



# Pro Series

**The future of Mine Ventilation Automation**

Monitor your environment with ease. Seamlessly connect to any Modbus RTU device and convert data to a variety of protocols for simple network integration.

## EVERYTHING YOU NEED IN ONE BOX.

The Accutron MAQS has been the staple product since 1993. Combining reliability with innovation, the Pro Series offers a new take on our tried and proven system.

The Pro Series mine air quality station allows you to accurately and easily monitor the parameters you need to ensure your air quality is maintained. Fully customizable and modular, the Pro Series easily monitors a wide range of conditions and converts data to a variety of protocols for simple network integration.



Airflow



Temperature



Pressure



Humidity



Toxic Gas



DPM



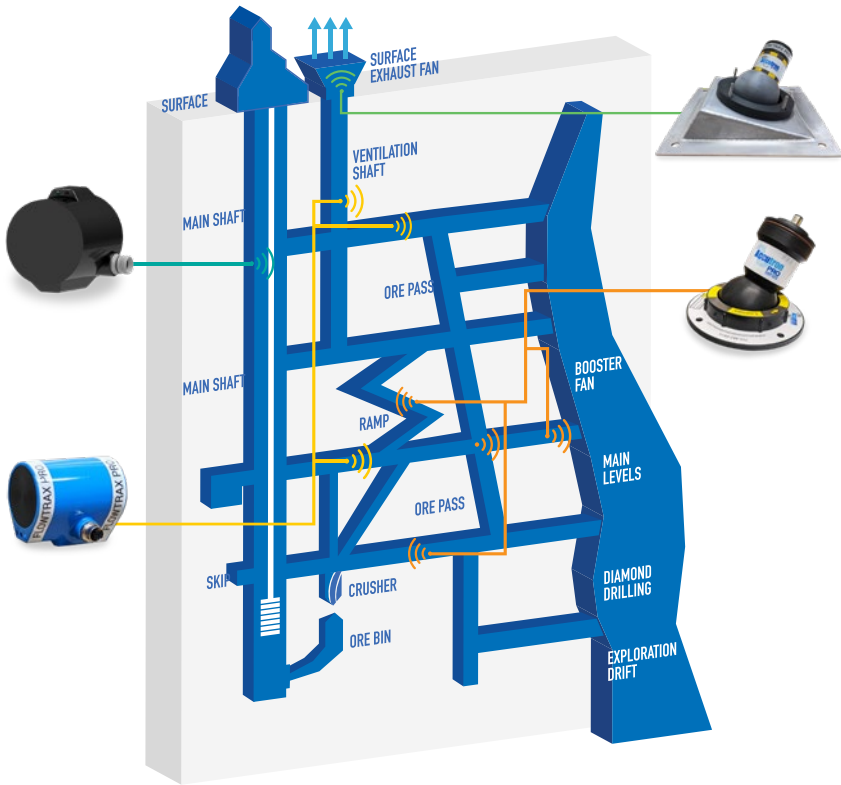
Dust



## DESIGNED FOR THE USER

The Pro Series uses a newly patented transducer design for quicker install times with new features such as the tap-on laser alignment function, daisy chained sensors, and on-board diagnostics.

Further features such as the tilt-alarm function for sensor misalignment warnings and sensor orientation allows users to confidently verify installs and settings from anywhere on the network.



## WORLD LEADING ULTRASONIC AIRFLOW MONITORS

Airflow sensors for complete mine ventilation monitoring systems.

- Drift
- Tunnel
- Raise
- Primary fan
- Industrial duct
- Axial fan

Systems are supplied with multiple configuration options for simple installation.

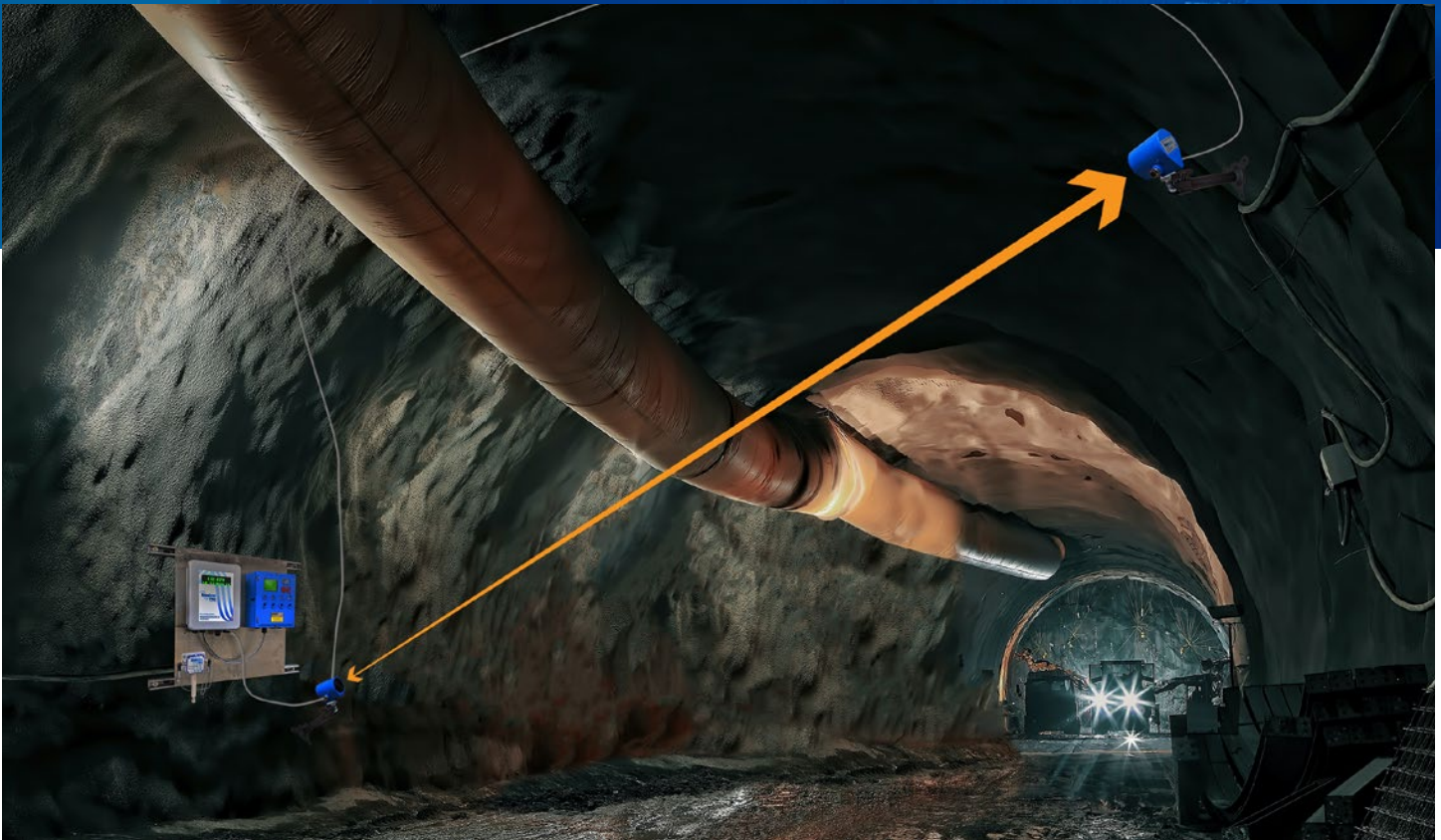
- Tap on laser alignment
- Quick-connect sensor cables
- Auto face to face calculating
- Stainless steel or steel sensor brackets



## FROM THE SURFACE

The Pro Web based interface allows you to easily manage and configure your devices.

- Actively monitor your station. See real time velocity & volumetric flow outputs. Configure your dashboard to display the information you need, at a glance.
- Remotely run system diagnostics and check for errors.
- Download system data directly from the webpage.
- Effortlessly map or re-map Modbus registers.
- Works with any mobile, laptop or desktop to effortlessly access the Pro webpages locally or from any network access point.



## I/O FEATURES

The Accutron Pro Series is a Modbus client/server device with Modbus RTU remapping capabilities that centralizes your air quality data. Configurable digital outputs with adjustable deadband allow users to control and optimize their ventilation systems by utilizing the process variables in whichever methods they desire. All available data is accessible through Modbus RTU, Modbus TCP and/or the 2 analog outputs.

## PRO SERIES ACCESSORIES



### ClimaTrax Pro

Multi-variable Environmental Sensor monitoring temperature, humidity, pressure, air density and heat stress.



### I/O Trax 1 & 2

Get more power when you connect, monitor and control field-remote devices using the digital and analog I/O module. Four digital and analog inputs, and two relay alarm outputs (4-20mA).

## FEATURE/FUNCTION



### Analog/ Relay Outputs

2 configurable relay and analog outputs. Use data collected from the Accutron Pro to control devices such as louvers, fans and doors.

## AIRFLOW SENSORS

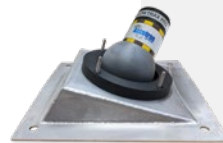
Accutron airflow sensors come with unique features such as laser alignment, heartbeat and tilt/temp sensors for ease of use.



### Drift Sensors 1-18m

Used for ramps, drifts, travel ways, shafts, raises & tunnels.

Compact transducer design with tap-on laser alignment, heartbeat, and tilt alarm. Our new transducers are smaller in design and can now be daisy-chained.



### Fan Sensors 1-13m

Used for primary intake and exhaust fans.

Stainless steel mounting plate designed for specific fan application with a ball and socket sensor assembly for easy alignment and quick installation.



### Long Range 6-35.5m

Used for tunneling & salt mines.

Designed to accurately measure airflow over long distance runs, wide tunnels, and large cross-sectional measuring areas.



### IDM Sensor 250-2500mm

Used for ducting & axial/booster fans.

Ball and socket design for easy alignment, quick installation and maintenance.

# PRO SERIES SPECIFICATIONS

## TRANSDUCERS

<b>Drift/Tunnel/Raise</b>	<b>Measuring Range</b> -40 m/s to +40 m/s (no practical limit)	<b>Accuracy</b> $\pm 0.05$ m/s	<b>Frequency</b> 50 kHz, $\pm 4\%$	<b>Face to Face Distance</b> 1 m min (3.3 ft) 18 m max (59 ft)
<b>Fan</b>	<b>Measuring Range</b> -40 m/s to +40 m/s (no practical limit)	<b>Accuracy</b> $\pm 0.05$ m/s	<b>Frequency</b> 50 kHz, $\pm 4\%$	<b>Face to Face Distance</b> 1 m min (3.3 ft) 13 m max (42.6 ft)
<b>IDM</b>	<b>Measuring Range</b> -40 m/s to +40 m/s (no practical limit)	<b>Accuracy</b> $\pm 0.05$ m/s	<b>Frequency</b> 75 kHz $\pm 4\%$	<b>Face to Face Distance</b> 0.25 m min (0.8 ft) 2.5 m max (8.2 ft)
<b>Long Range</b>	<b>Measuring Range</b> -40 m/s to +40 m/s (no practical limit)	<b>Accuracy</b> $\pm 0.05$ m/s	<b>Frequency</b> 30 kHz $\pm 4\%$	<b>Face to Face Distance</b> 6 m min (19.7 ft) 35.5 m max (116.5 ft)

## TRANSCIVER

<b>Electrical Ratings</b>	<b>Interface</b> Terminal boards Power over Ethernet	<b>Power In</b> 20-40 VDC (110-240 VAC option available) 48V IEEE 802.3af, mode A&B compatible	
<b>Communication</b>	<b>Interface</b> RS485 (x2) Ethernet Accutron Device Bus 4-20 mA outputs (x2) Dry contacts (x2) WiFi Web interface	<b>Details</b> Modbus RTU Modbus TCP, EtherNet/IP, SNMP M12, 4 wire transmitter Non-loop powered 50V AC/DC, 1A max Wifi 802.11 b/g/n	
<b>Physical</b>	<b>Enclosure</b> Non-corrosive IP66 NEMA 4X with lock hinges	<b>Display</b> 128 x 128 pixel OLED colour 256 x 64 pixel OLED single colour	<b>Operating Temperature</b> -40°C to +80°C
<b>Memory</b>	4 GB micro SD included Supports 2 to 32 GB micro SD card		



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