



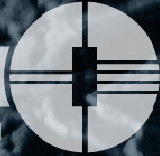
More time at the Face.

SuperBrite™ Marquee Display

Michael J. Gribbons



Maestro
mine ventilation



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Safety First



WORLD'S ONLY FAIL-SAFE SIGN

All other signs will display old data on loss of mine communications.
This is not safe and can lead to lost injury claims or unsafe working conditions.

Increase Safety and Productivity



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Underground mining applications

Communicate working conditions in real time

- Airflow rate
- Gas concentrations
- Safety Messages





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Underground mining applications



Ventilation on Demand applications

- Airflow rate
- Available HP notifications

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Underground mining applications

Ventilation on Demand applications

- Large – Bright – Tri-colour
- Reliable – Safe – Robust



Increase Safety and Productivity



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Surface mining applications



Blast clearance Optimization

- Shaft collar – surface
- Airflow rate
- Gas conditions

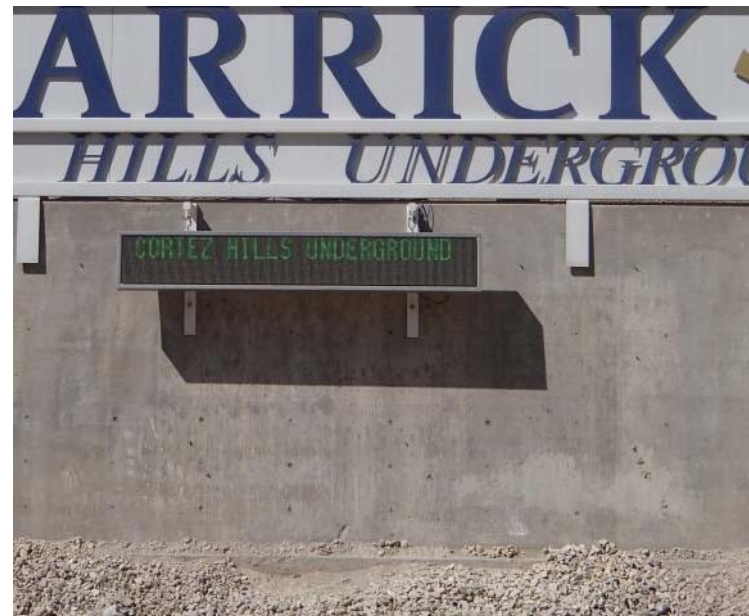


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Surface mining applications

Portal Entry

- Safety Messages
- Environmental conditions





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Additional applications



U/G Level Entry
Ventilation air conditions
Available level entry HP



U/G Level Entry
Real time tag board
Tagging system accessory



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Additional applications



Collar House
Production figures
Cage Co-ordinates



Ore Pass Safety
Distance from grizzly
Ore pass inventory



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Additional applications



Blast Scheduling
Production figures
Cage Co-ordinates



Dewatering
Pump flow rate
Sump levels
Slimes notification



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Additional applications



Ramp Traffic Control
Wait time
Traffic direction



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Mine Hardened



Easy chain hanger installation to Back

Rugged stainless steel NEMA 4X enclosure

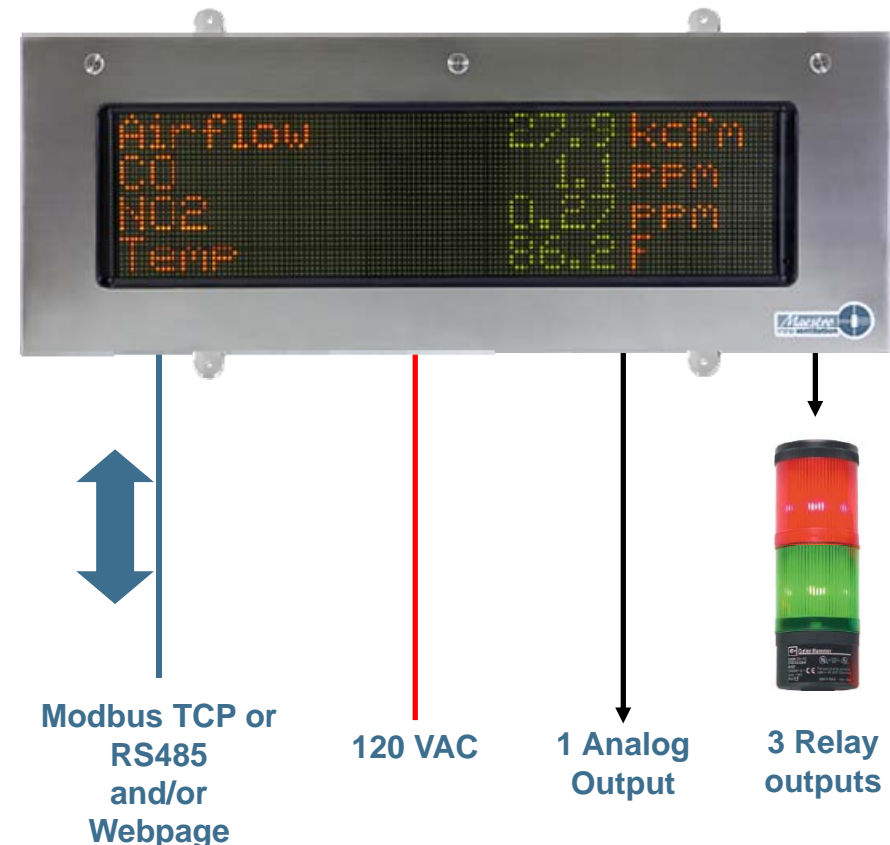
Impact resistant Lexan® face



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Flexible communication connectivity

- Choice of information delivery to each line
 - Modbus TCP/IP or Modbus RS485 from remote PLC/DCS/SCADA/HMI
 - Text input by Webpage manual entry
 - HTTP post from other software applications
- Ethernet copper or fiber optic (single or multi-mode)
- Leaky feeder
- 2" high SuperBrite® Tri-colour LED characters
- Flashing or solid state characters
- Fail-safe on loss of communications

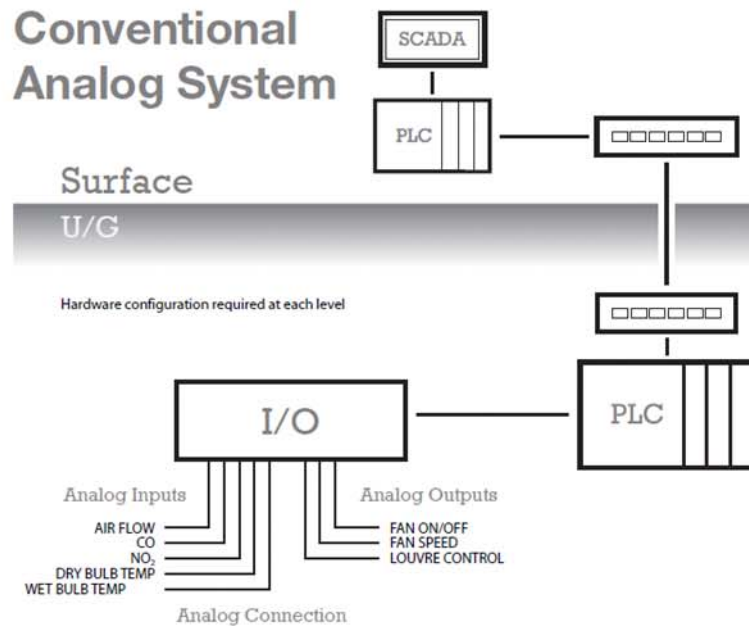




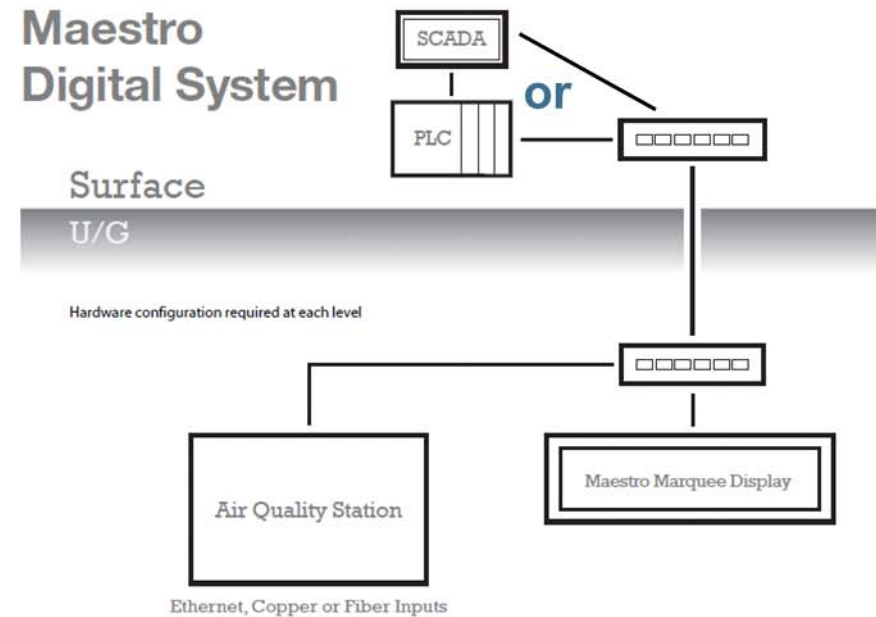
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Easy integration into existing infrastructure

Conventional Analog System



Maestro Digital System





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User comments

“This marquee display has many 'plug and play' feature I have not seen in other displays. For example, it can be part of an automation solution (e.g Ventilation on Demand), while simultaneously being used as an operations messaging system using the web browser interface. A welcome and innovative product.”

Erik Bartsch - Operations Technology Leader at Xstrata Nickel
November 18, 2012



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Maestro Major Users



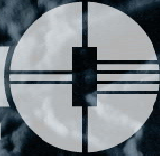
RioTinto



Top twenty global miners by market cap (BHP, Rio Tinto, Vale, Glencore Xstrata, Freeport McMoran, Barrick Gold, Newmont, Anglo American, Potash Corp, Goldcorp, Mosaic, Anglo Plats, Teck)

Increase Safety and Productivity

Maestro
mine ventilation



More time at the Face.

Complete solutions for mine ventilation



VIGILANTE AQS™



FANMON™



SUPERBRITE™ MARQUEE



AIRSCOUT™

Increase Safety and Productivity