## **APPROVALS:**

- IECEX TSA 07.0002X Ex ia I
- Nemko 07ATEX1033 🐵 1 M1 Ex ia I
- MSHA 18-ISA060002-0
- TÜV IEC61508 SIL3 (safety only)
- C-TICK
- UL Listed

## **APPLICABLE STANDARDS:**

- IECE 600079-0
- IECE 600079-11
- IECE 600079-25
- AS 1755





Austdac have specialised in mining and material handling solutions for over 25 vears making it a leading global supplier of conveyor monitoring, control and communication systems with installations on every continent.

We have over 1,000 conveyor installations with some in operation for over 15 years. Our commitment to our customers and engineering not only allows access to the latest safety technology and solutions; it provides backwards compatibility with existing installations providing upgrade paths to greater functionality and efficiency at a lower cost of ownership.

Austdac is now part of the GAI-Tronics group which gives us access and representation world wide. Our head office is in Sydney Australia with branch offices in Mackay Queensland, Pittsburgh USA and Burton Upon Trent UK.

Today with over 100 employees behind our products, Austdac provides solutions that are proven, tested and trusted by the world's largest and most demanding mines, power stations and port facilities.

Austdac staff has years of experience in designing conveyor monitoring, control and communication systems so please contact Austdac for your system design.

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# **SILBUS SYSTEM**

### **PRODUCT DESCRIPTION**

In today's underground mining industry there is an ever increasing demand for greater efficiency, higher reliability and lower cost of ownership in mine wide control and monitoring systems. Austdac has been at the forefront of this industry for 20 years now, supplying gas monitoring and conveyor control systems. With a commitment to research and development Austdac is proud to announce its latest family of intrinsically safe field bus products specifically targeted at hazardous area underground mining. This new family brings features such as ease of installation, improved ease of customer configuration and diagnostic capability.

The unique ability of SILBUS to provide data transmission and power on the same simple twisted pair of wires has been further improved to allow reliable monitoring and control in systems up to 8000 metres in length. Distances and functionality can be further extended using the new galvanic isolating repeater and network bridge.

The range of signals that can now be monitored include digital, safety (SIL3), voltage, current, temperature and frequency all in a consistent family of DIN rail mounting or wire in modules.

The SILBUS control unit or channel generator with its configurable logic resolvers, improved MODBUS interface and system diagnostic facilities further compliments the range and makes the implementation of a conveyor control or mine wide gas monitoring system a simple task.





New four channel digital transmitters and receivers provide galvanic isolation between the SILBUS network and digital signals allowing simple cross safe-hazardous area installations without the need for additional barriers and interposing relays. The four channel digital receiver is also fitted with six logic resolvers, identical to the channel generator, providing further system flexibility in remote tripping, conveyor control and block light control.

Four channel analogue input and output modules allow for up to six warning and trip alarms to be generated per analogue signal further increasing the ease of implementing mine wide gas monitoring systems with local and remote tripping capabilities.

Single channel line powered temperature transmitters provide the user with complete freedom in monitoring conveyor bearing temperatures.

Dual channel line powered frequency transmitters provide a unique low cost flexible method of monitoring mine ventilation.

The galvanic isolating repeater allows it to be used as an intrinsically safe barrier between safe and hazardous areas in drift belt installations.

The unique line powered galvanic isolating network bridge provides configurable transfer of data between SILBUS networks to further enhance gas monitoring and conveyor control systems