



ELECTRO-MATION

Messtechnik seit über 40 Jahren

ATM420 touchscreen display for pressure monitoring

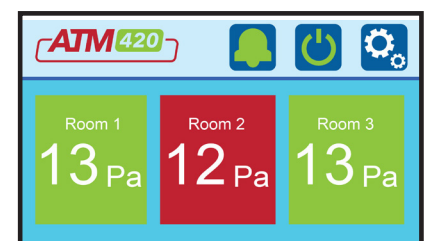
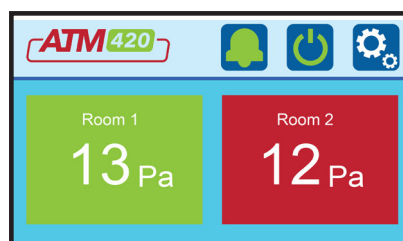
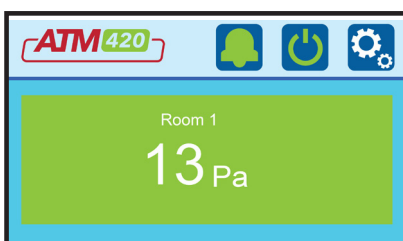
Datasheet ATM420

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 has a flush-mount bezel and integrated flush-mounting box for easy installation in walls of double 12 mm plaster or single plaster with a wooden frame. There are standard sets for monitoring one, two or three rooms, where the background color indicates the status per room. If the adjustable delay is exceeded, the buzzer can also be activated.

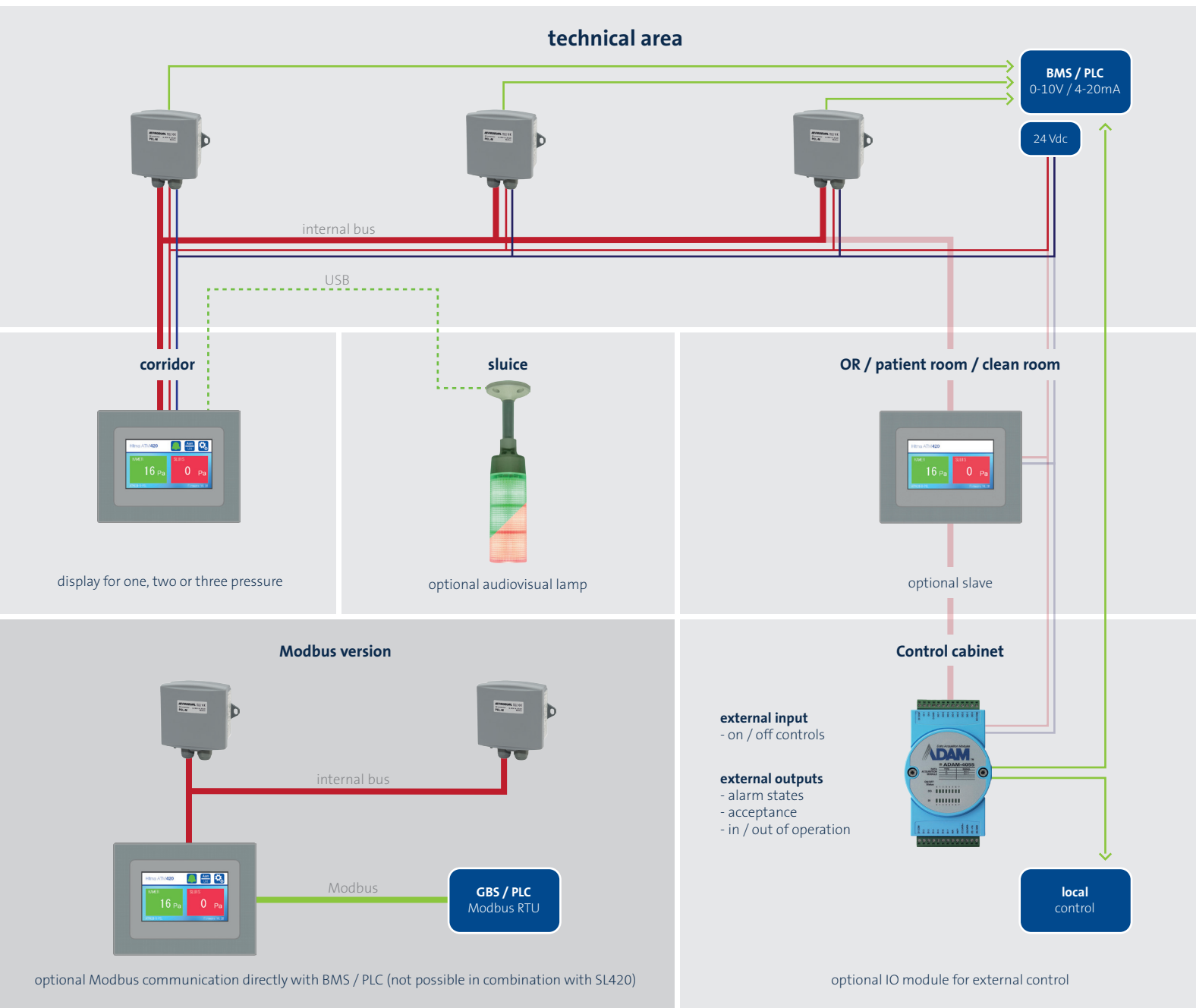
Optionally, there is now a status lamp that can show the status of the display in another room. If it is also desired to see the measured values on a second location, a slave display is a good option. With the optional Modbus RTU output it is possible to communicate all statuses to a building management system (BMS) in addition to the measured values.



Standard packages and options of the ATM420

There is a standard package for overpressure or underpressure monitoring for a single room and a package for monitoring a room and an air lock on one display.

Our standard options include a slave-display for visualization on a second location, a signal lamp for extra visual alarm and an IO-unit for connecting with external systems.



Custom solutions

In addition to the standard configurations, we also offer customized solutions. For example, in addition to the ATM420 display, it is also possible to place status indication lamps on the other side of the walls or to display other values such as the temperature and humidity of the room.

ATM420 configurations

Type	Scope / description
	ATM420-Single A compact solution for single-room pressure monitoring in clean environments. It comes supplied with one preconfigured differential pressure transmitter. 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 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 transmitter 1x Flush-mounted built-in box
	ATM420-Triple Ideal for larger setups that require pressure control across three zones, all from a single interface. It comes supplied with three reconfigured 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 3x Programmed pressure transmitter 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%RH	0 ... 50°C en 10 ... 90%RH	0 ... 50°C en 10 ... 90%RH

ATM420

configuration options

For the ATM420 there are with several standard sets. One set includes the ATM420 display with flush-mount bezel and mounting box. The sets are fully configured and tested including one, two or three pressure transmitters. These pressure transmitters should be placed above the ceiling or in the technical room.

The ATM420 communicates digitally with the pressure transmitters. The analog outputs can be connected to a PLC or building management system. If desired, we can supply the pressure transmitters with a calibration certificate. Please contact us for a customer-specific quotation for your project.



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



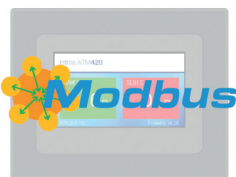
IO420

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

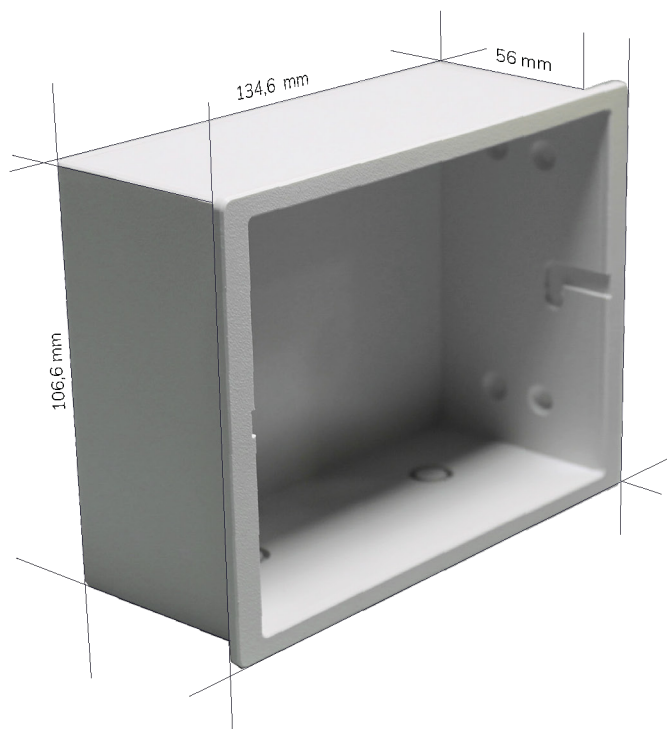
Crystal air hose on a roll of 25 meters
Crystal air hose on a roll of 50 meters



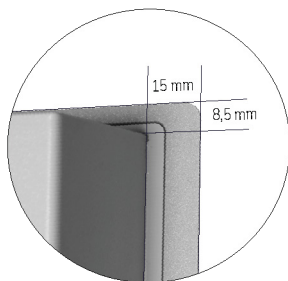
A-465
A-417A

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

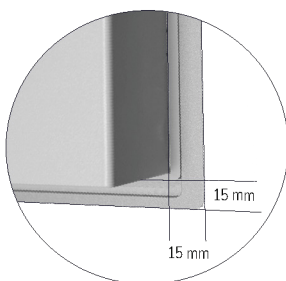
Dimensions ATM420



Back view: top



Back view: bottom



Back view:

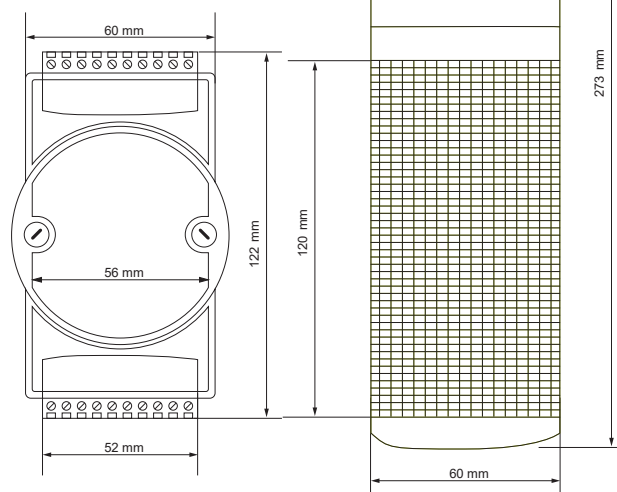
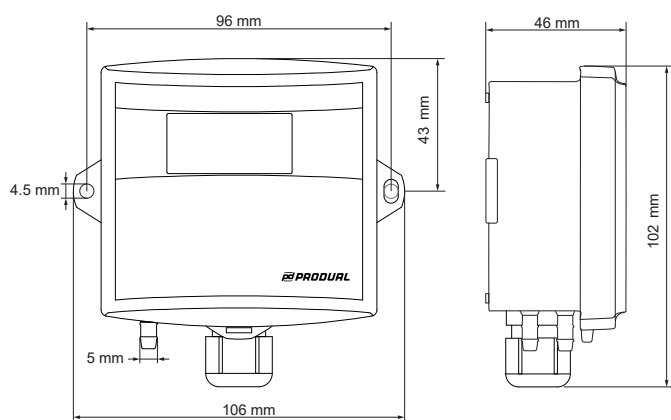
Flush-mounted box + display:

Top: 8,5 mm (display locked)

Right: 15 mm

Bottom: 15 mm

Left: 15 mm



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