

ATM420 touchscreen display for pressure monitoring

Datasheet ATM420

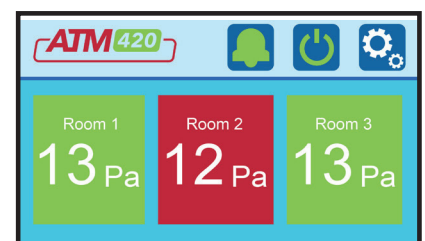
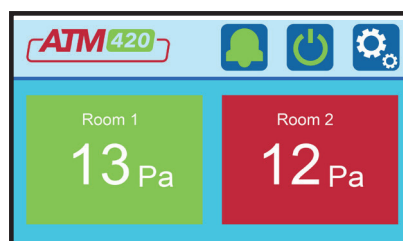
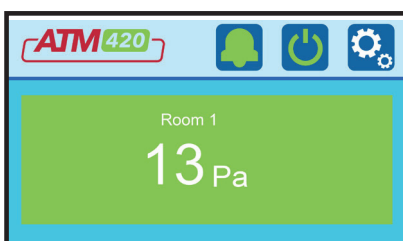
The ATM420 touchscreen display warns personnel in intensive care units, cleanrooms, operating rooms, isolation rooms and patient rooms by means of audiovisual alarms when the room pressure exceeds the set limit values for overpressure or underpressure.



The ATM420 display features a flush-mount bezel with an integrated mounting box, making it easy to install in walls made of double 12 mm drywall or single drywall with a wooden frame. The flush mounting ensures a sleek and professional finish.

Standard models are available for monitoring one, two, or three rooms. The status of each room is clearly indicated by background colors, so you can see at a glance whether the pressure conditions are within the set limits. If the set alarm limits are exceeded during the configurable delay time, an audible alarm (buzzer) is also activated.

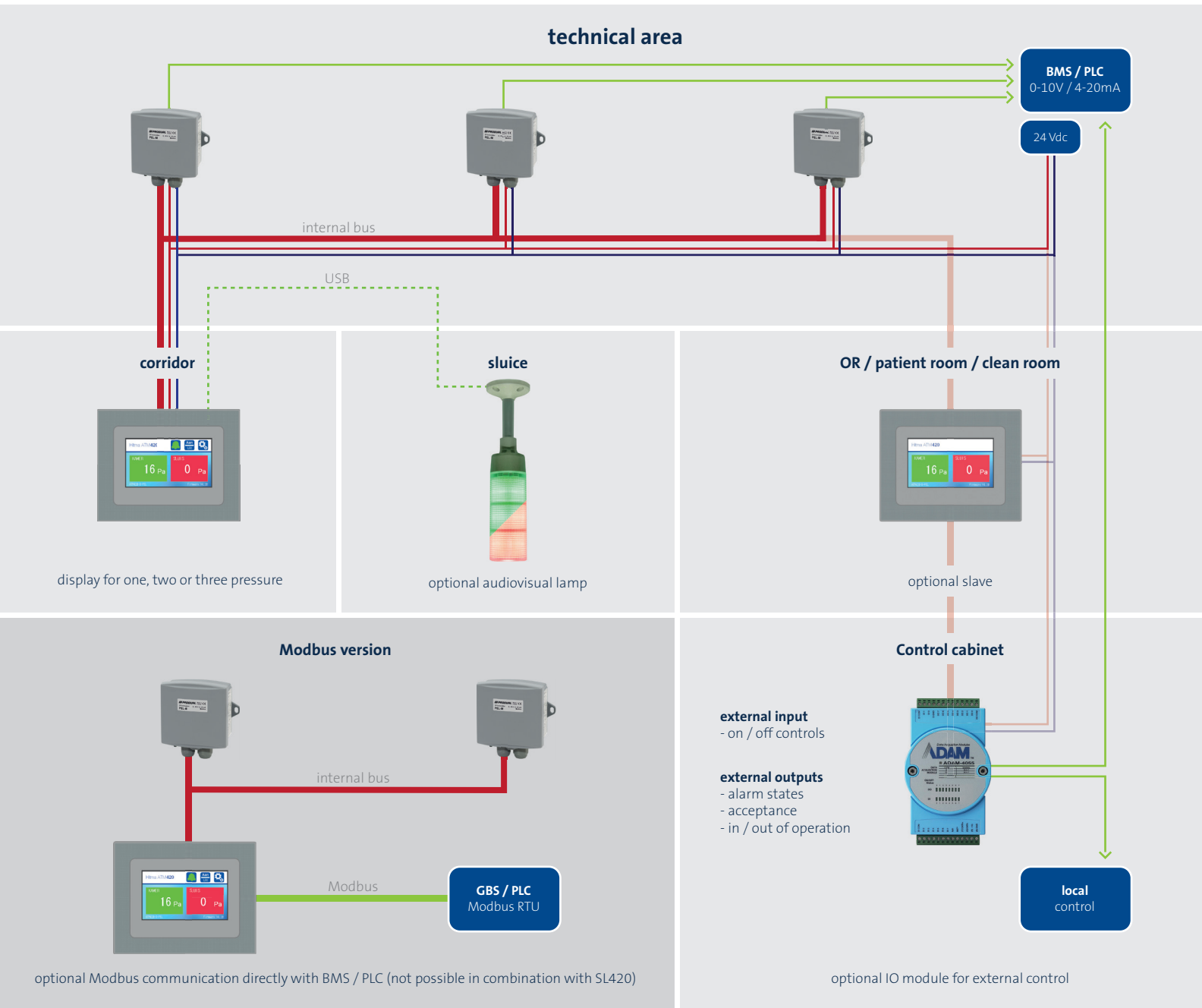
With the optional Modbus RTU output, not only the pressure measurements but also all alarm and status messages can be transmitted to a building management system (BMS). This allows the ATM420 to be easily integrated into existing building and process automation systems.



Standard packages and options of the ATM420

For monitoring overpressure or underpressure conditions, we offer complete standard packages for one, two, or three rooms. All measured values are clearly displayed on a single ATM420 touchscreen display.

A standard package includes the display, the necessary differential pressure transmitters, and a mounting box, providing you with a complete, ready-to-use system for accurate pressure monitoring.



Custom solutions

In addition to the standard configurations, we offer extensive customization options. These include connecting a second slave display, hiding selected measurement values, or displaying an interlock icon as soon as the interlock function is active. Additional features, such as fire alarm signaling and an emergency push button, can also be fully integrated. This allows the system to be optimally tailored to the needs and requirements of your application.

ATM420 configurations

Type

Scope / description



ATM420-Single

This package has been specially developed for reliable pressure monitoring in a single room. The system comes with one preconfigured differential pressure transmitter, making installation and commissioning quick and easy. The standard measurement range is -50 to +50 Pa, which is suitable for most applications, including isolation rooms, cleanrooms, and operating rooms.

1x ATM420 touchscreen display
1x Programmed pressure transmitter
1x Flush-mounted built-in box



ATM420-Dual

Designed to monitor two separate zones with one central touchscreen. It comes supplied with two preconfigured differential pressure transmitters. The standard measuring range is -50 to +50 Pa, which is suitable for most applications such as isolation rooms, cleanrooms, and operating rooms.

1x ATM420 touchscreen display
2x Programmed pressure transmitters
1x Flush-mounted built-in box



ATM420-Triple

The three-channel version has been specially developed for applications in which the pressure from three separate rooms must be displayed on a single ATM420 touchscreen display. This makes the system particularly well-suited for situations in which multiple rooms need to be monitored simultaneously from a single central interface. Examples include recovery rooms, intensive care units (ICUs), or isolation rooms with an adjacent restroom.

1x ATM420 touchscreen display
3x Programmed pressure transmitters
1x Flush-mounted built-in box

Model	ATM420-S-PEL	ATM420-D-PEL	ATM420-T-PEL
Amount of transmitters in set:	1 pieces	2 pieces	3 pieces
Flush-mounted built-in box:	Yes	Yes	Yes
Values in display:	1	2	3
Measuring range:	1x -50...+50 Pa	2x -50...+50 Pa	3x -50...+50 Pa
Accuracy:	±0.5 Pa ±1% of reading	±0.5 Pa ±1% of reading	±0.5 Pa ±1% of reading
Analog outputs (per transmitter):	4...20 mA and 0..10 Volt	4...20 mA and 0..10 Volt	4...20 mA and 0..10 Volt
Digital communication (option):	Extra Modbus RTU connector placed in Master ATM420		
Power supply (not included):	24 VDC	24 VDC	24 VDC
Power consumption:	Display 3,9W, transmitter 2W	Display 3,9W, transmitter 4W	Display 3,9W, transmitter 6W
Display type:	TFT 4,3" (95 x 53,9 mm)	TFT 4,3" (95 x 53,9 mm)	TFT 4,3" (95 x 53,9 mm)
Resolution:	80 x 272 pixels	80 x 272 pixels	80 x 272 pixels
Resistant to H ₂ O ₂ cleaning:	Yes	Yes	Yes
Firmware language:	English, Dutch, French, Italian, German, Others on request		
Safety of flammability of built-in box:	UL94-V0	UL94-V0	UL94-V0
Ambient conditions:	0 ... 50°C en 10 ... 90%RV	0 ... 50°C en 10 ... 90%RV	0 ... 50°C en 10 ... 90%RV

ATM420 configuration options

We offer various standard kits for the ATM420. Each kit consists of an ATM420 touchscreen display, a flush-mount bezel with a mounting box, and one, two, or three preconfigured and tested pressure transmitters. This provides you with a complete system that is ready for immediate installation.

The pressure transmitters are typically installed above the ceiling or in a utility room. The ATM420 communicates digitally with these transmitters, ensuring reliable and accurate data transmission. Additionally, analog outputs are available for integration with a PLC or building management system (BMS).

If desired, the pressure transmitters can be supplied with a calibration certificate. In addition to our standard sets, we also provide custom solutions and would be happy to prepare a customer-specific quote tailored to your needs and application.



ATM420-S-Slave
ATM420-D-Slave
ATM420-T-Slave

Slave display - single differential pressure measurement
 Slave display - double differential pressure measurement
 Slave display - triple differential pressure measurement



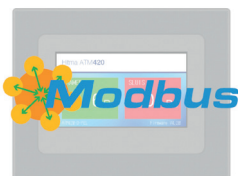
IO420

Input-output module
 2x input for external on-off control
 7x output alarm states, acceptance, in/out operation



SL420

Status lamp for ATM420
 Diameter 70mm, height 273mm
 Power supply: via USB
 Integrated buzzer
 Including 5 meters of cable



Modbus

Expansion Module including firmware adjustment,
 for connecting an ATM420 to Modbus RTU



C-58-25
C-58-50

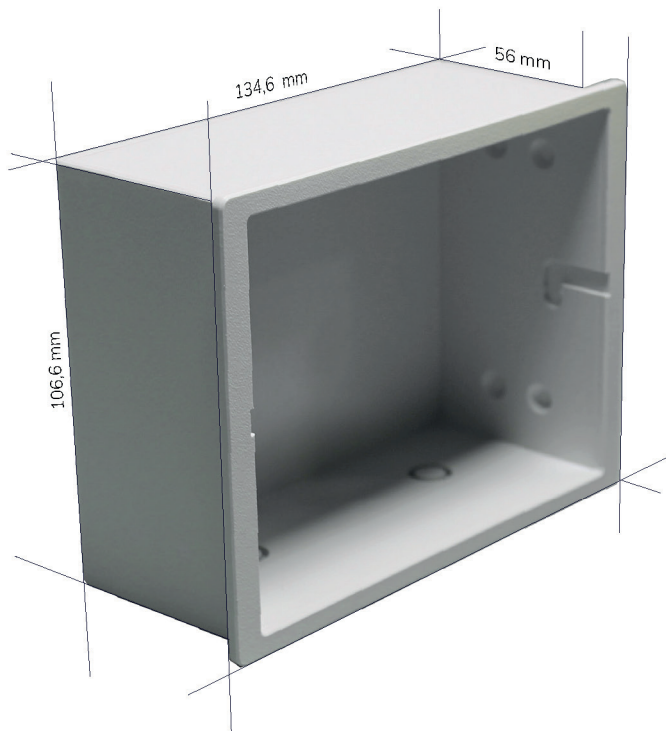
Crystal air hose on a roll of 25 meters
 Crystal air hose on a roll of 50 meters



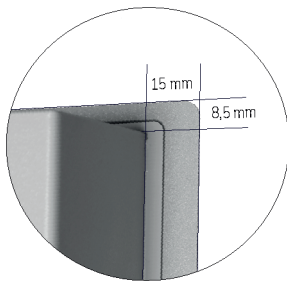
A-465
A-417A

White plastic pressure measuring point 114x70 mm
 Stainless steel pressure measuring point 114x70 mm

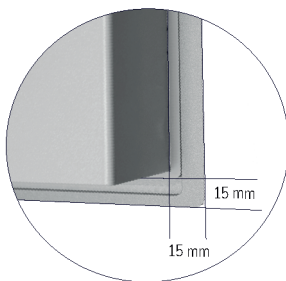
Dimensions ATM420



Back view: top

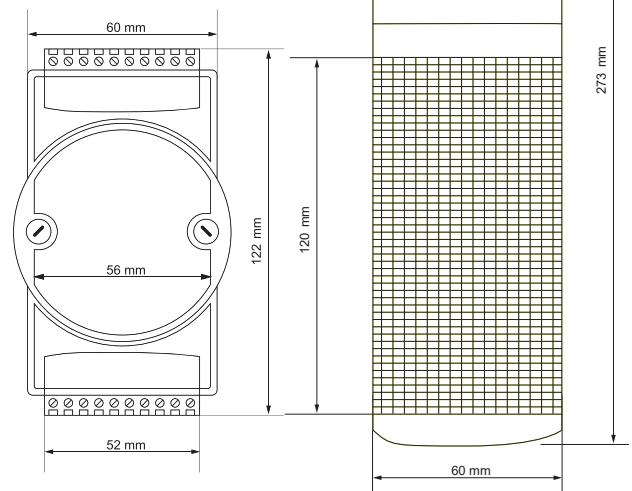
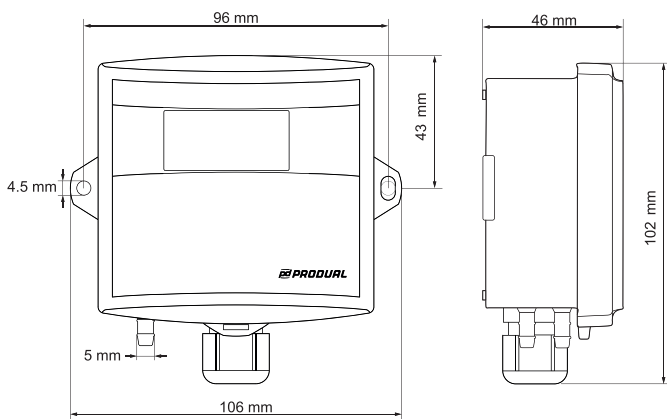


Back view: bottom



Back view:

Flush-mounted box + display:
 Top: 8,5 mm (display locked)
 Right: 15 mm
 Bottom: 15 mm
 Left: 15 mm



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