

Dräger Polytron® 6100 EC WL Wireless transmitter for toxic gases

The Dräger Polytron® 6100 EC WL is a wireless transmitter for continuous monitoring of toxic gases and oxygen. The intrinsically safe and SIL2-rated transmitter features a completely wireless signal transmission and power supply. The internal battery pack allows the transmitter to operate continuously for up to 24 months. This makes the Polytron a flexible and cost efficient solution for plant expansions, upgrades or new installations.



Benefits

Wireless reduces your efforts

Is the financial, technical or temporal effort of wiring a transmitter too high? Then the Dräger Polytron 6100 EC WL is the ideal addition to your fixed gas detection system. The challenging measuring tasks in the loading or revision areas really play to the advantages of the wireless gas detection transmitter. The Polytron 6100 EC WL is also well applied in the plant areas, which require mobile solutions, are difficult to reach or do not provide any infrastructure. Wireless detection reduces your planning effort required whilst retaining the same safety levels provided by a wired transmitter. The Polytron 6100 EC WL is SIL2-capable.

Choose your radio standard: ISA100 Wireless™ or WirelessHART®

You can choose between two radio standards depending on your needs. The industrial radio standard ISA100 Wireless™ ensures the safe transmission of the measured values. Together with the PROFIsafe protocol, it ensures the SIL2 capability of your system. The widely used, secure wireless standard WirelessHART® offers you the flexibility to easily integrate the transmitters into an existing WirelessHART® network, if one exists.

No compromises with the proven Dräger sensor technology

The Polytron 6100 EC WL uses the proven Dräger sensors optimised for industrial applications. They cover a spectrum of 140 different sample gases in a temperature range of up to -40 °C to +65 °C.

Access to the transmitter via Bluetooth®

The PolySoft software solution allows you to access the Polytron 6100 EC WL conveniently via Bluetooth® interface - using an explosion-proof tablet, laptop or desktop PC in the workshop. The transmitter data, measured values and the event memory can be easily transferred in a data record and evaluated if required. All settings and maintenance work can also be carried out via this. There are various accessories for the Polytron 6100 EC WL - from pipe mounting sets to weather protection. This results in a wide range of installation and application options. The integrated LEDs, visible from a distance, indicate the status of the life signal, fault, alarm and Bluetooth® interface. In this way, you can see the status of the device at any time.

Cost-effective in maintenance

The intrinsically safe design of the Wireless Gas Detector allows all maintenance work, such as battery replacement or sensor replacement, to be carried out in the hazardous area. You do not need to take any additional measures for this, such as declassifying the area. This saves you time and allows you to carry out maintenance work even more safely. The pre-calibrated DrägerSensors ensure quick commissioning and offer a wide range of measurable gases and vapours.

Benefits

External power supply possible

With the Polytron 6100 EC WL you can also cover applications in long-term operation without a battery. For this purpose, the wireless transmitter is supplied with 24 volts - directly in the safe area and via a suitable supply isolator in the hazardous area. You can continue to do without a measuring line to the control unit.

Transmission of signals even over long distances

You can realise transmission distances of up to 500 metres with the Polytron 6100 EC WL. The additional repeater function of the transmitter allows the radio signal to be forwarded. This allows you to bridge even greater distances with additional wireless transmitters or create alternative communication paths (redundancies). If you do not need additional gas detection points in the application, the Polytron Repeater is used. Operation and installation are identical to the Polytron 6100 EC WL.

System Components



D-6806-2016

Dräger REGARD® 7000

The Dräger REGARD® 7000 is a modular and therefore highly expandable control system for monitoring various gases and vapours. Suitable for gas warning systems with various levels of complexity and numbers of transmitters, the Dräger REGARD® 7000 also features exceptional reliability and efficiency. An additional benefit is the backward compatibility with the REGARD®.

Accessories



D-8929-2019

Antenna for remote applications

The external antenna allows the wireless Dräger Polytron® gas detectors to be in areas where radio transmission is restricted, for example inside buildings or metal structures.



D-7575-2019

Battery pack

The battery pack is required for grid-independent battery operation.

Accessories



Battery box

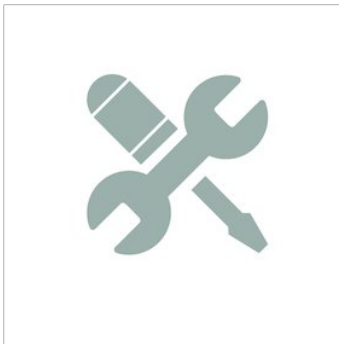
The battery box enables safe transport and replacement of the battery pack in hazardous areas.



Dräger Polytron Repeater

The Dräger Polytron Repeater relays communication from other field devices in the wireless network. This means that alternative communication paths may be established, or the range of the wireless network extended. This device can be battery-powered (five years' operation) or connected to mains power.

Services



Product Service

Our product service provides support with different service packages – in our workshops or directly on your premises. Care, maintenance and servicing are crucial for safety and reliability – but careful maintenance and care are a must, even when it comes to commercial considerations. Preventive checks, ongoing care and use of original replacement parts improve the longevity of your investment.

Services



D-2335-2016

Training

The Dräger Academy has shared its solid, practical knowledge for over 40 years. We hold more than 2,400 training courses each year, on a range of over 600 topics, with more than 110 authorised trainers. We equip your staff with practical knowledge and ensure that what they learn can be applied effectively, both day-to-day and, more importantly, whenever critical situations occur. We will be pleased to develop a customised training programme for you.

Related Products



D-21374-2020

GS01 (wireless)

The GS01 is a wireless infrared gas transmitter for continuous monitoring of flammable hydrocarbon gases and vapours in the oil and gas industry. The intrinsically safe and SIL-rated transmitter features completely wireless signal transmission and power supply. This makes the GS01 a flexible and cost efficient solution for plant expansions, upgrades, and new greenfield projects.



D-2847-2018

Dräger Polytron® 8100 EC

The Polytron® 8100 EC is Dräger's top of the line explosion-proof transmitter for the detection of toxic gases or oxygen. It uses a high performance plug and play electrochemical DrägerSensor to detect a specific gas. Besides having a 3-wire 4 to 20 mA analog output with relays, it also offers HART®, Modbus and Fieldbus protocol, making it compatible with most control systems.

Related Products



D-156-2016

Dräger Polytron® 5100 EC

The Dräger Polytron® 5100 EC is a cost-effective explosion-proof transmitter for the detection of toxic gases or oxygen in standard applications. It uses a high performance plug-and-play electrochemical DrägerSensor® to detect a specific gas. A 2- or 3-wire 4 to 20 mA output with relays makes it compatible with most control systems.



ST-3812-2003

Dräger Polytron® 7000

The Dräger Polytron® 7000 gas detector can satisfy many toxic and oxygen gas measurement applications on a single platform. It meets compliance requirements as well as the high specification requirements of customised solutions.

Technical Data

Dräger Polytron® 6100 EC WL

Gases and measuring range	Toxic gases and Oxygen, see sensor data sheet. All DrägerSensors are supported.
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Communication

Bluetooth® (for operation and service purposes)	Range 15 m
Measured value transmission (process interface), protocol	ISA100 Wireless™ oder WirelessHART®
Type	IEEE802.15.4 in 2.4 GHz-ISM-Band
Range	500 m in free area

Electrical data

Battery type	Lithium thionyl chloride (Battery pack with 4 D cells)
Battery life time	Depending on operating conditions; max. 24 months
Wired power supply	2-wire shielded cable, 24-12 AWG / 0,2 – 2,5 mm ²
Operating voltage	14 to 30 V

Housing

Housing material	Stainless steel 316
Protection class	IP66/67
Dimensions	320 x 150 x 170 mm (with 2 dBi aerial)
Weight transmitter	Ca. 3.2 kg (7.0 lb)
Weight battery pack	Ca. 0.5 kg (1.1 lb)
Cable gland	M25 x 1.5

Environmental conditions

Temperature	-40 to +65 °C (-40 to +149 °F)
Humidity	0 to 100 % r.h., non-condensing
Pressure	700 to 1,300 hPa (20.7 to 38.4 in Hg)

Approvals

ATEX / IECEx	I M1 / II 1GD Ex ia I Ma, Ex ia IIC T4 Ga, Ex ia IIC T135 °C Da, -40 °C ≤ Ta ≤ +65 °C
CE-Directive	ATEX directive 2014/34/EU RED directive 2014/53/EU RoHS directive 2011/65/EU
Safety Integrity Level	SIL2

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The ISA100 Wireless™ is a registered trademark of ISA100 Wireless Compliance Institute.

Wireless HART® is a registered trademark of FieldComm Group™.

Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

Ordering Information

Dräger Polytron® 6100 EC WL WirelessHART®	37 14 791
Dräger Polytron® 6100 EC WL ISA100 WirelessTM	37 14 792
Dräger Polytron® Repeater WirelessHART®	37 14 789
Dräger Polytron® Repeater ISA100 WirelessTM	37 14 790
Dräger Polytron® 6100 Battery Box	37 02 223
Dräger Polytron® 6100 Battery Pack, 1 pc	37 02 176
Dräger Polytron® 6100 Battery Pack, 6 pc	37 02 177
Weather protection kit Dräger Polytron® 5/6/8xxx	37 02 198
Tablet EX80	37 03 254
Dräger Polytron® 6100 Premium Antenna, 2 dBi	83 27 813
Dräger Polytron® 6100 Standard Antenna, 2 dBi	37 02 169
Dräger Polytron® 6100 Remote Antenna, 2 dBi	37 02 244
Antenna cable, 5 m	AL 20 719
Antenna cable, 10 m	AL 20 720
Antenna cable, 20 m	AL 20 721
Pole Mount Kit	45 44 198
Calibration adapter V	68 10 536
Dräger PolySoft licence (1 year free updates)	83 28 600
Dräger PolySoft licence (subscription lifelong updates)	83 28 601
Magnetic Wand	45 44 101

Notes

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