


Description : Integral Measuring Concept: Sampling and conditioning of measured gas as well as transmitters and evaluation combined in one wall mounted housing.

#### Features

- Number of Transmitters :
  - Number: 1
  - freely selectable out of ExTox-Series Sens(-D) and ExSens(-D)
- Signal Processing : integrated Control Unit ET-1DA with 4-20 mA output (see Data Sheet of Article-No. 305002)
- Sampling of Measured Gas :
  - Gas suction pump
  - Electronic flow rate monitoring
  - 2 screw-in glands for measured gas inlet / gas outlet at the bottom of the housing
- Preparation of Measured Gas :
  - Hosing: PE/PP
  - Dust filter
  - Flame arrestor  IIG IIA (as option)
- Operation Temperature : -10 °C to +40 °C  
(Limitations due to used transmitters have to be considered)

#### Mechanical Features

- Dimensions : 760 mm x 600 mm x 350 mm (Height x Width x Depth)
- Installation : Wall Mounted Housing with door, mounting plate, foamed-in door sealing, 2 cam locks
- Material : steel, powder-coated in textured RAL 7035
- Climatisation : 2 fans for housing, rotary speed monitored
- Storage Temperature : -25 °C to +60 °C  
(Limitations due to used transmitters have to be considered)

#### Electrical Features

- Power Supply :
  - 230 V AC
  - Power supply 230 V AC / 24 V DC, 120 W integrated
- Cable Gland : At the bottom of the housing
  - 1 x M20 x 1.5 (diameter of cable 7-13 mm)
  - 10 x M16 x 1.5 (diameter of cable 5-10 mm)
- Terminal Assignment : Double stock clamps for
  - Power supply (fused twice)
  - 230 V for external devices, for example horns, flashing lights

# Integral Measuring Concept IMC-1DA

Article-No.: 420103

## Interior View

Measured gas preparation:  
(here: manual condensate trap)

Flow rate monitoring, dust filter

Power supply, clamps,  
power socket 230 V AC

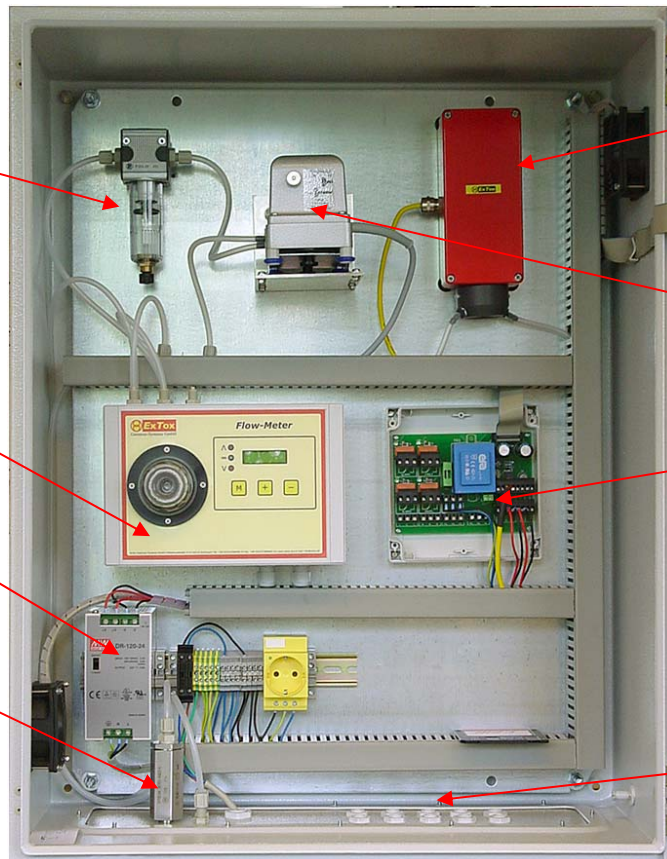
Gas inlet / outlet,  
condensate outlet,  
flame arrestor

Gas transmitter


Gas suction pump

Connection PCB for  
transmitter and digital  
inputs, relays and  
analogue outputs

Cable glands



## Options

- Hydrophobic dehumidification of measured gas:  
Dehumidification of gas is done via a chemical exchange process.  
(We recommend application when using transmitters based on the measuring principle IR-Absorption and/or high humidity content in measured gas.)
- Condensate trap including hose pump:  
Draining is automatically done by means of the hose pump.
- Condensate trap:  
Draining of the trap has to be done manually  
(only to be used for applications with low quantities of condensate and regular maintenance)
- Flame arrestor  IIG IIA:  
When sampling in hazardous areas the gas flow inside the IMC is decoupled of the monitored process as far as the danger of explosion is concerned. The flame arrestor is connected previous to the measured gas inlet. When returning the measured gas into the process another flame arrestor at the measured gas outlet is necessary.
- Heating for enclosure 100 W with thermostat control + 5 to +30 °C:  
Necessary for very low temperatures at the place of application. Formation of condensate inside the housing is avoided when installing the IMC outside.

This Data Sheet is at the same time a type specific supplement  
to the Instruction Manual *ExTox Integral Measuring Concept IMC-1D Series*.

(Subject to technical changes)