

## Press Release

For immediate release

### Maestro launches new digital IIoT mine ventilation solution

Montreal, Quebec, Canada, on April 29, 2019 at the CIM Convention and Exhibition, booth 408, Maestro Digital Mine launched its latest digital IIoT solution, the **Zephyr AQS™**. Maestro's **Zephyr AQS™** is a compact, low cost environmental air quality monitoring station for underground mines. The **Zephyr AQS™** is an IIoT device that connects directly to an industrial network without the requirement of adding an expensive and complex programmable logic controllers (PLCs) and several analog based instruments. Since it is a digital device, not only are the real time environmental conditions reported back to surface via a single ethernet connection, but all the advanced diagnostic data is available too assuring maximum uptime.

Michael Gribbons, Vice President Sales and Marketing, Maestro Digital Mine shared with the audience at the launch event that, "the **Zephyr AQS™** was developed to satisfy 75% of all the air monitoring requirements of a modern mine. Airflow rate, airflow direction, gas levels, barometric pressure and wet/dry bulb temperatures can be measured in real time and now affordably. The **Zephyr AQS™** is designed for any mine aiming to increase production, improve miner worker safety and reduce energy by monitoring and controlling ventilation air in an underground operation. The first step of working to control ventilation is the requirement of measurement. Only then can you start to understand and drive value to increasing production by getting the miners back to the face quicker and safer. Or reducing the energy demand by providing enough ventilation air to the areas of the mine that need it and reducing air to the non-working areas of the mine."

Like all Maestro's solutions, the **Zephyr AQS™** is fully digital solution that can be plugged into a network switch without the requirement of an expensive PLCs, PLC cabinets and all the associated wiring, terminations, software and complex labour for integration into the network. Based on direct customer feedback, Maestro's digital products save mining companies on average 40-60% of CAPEX compared to conventional monitoring solutions. All Maestro solutions are provided with lifetime, free firmware updates. The full savings to mining clients is in the range of 70-80% over the full life cycle with no hidden hooks or costs to bear in the OPEX maintenance cycle

The new **Zephyr AQS™** air quality station features three fully configurable sensor inputs that can be freely mixed and matched according to the customer's requirements. Like the Vigilante AQS™, the **Zephyr AQS™** will be configured through built-in webpages similar to that of a home network router. All the sensors are connected to the **Zephyr AQS™** electronics digitally supported by the



way that the **Zephyr AQS™** communicates over the mine's network using standard network protocols. Maestro fully supports both of the two most popular network communication protocols - Modbus TCP/IP and EtherNet/IP™. Alternately, **the Zephyr AQS™** offers on-board analog outputs (3 x 4-20 mA) and two relay outputs to tie into legacy systems.

"The **Zephyr AQS™** is considered the baby sister of the Vigilante AQS™. Both provide plug and play sensors and both are fully digital. However, the Vigilante AQS™ supports seven plug and play ports vs. three for the **Zephyr AQS™**. The Vigilante AQS™ also provides four complete PID (Proportional – Integral – Derivative) control loops to allow it to run autonomously in the event of network failure. It can also integrate up to 24 RTD sensors used in primary fan and booster fan applications", remarked David Ballantyne, Vice President of Development and Technology, Maestro Digital Mine.

The Vigilante AQS™ was created to solve 100% of the applications for mine ventilation monitoring and controlling, however solving all the applications with a single device adds extra costs for most of the simpler requirements. Maestro has supplied over 120 mines globally with this equipment, we recognized that a lighter version would be adequate for many of the mines price sensitive markets such as Latin America and Africa.

Maestro has 100 units sold pre-delivery from three existing hard rock mining customers in Canada, the United States and Spain.

### About Maestro Digital Mine

Maestro Digital Mine manufactures Industrial Internet of Things (IIoT) measurement and control instrumentation for the optimization of underground mine ventilation and underground digital networks for last mile communication. Maestro products are made exclusively for the underground mine automation, IT and ventilation sectors, delivering energy savings and productivity improvements while meeting the highest health and safety standards. Learn more about Maestro's digital solutions at [www.maestrodigitalmine.com](http://www.maestrodigitalmine.com).

**Visit us at booth 408 at CIM!**

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