Gas concentrations in the air

03/2023 • We reserve the right to make technical changes

Digital carbon dioxide sensor FYAD 00 CO2 with grip, integrated atmospheric pressure sensor for automatic atmospheric pressure compensation, and ALMEMO[®] D6 plug



General features and accessories. ALMEMO® D6 sensors: see page 01.08

Technical Data

- All sensor characteristics and adjustment data are stored in the CO₂ sensor itself.
- The unique automatic calibration procedure (without fresh air intake) automatically compensates any natural ageing effects.
- The sensor is very well protected against the effects of pollution by means of replaceable PTFE filter caps. Long-term stability is outstanding.
- · Automatic atmospheric pressure compensation is provided for pressure-dependent CO₂ concentrations by means of a digital atmospheric pressure sensor integrated in the grip.
- The relevant ambient parameter, atmospheric pressure, is measured using the same sensor.
- Long-term measuring operations can be performed with an ALMEMO[®] data logger in sleep mode; this applies only to current device types with sleep delay (180 seconds).
- 2 primary measuring channels (real measurable variables) CO₂ concentration and atmospheric pressure
- Freely selectable measurable variables Two measuring channels are programmed (at our factory). CO₂ value concentration. average (ppm), Atmospheric AP, pressure (mbar, p). Alternatively a further variable can be selected. CO, concentration, (ppm) current value The configuration is performed on the ALMEMO® V7 measuring instrument or directly on the PC using the USB adapter cable ZA1919AKUV (see chapter "ALMEMO® Network technology").

Digital carbon dioxide (CO2) sensor (including A/D converter)		
Measuring principle	non -dispersive infrared (NDIR) technology	
Sensor	2-beam infrared measuring cell	
Measuring range FYAD00CO2B10 FYAD00CO2B05	0 to 10,000 ppm 0 to 5,000 ppm	
Accuracy FYAD 00-CO2B10 FYAD 00-CO2B05	±(100 ppm +5 % of measured value) ±(50 ppm +3 % of measured value)	
Nominal conditions	+25 °C, 1013 mbar	
Temperature dependence	typical 2 ppm CO2 / K in range 0 to +50 °C	
Response time t63	105 s for averaged output value, 60 s for instantaneous value	
Operative range	-40 to +60 °C / 0 to 95 % RH (non-condensing)	
Measuring interval	Moving average 165 seconds (= 11 current values of 15 sec.)	

Sensor connectorPlug connectionGripwith socket, integrated electronicsDimensions:Diameter 20 mm Total length including the sensor 245 mmALMEMO® connecting cable fitted cable, 2 meters With ALMEMO® D6 plugDigital atmospheric pressure sensor (integrated in grip)Measuring range700 to 1100 mbarAccuracy±2.5 mbar (at 23 °C ±5 K)ALMEMO® D6 plugRefresh rate1 second for all four channelsSupply voltage7.5 to 13 VDCCurrent construction20 m A	Filter cap	PTFE Diameter 18 mm Length appr. 41 mm	
Gripwith socket, integrated electronicsDimensions:Diameter 20 mm Total length including the sensor 245 mmALMEMO® connecting cable fitted cable, 2 meters With ALMEMO® D6 plugDigital atmospheric pressure sensor (integrated in grip)Measuring range700 to 1100 mbarAccuracy±2.5 mbar (at 23 °C ±5 K)ALMEMO® D6 plugRefresh rate1 second for all four channelsSupply voltage7.5 to 13 VDCCurrent constraints20 m A	Sensor connector	Plug connection	
Dimensions:Diameter 20 mm Total length including the sensor 245 mmALMEMO* connecting cable fitted cable, 2 meters With ALMEMO* D6 plugDigital atmospheric pressure sensor (integrated in grip)Measuring range700 to 1100 mbarAccuracy±2.5 mbar (at 23 °C ±5 K)ALMEMO* D6 plugRefresh rate1 second for all four channelsSupply voltage7.5 to 13 VDC	Grip	with socket, integrated electronics	
ALMEMO® connecting cable fitted cable, 2 meters With ALMEMO® D6 plug Digital atmospheric pressure sensor (integrated in grip) Measuring range 700 to 1100 mbar Accuracy ±2.5 mbar (at 23 °C ±5 K) ALMEMO® D6 plug Refresh rate 1 second for all four channels Supply voltage 7.5 to 13 VDC	Dimensions:	Diameter 20 mm Total length including the sensor 245 mm	
Digital atmospheric pressure sensor (integrated in grip)Measuring range700 to 1100 mbarAccuracy±2.5 mbar (at 23 °C ±5 K)ALMEMO® D6 plugRefresh rate1 second for all four channelsSupply voltage7.5 to 13 VDCCurrent as grammation20 m A	ALMEMO [®] connecting cal	ble fitted cable, 2 meters With ALMEMO® D6 plug	
Measuring range700 to 1100 mbarAccuracy±2.5 mbar (at 23 °C ±5 K)ALMEMO® D6 plugRefresh rateRefresh rate1 second for all four channelsSupply voltage7.5 to 13 VDCCurrent component of the product of the	Digital atmospheric pressure sensor (integrated in grip)		
Accuracy±2.5 mbar (at 23 °C ±5 K)ALMEMO® D6 plugRefresh rate1 second for all four channelsSupply voltage7.5 to 13 VDCCurrent commution20 m A	Measuring range	700 to 1100 mbar	
ALMEMO® D6 plug Refresh rate 1 second for all four channels Supply voltage 7.5 to 13 VDC Current consumption 20 m A	Accuracy	±2.5 mbar (at 23 °C ±5 K)	
Refresh rate1 second for all four channelsSupply voltage7.5 to 13 VDCCurrent concurrent in20 m A	ALMEMO [®] D6 plug		
Supply voltage 7.5 to 13 VDC	Refresh rate	1 second for all four channels	
Comment of a manufacture 20 mg A	Supply voltage	7.5 to 13 VDC	
Current consumption 50 mA	Current consumption	30 mA	

Type (including factory test certificate)

Digital CO₂ sensor with grip, fitted cable with ALMEMO® D6 plug, and integrated digital atmospheric pressure sensor

幸託有限公司

XIN TOP CORPORATION

Measuring range 10 000 ppm

Measuring range 5 000 ppm

FYAD00CO2B10

ÖKD calibration KY96xx carbon dioxide concentration for digital sensor (see chapter Calibration certificates)



TEL : (02)2598-1199 E-mail : info@xintop.com FAX : (02)2596-2331 Website : www.xintop.com

Order no.

FYAD00CO2B10

FYAD00CO2B05