

# Instruction Manual

## 1. Marking

SMART Transmitter Power Supply HiD2030, HiD2030SK
ATEX certificate: CSANe 21 ATEX 2149 X ATEX marking: Ⓜ II (1)G [Ex ia Ga] IIC Ⓜ II (1)D [Ex ia Da] IIIC Ⓜ I (M1) [Ex ia Ma] I
IECEX certificate: IECEX CSAE 21.0010X IECEX marking: [Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I
North America Certificates: CoC 80072560 (cCSAus) Associated apparatus with intrinsically safe circuits for: Class I, Division 1, Groups A-D; Class II Division 1, Groups E-G; Class III Class I, Zone 0 and 1, Class I, Zone 20 and 21 [AEx ia Ga] IIC, [AEx ia Da] IIIC (US), [Ex ia Ga] IIC, [Ex ia Da] IIIC (Canada)
Pepperl+Fuchs Group Lilienthalstraße 200, 68307 Mannheim, Germany Internet: www.pepperl-fuchs.com

## 2. 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.

## 3. Reference to Further Documentation

Observe laws, standards, and directives applicable to the intended use and the operating location.

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).

Observe the instruction manuals for the associated termination boards.

If you use the device in safety-related applications, observe the requirements for functional safety. You can find these requirements in the functional safety documentation under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

## 4. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The device is used in control and instrumentation technology (C&I technology) for the galvanic isolation of signals such as 20 mA and 10 V standard signals or alternatively for adapting or standardizing signals. The device has intrinsically safe circuits that are used for operating intrinsically safe field devices in hazardous areas.

The device provides a fully floating supply to power 2-wire SMART transmitters in the hazardous area, and repeats the current to drive a safe area load. It is also used with 2-wire current sources.

Use the device only within the specified ambient and operating conditions. Only use the device stationary.

Only use the module with the designated termination boards.

The device is an associated apparatus according to IEC/EN 60079-11.

The device may be installed in the non-hazardous area.

If you use the device in safety-related applications, observe the information for safety function and safe state.

## 5. Improper Use

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

## 6. Mounting and Installation

Do not mount a damaged or polluted device.

Mount the device in a way that the device is protected against mechanical hazard. Mount the device in a surrounding enclosure for example.

Mount the device with at least a degree of protection of IP20 according to IEC/EN 60529.

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.

The device must be installed and operated only in an environment of overvoltage category II (or better) according to IEC/EN 60664-1.

Supply the device with a power supply that meets the requirements for safety extra-low voltage (SELV) or protective extra-low voltage (PELV).

Observe the installation instructions according to IEC/EN 60079-14.

If you install the device in safety-related applications, observe the requirements for functional safety.

## Requirements for Usage as Associated Apparatus

If circuits with type of protection Ex i are operated with non-intrinsically safe circuits, they must no longer be used as circuits with type of protection Ex i.

Observe the respective peak values of the field device and the associated apparatus with regard to explosion protection when connecting intrinsically safe field devices with intrinsically safe circuits of associated apparatus (verification of intrinsic safety). Also observe IEC/EN 60079-14 and IEC/EN 60079-25.

Observe the maximum values of the device, when connecting the device to intrinsically safe apparatus.

Keep the separation distances between all non-intrinsically safe circuits and intrinsically safe circuits according to IEC/EN 60079-14.

Observe the compliance of the separation distances between two adjacent intrinsically safe circuits according to IEC/EN 60079-14.

## 7. Operation, Maintenance, Repair

Do not use a damaged or polluted device.

Do not repair, modify, or manipulate the device.

If there is a defect, always replace the device with an original device.

If you operate the device in safety-related applications, observe the requirements for functional safety. In case of operating in low demand mode, plan appropriate intervals for the proof test.

## 8. 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.

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.