



Features

- Measuring ranges: 600...1100 hPa or 800...1100 hPa
- Accuracy according international standards (NIST):
±0.5 hPa (600...1100 hPa)
±0.3 hPa (800...1100 hPa)
- Pressure fitting over 1/8" fitting
- Power supply: 9.5...28 V_{DC}
- Current consumption: 3 mA

General



The analogue pressure sensor 8128 is a very accurate and versatile instrument, it suits ideally for applications in non air-conditioned measuring stations or data loggers. The sensor has a very low current consumption and is suitable for pressure measurements in clean and dry air or other non-condensing gases.

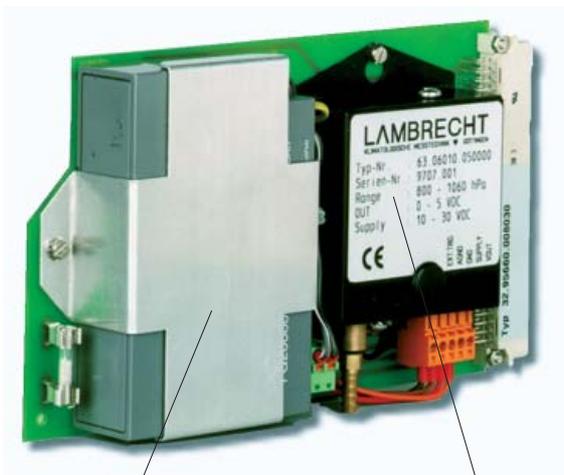
The used thermally stable, capacitive ceramic sensor is encapsulated in glass and connected to a high-quality electronic measuring device which allows for an exact signal processing in consideration of environmental influences. The sensor has an excellent coefficient of thermal expansion and a very low mechanical hysteresis; therefore a high temperature- and long term stability is achieved.



Figure 2: barometer in protective housing

Application

- As outdoor air pressure sensor for connection to an automatic weather station (figure 2).
- As air pressure module for the optional extension of the data acquisition system SYNMET (figure 1).

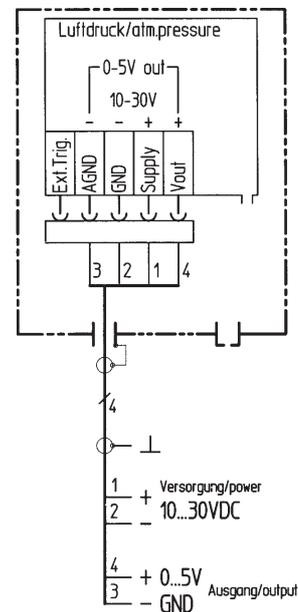


USV accumulator of the SYNMET system

Sensor for air pressure 8128

Figure 1: SYNMET barometer module

Wiring diagram



Ader core	AWG-Farbcode	AWG color code		
1	schwarz	sw	black	blk
2	braun	br	brown	brn
3	rot	rt	red	red
4	orange	or	orange	ora



Technical data

General

Pressure media:	clean, dry air or other non-condensing gases	
Measuring range:	600...1100 hPa	800...1100 hPa
Operating temp. range:	-40...+60 °C	
Humidity range:	non-condensing	
Power supply:	9.5...28 V _{DC}	
Output voltage:	0...5 V _{DC}	
Current consumption:	3 mA	
Resolution:	0.01 hPa	
Long term stability:	0.1 hPa/year	

Accuracy

Pressure range	600...1100 hPa	800...1100 hPa
temperature	accuracy	accuracy
at 20 °C	±0.5 hPa	±0.3 hPa
0...40 °C	±1.0 hPa	±0.6 hPa
-20...50 °C	±1.5 hPa	±1.0 hPa
-40...60 °C	±2.0 hPa	±1.5 hPa

Mechanics

Pressure fitting:	1/8" fitting
Maximum pressure:	1500 hPa
Electrical connector:	removable connector for 5 wires (AWG 28...16)
Outdoor housing:	aluminium diecast
Type of protection:	IP43 (in outdoor housing)
Weight:	135 g (air pressure module) 1600 g (in outdoor housing)
Dimensions:	see drawing

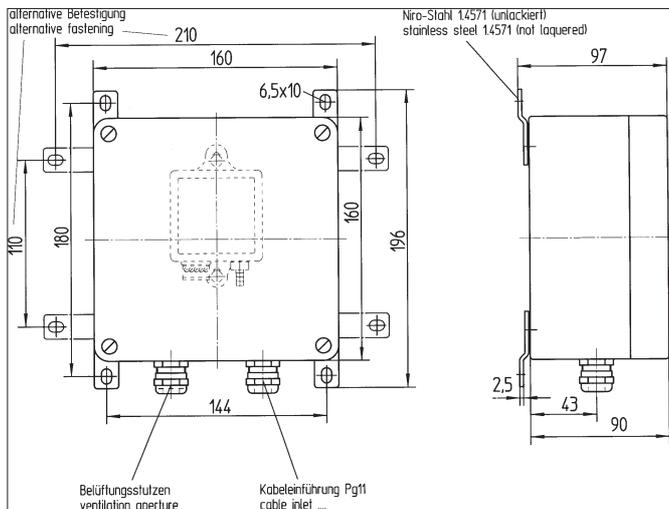
Please note the loss of warranty and non-liability by unauthorised manipulation of the system. You need a written permission from LAMBRECHT meteo GmbH for changes of system components. These activities must be operated by a qualified technician.

The warranty does not cover:

1. Mechanical damages caused by external impacts (e. g. icefall, rockfall, vandalism).
2. Impacts or damages caused by over-voltages or electromagnetic fields which are beyond the standards and specifications in the technical data.
3. Damages caused by improper handling, e. g. by wrong tools, incorrect installation, incorrect electrical installation (false polarity) etc.
4. Damages which are caused by using the device beyond the specified operation conditions.

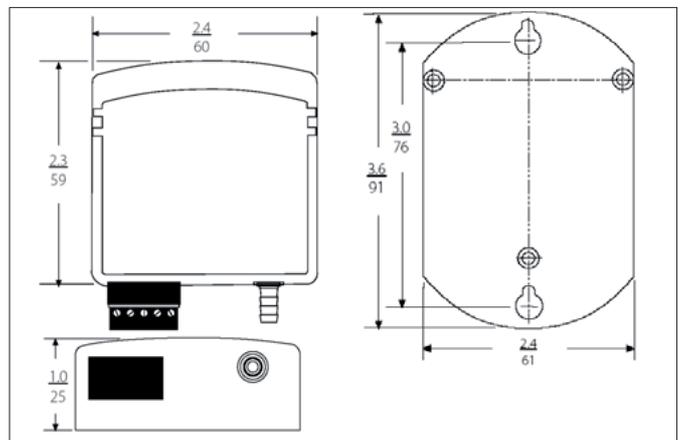
Dimensional drawing

Air pressure module in outdoor housing (dimensions in mm)



Dimensional drawing

Air pressure module (dimensions in inch and mm)



Ordering information

Air pressure sensor in outdoor housing
600...1100 hPa
Ident-no. 00.08128.085 072

Air pressure sensor module
600...1100 hPa
Ident-no. 63.06010.090 100

Air pressure sensor module for SYNMET IND...(installation kit)
600...1100 hPa
Ident-no. 32.95660.008 020

Air pressure sensor module for SYNMET / LOG...(installation kit)
600...1100 hPa
Ident-no. 32.95665.020 010

Air pressure sensor in outdoor housing
800...1100 hPa
Ident-no. 00.08128.095 072

Air pressure sensor module
800...1100 hPa
Ident-no. 63.06010.090 000

Air pressure sensor module for SYNMET IND...(installation kit)
800...1100 hPa
Ident-no. 32.95660.008 040

Air pressure sensor module for SYNMET / LOG...(installation kit)
800...1100 hPa
Ident-no. 32.95665.020 030

Subject to change without notice.

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