

# Instruction Manual

## 1. Marking

PROFINET Power Hub Motherboards MB-FB-GTR1, MBHC-FB-4.GT and PROFINET PA Gateway HD2-GTR-4PA.PN
ATEX certificate: TÜV 15 ATEX 7735 X ATEX marking: Ⓜ II 3G Ex ec IIC T4 Gc
IECEx certificate: IECEx TUR 16.0007X IECEx marking: Ex ec IIC T4 Gc
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## 2. Validity

Specific processes and instructions in this instruction manual require special provisions to guarantee the safety of the operating personnel.

## 3. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismantling lies with the plant operator. The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismantling of the device. The trained and qualified personnel must have read and understood the instruction manual. Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

## 4. Reference to Further Documentation

Observe laws, standards, and directives applicable to the intended use and the operating location. Observe Directive 1999/92/EC in relation to hazardous areas. The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable supplement this document. You can find this information under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com). For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com). Due to constant revisions, documentation is subject to permanent change. Please refer only to the most up-to-date version, which can be found under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

## 5. Intended Use

The PROFINET Power Hub is designed to connect PROFIBUS PA segments to PROFINET. The device must only be operated in the specified ambient temperature range and at the specified relative humidity without condensation. The device is an electrical apparatus for hazardous areas of Zone 2. The Power Hub consists of a motherboard and power supply modules. Depending on the configuration, further components are gateways and diagnostic modules. See the respective product documentation for these components.

## 6. MBHC\*, MB\* Intended Use

The device is designed for mounting on a 35 mm DIN mounting rail according to EN 60715.

## 7. Improper Use

Protection of the personnel and the plant is not ensured if the device is not used according to its intended use.

## 8. Mounting and Installation

Do not mount a damaged or polluted device. The Power Hub motherboard features a special connection slot for HD2-DM\* diagnostic modules labeled "Diagnostic Module only". Do not try to plug any other modules into this connection slot. Other modules may be damaged. Observe the ambient and operating conditions when mounting and installing the device. The device must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to IEC/EN 60664-1. If used in areas with higher pollution degree, the device needs to be protected accordingly. Supply the device with a power supply that meets the requirements for safety extra-low voltage (SELV) or protective extra-low voltage (PELV).

## MBHC\*, MB\* Requirements for Cables and Connection Lines

Observe the following points when installing cables and connection lines: Observe the permissible core cross section of the conductor. The insulation stripping length must be considered. When using stranded conductors, crimp wire end ferrules on the conductor ends. Observe the tightening torque of the screws.

### 8.1. Hazardous Area

Observe the installation instructions according to IEC/EN 60079-14. Observe the installation instructions according to IEC/EN 60079-25. The device may be installed in gas groups IIC, IIB, and IIA. Connection or disconnection of energized non-intrinsically safe circuits is only permitted in the absence of a potentially explosive atmosphere.

#### 8.1.1. Zone 2

The device may be installed in Zone 2. The device must be installed and operated only in surrounding enclosures that

- comply with the requirements for surrounding enclosures according to IEC/EN 60079-0,
- are rated with the degree of protection IP54 according to IEC/EN 60529.

## 9. Operation, Maintenance, Repair

Do not repair, modify, or manipulate the device. If there is a defect, always replace the device with an original device. Do not use a damaged or polluted device. Only manipulate the connections within the specified ambient temperature range.

## 10. Delivery, Transport, Disposal

Check the packaging and contents for damage. Check if you have received every item and if the items received are the ones you ordered. Keep the original packaging. Always store and transport the device in the original packaging. Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet. The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.