Passionate About Innovation

NAUTITECH® is an Australian provider of smart electronic and electrical solutions for OEMs and mine sites in the underground mining industry. We design and manufacture equipment that delivers **Communications** and **Visibility**, supports **Automation**, and provides a platform for **Asset and Condition Monitoring** of underground equipment.

Our core products include **Methane Monitoring** and **Shutdown** systems, **Underground Communications**, **Thermal** and **HD Cameras, IS Lights** and **Displays**. We collaborate, test, and research to continually improve what we deliver to our customers.

NAUTITECH®
DEVOTED TO SOLUTIONS IN HAZARDOUS AREAS

CUBEX

CUBEX

Independently certified as a SIL2 I.S. Methane Shutdown, Startup and PLC System

Intrinsically Safe (I.S.) modular products by NAUTITECH® deliver outstanding advantages to the industry by increasing safety and productivity in hazardous areas

Service & Support

- ☑ AS3800 and IECEx service facility
- ☑ NATA certified calibration lab
- ☑ Field installation, maintenance & training
- ☑ Audits & compliance checks of explosion proof equipment including diesel machines
- ☑ 12 months warranty on new parts

We offer full product life cycle support

The reliability and quality of NAUTITECH® solutions have been proven to provide a competitive advantage.

AUSTRALIAN OWNED & OPERATED

FULL ONE YEAR 1 WARRANTY

This range includes the following I.S products for use in Group 1 and Zone 0 hazardous environments without the need for flameproof enclosures

Module ① + Module ② + Module ③ +
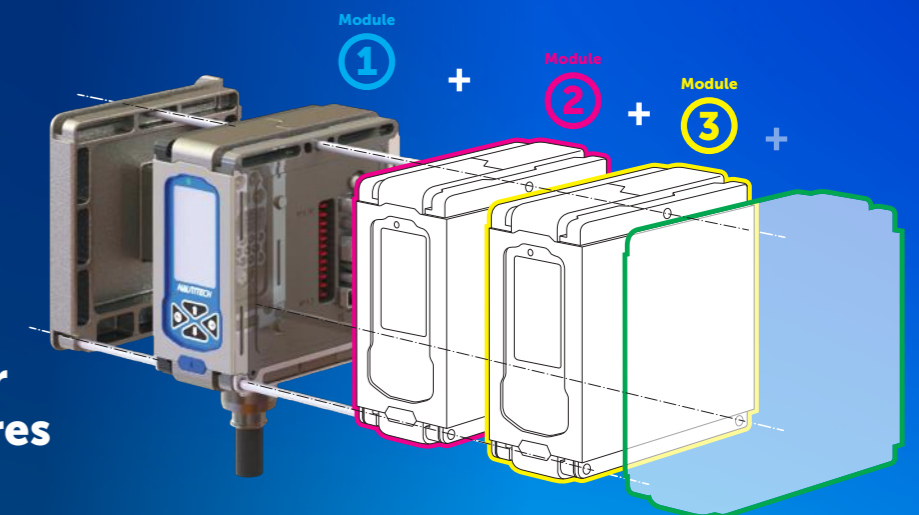
- • SIL3 certified Methane shutdown, startup and PLC System
- • Power Supply Modules (PSM)
- • Uninterruptible Power Supplies (UPS)
- • Programmable Logic Controllers (PLC)

- • Intelligent sensors (including methanometers)
- • Solenoid controllers
- • Piezo pneumatic valves
- • Quick Connect cabling systems

New South Wales

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✉ sales@nautitech.com.au
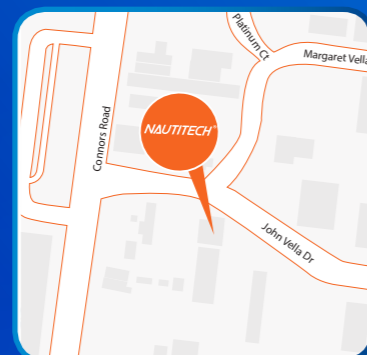
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▯ + 61 488 221 031
✉ sales@nautitech.com.au

South Africa

Middelburg, Mpumulanaga
South Africa

☎ + 27 78 800 2589
✉ sales_za@nautitech.com.au

Full 1-Year Warranty backed with experienced technicians offering installation, training and post-purchase support
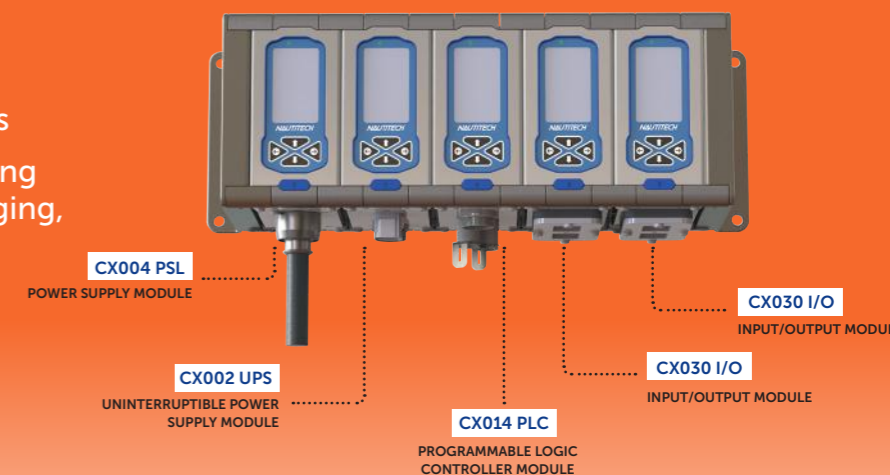
CUBEX

☑ Designed to assess the concentration of atmospheric methane in mine environments allowing for safe operations

☑ Acts as a shut-down / start-up system in potentially explosive methane rich atmospheres

☑ Allows for construction of complex systems using I.S. PLC including automation control, data logging, and power supplies

I.S. modules weigh only 1.7kg and are stackable to suit any application. Over time, the I.S. solution could represent significant cost savings due to a reduction in inspections, maintenance, and machinery down time.

CX004 PSL
POWER SUPPLY MODULE

CX002 UPS
UNINTERRUPTIBLE POWER SUPPLY MODULE

CX014 PLC
PROGRAMMABLE LOGIC CONTROLLER MODULE

CX030 I/O
INPUT/OUTPUT MODULE

CX030 I/O
INPUT/OUTPUT MODULE

CX105
Smart Piezo Valve

Controls or pilot operates actuators that manage fluid or gas

CX070
Differential Pressure Sensor

Pressure sensor (transmitter) for pressures up to 20MPa

CX053
Gas Detector

Designed to assess the concentration of methane gas (CH4) utilising NDIR sensing technology
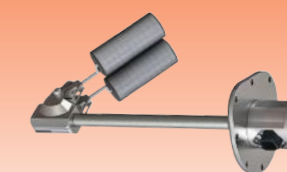
CX051
Temperature Sensor

Measures process temperature from -20°C to 150°C

CX050
Speed Sensor

Detects the motion of soft magnetic objects moving past its sensing tip. Digital signal conveys the speed of passing object

CX075
Cantilever Level Sensor

Two independent sensors in common housing measure fluid (water) level in high temperature environments up to 120°C

CX086
Position Sensor

Detects the position of the lever arm for measurement of Throttle position, Link position, Actuator position or Limit switch

CX087
Make-up Tank Level Sensor

Measures tank level in high temperature environments from -20°C to 120°C (for smaller tanks)

CX052
Absolute Pressure Sensor

Absolute pressure sensor (transmitter) for ranges from 200kPa to 35,000kPa

CX055
Angle Sensor

Measures and transmits angle value

CX090
Load Cell

A transducer that converts the force and transmits the value as a digital signal

CX080
Level Temperature Sensor

Measures tank level in high temperature environments from -20°C to 120°C (for larger tanks)

PSM — Power Supply Module

- Intrinsically safe output (Ex ia | Ma)
- Regulated mains output
- 12 V rated input
- Backplane integration
- 4 x backplane power bus options
- Temp range -20°C < Ta < 60°C
- Crocodile scale enclosure
- Local graphical panel with keypad
- Suited for direct installation into hazardous environments
- IP66 ingress protection

Supports construction of complex control systems utilising a range of certified I.S. components including UPS, PLC, lights, temperature sensors, pressure sensors, float sensors, gas detection & position sensors

UPS — Uniterruptable Power Supply Module

- Intrinsically safe, Ex is l Ma
- Backplane integration
- 4 x backplane power bus options
- Temp range -20°C < Ta < 60°C
- Crocodlie scale enclosure
- Local graphical panel with keypad
- Suited for direct installation into hazardous environments
- IP66 ingress protection

Provides a reliable power supply for the construction of complex electronic control system

PLC — Programmable Logic Controller Module

- Intrinsically safe, Ex is l Ma
- IEC61131 programming
- Real time clock
- 2 x independent backplane CAN ports
- 2 x independent fieldbus (CAN) ports
- 1 x 100 Base Fx Port
- 1 x Bluetooth V4.0 port
- 4Mb application RAM
- 2Mb event logs
- 4 x backplane power supply options
- Temp range -20°C < Ta < 60°C
- Crocodile scale enclosure
- Local graphical panel with keypad
- Reliability features for safety application
- Suited for direct installation into hazardous environments
- IP66 ingress protection

Sources power from PSM and supplies it to external field BUS connectors in order to power I.S. transceivers and isolation barriers

I/O — Input / Output Module

- Intrinsically safe (Ex is | Ma)
- 10 discrete, single drop ports
- Digital communication interface
- Backplane integration
- 4 x backplane power bus options
- Temp range -20C < Ta < 60C
- Crocodile scale enclosure
- Local graphical panel with keypad
- IP66 ingress protection

Links compatible field connected devices (both input and output types) and a logic controller

IECEx