standard is supported and integrated by the SPE relevant standards ISO/IEC 11801-3, ANSI TIA 1005-x and IEEE802.3cg.**

On January 23, 2020, the IEC standardisation committee SC 48B published IEC 63171-6 as an international standard for Ethernet interfaces using only single pair wires. The T1 Industrial Style mating face described in the standard was included in standardisation by HARTING in 2016 and is now the internationally standardised default interface for SPE networks in $M_3I_3C_3E_3$ environments (industry).

IEC 63171-6 is included as a complete standard document with all specifications and test parameters in ISO/IEC 11801-3 for cabling and represents the specified standard interface. It is still possible, however, to use cabling components other than in IEC 63171-6, but these are not compliant with the standard and may pose a risk of functional loss.

For this reason, ISO/IEC JTC 1/SC 25/WG 3 started an international selection process in 2018, at the request of IEEE 802.3, which gives a recommendation for a SPE Media Dependent Interface (MDI). As a result of this choice of over 20 national standardisation bodies, a mating face has prevailed for industrial applications:

For the industry and industry-related applications ($M_2I_2C_2E_2$ and $M_3I_3C_3E_3$) the mating face according to **IEC 63171-6**. This mating face is based on the proposal from HARTING T1 Industrial.

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This result has been confirmed by TIA TR-42 and IEEE802.3cg. The T1 Industrial plug-in face supported by the SPE Partner Network in accordance with IEC 63171-6 is the standard interface for a standardised $M_3I_3C_3E_3$ end-to-end connection in single-pair Ethernet networks.

The founding members of the SPE partner network (HARTING, TE Connectivity, HIROSE, LEONI, Murrelektronik, Würth Electronic and softing IT network) as well as the companies igus, DEHN, HELUKABEL, Molex, Amphenol ICC, Lütze, ESCHA, Perinet, EKF and Zhaolong which joined after the SPS 2019, support this common standard IEC 63171-6.

Single pair Ethernet is the infrastructure basis that makes IIoT and Industry 4.0 possible.

If you want to learn more, visit us at the **Hannover Messe** on **Thursday April 23, 2020**. At the Vogel Communications Group stand **(Hall 12, Stand B15)** we invite you to a relaxed come-together with interesting lectures from **4:30 p.m**.

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**About the Partner Network:**

The SPE Industrial Partner Network is based in the Westphalian town of Rahden and is an equal alliance of companies that promote single pair Ethernet technology as the basis for fast and successful growth of IIoT. The aim of the association is to establish SPE as a new Ethernet technology in the sense of a comprehensive ecosystem with all necessary components on the market.

We also see ourselves as partners of industrial Ethernet user groups and would like to support them in adapting this new "physical layer" for PROFINET, EtherNet/IP, CC-LinkIE, for example.

The bundling of competencies from the individual companies is intended to give users security of investment when employing this technology. Other interested companies are happy to be seen as new members. Shaping the future together - contact us!

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