

# PolyGard® Portable Gas Measuring Device Series ADL-X1-11XX incl. Datalogger for Toxic Gases and Oxygen

## DESCRIPTION

Portable gas measuring device with integrated datalogger for the continuous monitoring of the ambient air to detect the presence of toxic gases and vapours, as well as of oxygen. Up to 16.000 measuring values are recorded in the datalogger.

## APPLICATION

For the detection and recording of toxic gases and vapours, as well as of oxygen in a wide range of commercial applications.



Standard housing

## FEATURES

- Suitable for toxic gases and vapours, as well as for oxygen
- Measuring cycle adjustable from 2 sec. to 5 hours
- Datalogger for 16.000 measuring values
- Data readout via the USB port
- Internal rechargeable battery: Lifetime according to sensor type
- Certified calibration

## SPECIFICATIONS

### Electrical

Power supply	Rechargeable battery; 6 VDC
Power consumption	Ca. 30 mA

### Gases

Internal sensor	Toxic gases, etc. (see Ordering Information)
Sensor data	See corresponding datasheet of ADT transmitter

### Output signal

Measuring signal sensor	0 – 5 VDC proportional
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<b>Data output</b>	USB port
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### Visualisation

Display (optional without display)	LCD display
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### Battery data (standard type)

Tension	6 VDC
Capacity	2,8 Ah
Supply duration	ca. 90 h with fully charged battery
Deep discharge voltage	5,5 V
Type	Lead battery

### Ambient conditions

Humidity	15 – 90 % RH non-condensing
Working temperature	-10 °C to + 50 °C (14 °F to 122 °F)
Storage temperature	5 °C to 30 °C (86 °F to 122 °F)
Pressure range	Atmospheric ± 10 %

### Physical characteristics

Enclosure plastic version type E	Polycarbonate
Flammability	UL 94 V2
Enclosure colour	RAL 7032 (light grey)
Dimensions (W x H x D)	97 x 130 x 81 mm (3.82 x 5.12 x 3.19 inch.)
Weight	Approx. 0.95 kg (2 lbs.)

### Certificate

VDI 2053 German air treatment systems for car parks and tunnels

### Guidelines

EMC Directive 2004/108//EEC  
CE

### Warranty

One year on material (without sensor)

### Optional accessories

#### Charging device ADL-X1-Charger

Supply voltage	230 VACV/ 50 Hz
Output voltage	2, 6, 12, 24 VDC (Autom. adaptation to battery)
Charging characteristics	IU
Trickle charge	Approx. 20 mA
Capacity range	2,4 – 24 Ah
Charge current	700 mA at 6 V

#### High power battery ADL-X1-Accu

On request

#### Software and USB adapter ADL-X1-Soft

Software	MINISOFT
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## ORDERING INFORMATION

ADL-X1-11XX-X-XXXX

### Ausführung

1XXX	Factory calibration 0 - 1 ppm <sup>10, 27</sup>
2XXX	Factory calibration 0 - 5 ppm <sup>16, 21</sup>
3XXX	Factory calibration 0 - 10 ppm <sup>11, 14, 18</sup>
4XXX	Factory calibration 0 - 20 ppm <sup>6, 7, 15, 23, 25</sup>
6XXX	Factory calibration 0 - 50 ppm <sup>17, 26</sup>
RXXX	Factory calibration 5 - 50 ppm
7XXX	Factory calibration 0 - 100 ppm <sup>12</sup>
BXXX	Factory calibration 0 - 300 ppm <sup>1, 3, 5</sup>
EXXX	Factory calibration 0 - 1000 ppm <sup>3, 13</sup>
FXXX	Factory calibration 0 - 2000 ppm <sup>2, 20, 22</sup>
PXXX	Factory calibration 20 - 2000 ppm <sup>19</sup>
GXXX	Factory calibration 450 - 2000 ppm <sup>8</sup>
VXXX	Factory calibration 0 - 3.5 vol % <sup>4</sup>
IXXX	Factory calibration 0 - 5 vol % <sup>9</sup>
KXXX	Factory calibration 0 - 25 vol % <sup>24</sup>
X1XX	Rechargeable lead battery 6V, 2.8 AH
X2XX	Rechargeable battery for semi-conductor sensor
X3XX	Rechargeable battery for IR sensor
XX2X	Fastening eye
XXX1	With display
XXX2	Without display

### Enclosure

E	Plastic (standard)
H	Plastic (for infrared sensors)

### Gases

<sup>1</sup> 01-1110	Carbon monoxide	CO	0 - 300 ppm
<sup>2</sup> 51-1110	Carbon monoxide	CO	0 - 2000 ppm
<sup>3</sup> 51-1120	Ammonia (EI-chem.)	NH <sub>3</sub>	0 - 300/1000 ppm
<sup>4</sup> D1-1120	Ammonia (IR)	NH <sub>3</sub>	0 - 3,5 vol%
<sup>5</sup> 31-1120	Ammonia (Semi-cond.)	NH <sub>3</sub>	0 - 300 ppm
<sup>6</sup> 21-1129	Nitrogen oxide	NO	0 - 20 ppm
<sup>7</sup> 21-1130	Nitrogen dioxide	NO <sub>2</sub>	0 - 20 ppm
<sup>8</sup> C1-1160	VOC (Semi-cond)	VOC	0 - 4000ppm
<sup>9</sup> D1-1164	Carbon dioxide (IR)	CO <sub>2</sub>	0 - 5 vol%
<sup>10</sup> 61-1181	Chlorine dioxide	ClO <sub>2</sub>	0 - 1 ppm
<sup>11</sup> 61-1182	Hydrogen fluoride	HF	0 - 10 ppm
<sup>12</sup> 51-1183	Hydrogen cyanide	HCN	0 - 100 ppm
<sup>13</sup> D1-1184	Sulphur hexafluoride (IR)	SF <sub>6</sub>	0 - 1000 ppm
<sup>14</sup> 51-1185	Formaldehyde	CH <sub>2</sub> O	0 - 10 ppm
<sup>15</sup> 51-1186	Hydrogen chloride	HCL	0 - 20 ppm
<sup>16</sup> 51-1187	Phosphine	PH <sub>3</sub>	0 - 5 ppm
<sup>17</sup> 51-1188	Silane	SiH <sub>4</sub>	0 - 50 ppm
<sup>18</sup> 51-1189	Ethylene (EI-chem.)	C <sub>2</sub> H <sub>4</sub>	0 - 10 ppm
<sup>19</sup> 41-1189	Ethylene (Semi-cond)	C <sub>2</sub> H <sub>4</sub>	20 - 2000 ppm
<sup>20</sup> D1-1189	Ethylene (IR)	C <sub>2</sub> H <sub>4</sub>	0 - 2000 ppm
<sup>21</sup> 51-1190	Ozone	O <sub>3</sub>	0 - 5 ppm
<sup>22</sup> D1-1192	Nitrous oxide (IR)	N <sub>2</sub> O	0 - 2000 ppm
<sup>23</sup> 51-1193	Chlorine	CL <sub>2</sub>	0 - 20 ppm
<sup>24</sup> 91-1195	Oxygen	O <sub>2</sub>	0 - 25 % vol
<sup>25</sup> 21-1196	Sulphur dioxide	SO <sub>2</sub>	0 - 20 ppm
<sup>26</sup> 51-1197	Hydrogen sulphide	H <sub>2</sub> S	0 - 50 ppm
<sup>27</sup> 61-1198	Fluorine	F <sub>2</sub>	0 - 1 ppm

**Example:** Datalogger ADL for carbon monoxide CO, 0 - 300 ppm, with display

**Ordering No.:**  
ADL-01-1110-E-B101