ExLoc
INSTRUMENTS

HAZARDOUS AREA
PRODUCTS & SOLUTIONS

Intrinsically Safe Interfacing

Hazardous Area Visualisation & Notification

Hazardous Area Mobility & Communications

Contents:

About Us

Exloc Instruments UK Ltd was formed in 2012 to bring to the UK the success that Exloc Instruments Inc have been enjoying in North America for 20 years.

Our staff have many years experience in working in the process industry and in the fields of hazardous area protection, especially Intrinsic safety. We are based in the North of England and serve all the UK and the Republic of Ireland.

We are the sole UK agents for the GM International range of Intrinsically Safe Interfaces and SIL relays, HMI Elements range of PC Terminals, workstations and monitors and Primation GMBH for their range of ATEX ethernet solutions. We have a strong and growing range of ATEX smartphones including i.safe mobile, Ecom Instruments and others We have also partnered with Aegex who have brought to the market the first Zone 1 Windows 10 tablet computer and I.safe Mobiles range of Zone 1 and Zone 2 Android tablets . We stock CorDEX digital cameras, and portable lighting and flashlights as well as working closely on a global basis with Extronics, Beka Associates & e2S Warning Signals.

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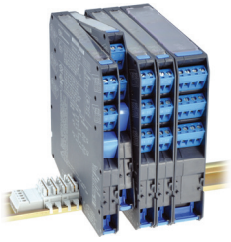E: sales@exloc.co.uk
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USA

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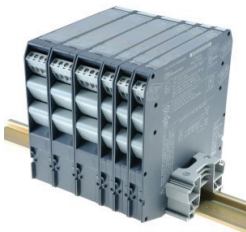Texas 77356 U.S.A.

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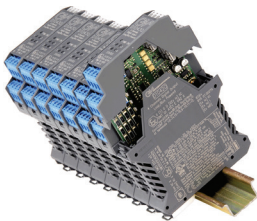## D5000 Series

SIL 2 / SIL 3 Intrinsically Safe Isolators

> Installation directly in zone 2 - Division 2
> Certified for 20 years of useful lifetime
> DIN-Rail, Power Bus or Custom Termination Boards Installation
> Slim modules (12,5 mm width) Single or Dual channel
> Up to SIL 3 certification
> Marine Type Approval and G3 Coating

D6000 Series

Full range of Galvanic isolators for non-intrinsically safe applications

> Modules suitable for SIL 2 applications according to IEC61508, IEC61511
> Single or Multichannel versions available
> Configuration components are easily accessed by removing the side cover
> DIP Switch configurability for easy field setup
> LED indication for power, signal status and line fault conditions (20-39 Vdc) applications
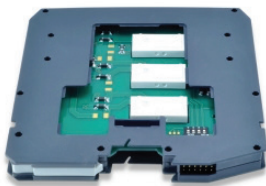> Wide operating temp. range: -49 to +60/+70 C

D1000 Series

SIL 2/ SIL3 Intrinsically safe isolators

> Installation also directly in Zone 2
> Available for specific application and with Universal Input
> DIN rail or Termination Boards Installtion

Safety Relays

SIL 3 High Integrity safety relays

> Compatible with DO Card line monitoring pulse test
> Complete line and load monitoring available on SMART RELAY
> High availability and safety both for NE and ND loads
> SIL 2 certified Modbus RTU RS485 supported
> Coil-to-contact SIL 3 - TUV certified
> Extended T-Proof Times
> Available for all safety function; ETS or DTS or inverted

PSx1200 Series

SIL 2 / SIL 3 Power Supplies

> Hot swapping certified in Zone 2
> Installation in Hazardous area, close to the load: Less cables, lower voltage drop, lower costs.
> Two or more units can be paralleled for redunancy or additional power with automatic load sharing without the need of external high dissipation diodes
> Continuous operation also in case of short on the output thanks to the high fuse breaking capacity feature.
> Marine type approval and G3 coating

Termination Boards

Universal Termination Boards
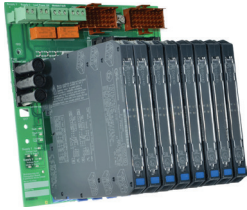
> Suitable to host 8/16/32 D5000 or d5200 SIL 3 modules 12.5mm/22.5mm wide, single or double channel, up to 64 channels
> AI/AO - DI/DO - Tempeture: Single or Double channels
> Signal converter, Safety relay: Single of Double channels
> 24 Vdc redundant power supply, with window voltage monitoring and corresponding relay fault output
> Boards are availble with custom connectors to directly interface any system PLC/DCS/ESD
> Comulative fault relay output
> Redundancy available

HART Mulitplex System

Cost-Effective Hart interface Solutions

> Reduced components: only 31 multiplex modules GM5700 to control 7936 channels
> Less spare parts: stock is substantially reduced
> Wirings are reduced: less components, less cables, less wirings
> Increased performances: 115.200bps baud rate
> Certified for SIL 3 applications: our Hard Mulitplexer system is suitable for SIL 3 applications accoring to IEC 61508 and IEC 61511

D9000 Series

Surge Protectors

> SIL 3 according to IEC 61508: 2010 Ed.2
> Input from Zone 0 (Zone20), installation in Zone 1 and 2
> Disconnection of signal circuit by disconnect knife
> Protection of a floating double wire in intrinsically safe circuits
> High density, 6.2mm per channel
> Hart compatible
> Covers available to terminate a ow of D9024S

D2000 Series

Intrinsically Safe Temperature and Digital Multplexers

> Field units can be placed up to 4km from gateway
> Drastically reduces field wiring and installation costs
> Eliminates the need of PLC - DCS AI cards
> Gateway D2050M can be installed in Zone 1 / Div. 1 by using an explosion proof enclosure

HMi Elements - Zone 1 PCs & Workstations

> Glove friendly optional touch screen (800 & 900 series)
> Integrated keyboard/mouse and/or external keyboard
> High bright and transflective screen options (800 & 900)
> Simple to install
> Will run with any PC operating system (450 CE only)
> Configurable with fibre optic, Cat5, and/or WiFi

HMi Elements - Zone 2 PCs

Features include:

> Glove-friendly Projective Capacitive Touchscreen (PCT) with multi-touch
> 19" 1000 NIT display
> Wide -40°C to +60° operating temperature range as standard
> Thin: 3.5" profile. Lightweight: 26.9lbs
> Shock and vibration tested in accordance with BS EN60068 standards
> Windows 7 Professional or Windows Embedded 7 (WES7) operating system
> Designed for field maintainability

Indicators and Displays

> 4/20mA loop-powered indicators
> Rate totalizers
> Serial text and Fieldbus displays
> Batch controllers
> Manual setpoint stations
> Field and panel mounting models
> Rugged stainless steel case option
> Zone 1 Wall Clock

Hazardous Area Audible & Visual Alarms

>Intrinsically Safe Sounders, beacons and combination units
>Explosion Proof Sounders, beacons
>ATEX approved manual call points
>Zone 1 signal towers
>Intrinsically Safe Low power LED Clusters

P-Ex OTR opis Transceivers & Media Converters

> Transparent interface between general purpose areas and hazardous locations
> Make general purpose optical signals opis compliant
> Can be installed in ATEX Zone 2 using a lightweight housing
> Redundant 10-30VDC power supply connections
> External 90-250VAC power supply available
> Operating temperature -40 to +176˚F / -40 to +80˚C
> Optical connector types SC, ST, and LC (model dependent)
> Connect easily to additional devices for system expansion
> Convert from copper to fiber optic

Ethernet Switches and Media Converters

> Aluminum houses for zone 1, zone 21
> Stainless steel housing for mining area M2
> Operating temperatures of -40˚C to +80˚C
> No additional housing or power supply required

Zone 1 Wireless access points

P-Ex WLAN

> Direct installation in ATEX Zone 1, 21 and M2
> No additional ex-proof housing required
> Inherent safe antenna connection
> Input voltage 18-28V DC
> IEEE 802.11 a/b/g/n
> Operation in 2GHz or 5GHz band
> Configuration via web interface or configuration software

1901-Z1

> Lightweight ATEX, IECEx, CSA and AEx wireless access point
> Certified* for use in in Class I Zone 1
> Tri-band wireless Wi-Fi IEEE 802.11a/b/g/h & Super AG
> Up to 108Mbps (Super AG mode)
> 4/128 bit WEP, WPA-PSK, WPA2-PSK, IEEE 802.1X (RADIUS) authentication
> MAC address filtering, SSID broadcast control

Zone 1 Tablet Computers

Aegex10

- > Intrinsically Safe for use in hazardous areas (w/ IS camera + video)
- > Zone 1 (ATEX, IECEx & UL approved)
- > Windows 10 operating system (8.1 available)
- > Wi-Fi, Bluetooth, GPS, Optional 4G/LTE
- > Industrial volume with noise cancellation
- > -10°C to +50°C operating temperature
- > Capacitive Touch with gloves or pen
- > UP to 12-hours of web browsing battery life

Getac EX80

- > Windows 10 Pro
- > Zone 0/20 (ATEX, IECEx & UL approval)
- > Bright 8" Sunlight-Readable Display
- > LumiBond® 2.0 — Touch Responsive
- > Front & Rear 8 MP Cameras
- > Contactless HF RFID Reader
- > GPS, Wi-Fi, WWAN & Bluetooth 4.0
- > IP67 & 6 foot drop resistant
- > 3 year warranty

IS910.1

- > Zone 1/21 (ATEX, IECEx & CSA approval)
- > Android 7.1
- > > 4G (LTE)
- > NFC - Near Field Communication
- > 8" F HD RugDisplay-Glass
- > multi capacitive touchscreen
- > Lone Worker Protection, Push to Talk (server based), options
- > Dust- and waterproof (IP68)
- > 2 cameras: 8 MP rear camera and 2 MP front camera
- > Wi-Fi IEEE 802.11 b/g/n
- > Bluetooth® 4.1 LE
- > MicroSD-card slot up to 64 GB

Zone 2 Tablets

ATEX approved iPad Cases

IS910.2

- > Android 7.1
- > Zone 2/22
- > Bluetooth 4.1 LE
- > Near Field Communication
- > 8" RugDisplay-Glass
- > capacitive touchscreen
- > 2 cameras
- > external memory microSD up to 32 GB
- > 6.000 mAh battery

XCZ1

- > Zone 1 and Class 1 Div 1approved
- > Use with iPad mini 4
- > 225mm x 156mm x 18mm and weighing 1Kg
- > Patented - Only means of taking iPad into Zone 1
- > Rugged aluminium case provides environ mental protection
- > Allows secure connection via WiFi or LTE
- > Comes with handle and shoulder strap
- > Range of accessories available

XCRiPad Cases

We offer a large range of cases to allow iPads to be taken into Zone 2 - Contact us for available options and pricing

ATEX Mobiles & Smartphones

Zone 1 mobiles

IS520.1

> Android 7.1
> 4G (LTE)
> Bluetooth® 4.1 LE
> Near Field Communication
> 4,5" (11.43 cm) (1280 x 720 pixel)
> Capacitive touchscreen
> 2 cameras: 8 MP rearcamera with autofocus and 2 MP front camera
> MicroSD-card slot up to 64 GB quick charge
> Optional: Lone Worker Protection & Push to Talk

Rough Pro EX-SM14A

> Android 4.2
> Camera 8 MP back 2 MP front
> IP68
> 4,5 Screen
> Quad Core 1.5 GHz
> Weight 209 Grams
> Bluetooth 4.0
> Dual SIM

Innovation 2.0

> Android 4.2.1 Platform
> Lone Worker Protection, Push to Talk
> Near Field Communication
> Dual SIM
> Bright 3,2 HVGA display
> Capacitive touchscreen
> Dust- and waterproof (IP68)
> 5MP autofocus camera with LED-Flash
> GPRS, EDGE, UMTS, HSPA+, Bluetooth, Wi-Fi
> MicroSD-card slot up to 32 GB

IS320.1

> Android 4.2
> 3G (GSM/WCDMA)
> Bluetooth® 2.0
> Near Field Communication
> 2.4" (6.1 cm) RugDisplay-Glass with a resolution of 240 x 320 pixel
> 2 cameras:5 MP rear camera 0.3 MP front camera
> external memory micro SD up to 32 GB
> SOS button with emergency call functionality
> Optional: Lone Worker Protection & Push to Talk

Zone 2 mobiles

IS740.2

> Android 5.1.1 Lollipop
> Bluetooth® 4.0 LE
> Near Field Communication
> 4.7" (11.94 cm)HD Bright View GorillaGlass
> 2 cameras:13 MP rear camera and 5 MP front camera
> External memory microSD up to 32 GB
> USB-magnetic charging port and magnetic charging cable

IS730.2

> AndroidTM 5.0 Lollipop
> 4G (LTE)
> Bluetooth® 4.0
> Near Field Communication
> 5" display (1280 x 720 pixel)
> Capacitive touchscreen
> Dust- and waterproof (IP68)
> 13 MP autofocus camera
> MicroSD-card slot up to 64 GB
> Long battery life time
> inductive charging
> Optional: Lone Worker Protection & Push to Talk

IS310.2

> Android 4.2 Jelly Bean
> 3G
> Bluetooth® 4.0
> Near Field Communication
> 2,4" display (6,1 cm)
> 2 cameras
> Drop-protection, tested against: extreme temperatures, barometric pressure, humidity and vibrations (MIL-STD 810G)
> Dust- and waterproof (IP68)
> MicroSD-card slot up to 32 GB
> Optional: Lone Worker Protection & Push to Talk

Xciel iPhone cases

XCR iPhone Cases Zone 2 Cases available for iPhone 5/6/7/8 -

Please contact us for details

iCAM-502

> Intrinsically safe, FM approved, ATEX & IECEx certified
> Simple "point & shoot" operation
> Optical viewfinder
> .1 Megapixels
> 1 GB flash memory, 5000 photos
> Image stabilization
> Super bright 131 lux.sec. four-LED flash

> Voice recording in .wav format
> Included silicon rubber sleeve for extra grip
> Powered by AA alkaline batteries
> High performance auto-focus lens for even sharper images
> Focusing as close as 2 inches / 5cm enables capture of tags, data plates, and fine details

ToughPIX Digitherm

> ATEX and IECEx Certified
> Adaptive Thermal Blending
> 5 megapixel digital camera with automatic, motorized focus. Capture high resolution visual images
> WIFI Download images directly to your tablet or smartphone with the CorDEX CONNECT Mobile app or via an onboard webserver.

> Rechargeable removable battery
> Powerful LED flash for low light imaging
> Sleek and rugged compact design
> Alarm triggered recording
> Soft touch buttons for ease of use
> Never run out of memory thanks to the removable CorDEX Memory card
> Motorised optical focus

Bluetooth RFID Readers

> Zone 1/21 and Zone 2/22 units
> Bluetooth® 4.0 LE
> Vibration feedback
> OLED-Display

> Memory for 1000 readings
> Battery capacity for 2000 Bluetooth readings
> Real-time clock
> Apps with remote use available

Portable lighting

> Lightweight, compact explosion-proof fluorescent light
> Atex approved for use in Zones 1/21
> UV Resistant, Anti-Static Polycarbonate Tube

> Impact Tested to 7 Joules
> IP 66/67
> End of Life Protected
> 24V ac/dc, 110V ac & 230V ac
> Available as: Single light, interlinking light or a set of lights to create a system

Stainless Steel Enclosures

> 316L & 304 stainless steel, painted MS optional
> Brushed finish is standard, more options
> Corrosion resistant for 25 years minimum
> Silicone gasket is standard
> Entry configuration to suit user needs

> Impact resistance 7 N/m
> IP66 ingress protection
> Alternate mounting options
> DIN rail support included
> Alternative sheet metal gauges available on request
> ATEX certified as component & apparatus

ATEX & IECEX Telephone Series 229

> Direct current supply: 12 to 60Vdc
> Consumption: 15 to 45mA
> Ringing voltage: 30-80Vac
> Suitable for use in Zone 1 hazardous areas
> Dialing: DTMF/PD

> Flashing: adjustable
> Electronic Bell: 84 to 92dB at 1m- subject to model
> Flashing beacon: option
> Noise cancelling: noise cancelling circuit

Functional Safety Engineer (TUV Rheinland) SIS Training

Exloc Instruments (UK) Ltd are pleased to provide Functional Safety Engineer (TÜV Rheinland) vocational Training for Safety Instrumented System Professionals, presented by Worldwide renowned Functional Safety Expert, Tino Vande Capelle.

Course objectives

The main objective is to provide all engineers involved in safety instrumented systems with elementary and necessary knowledge about functional safety, based on the leading international functional safety standards IEC 61508 and IEC 61511. A second objective is to give anybody attending the course the opportunity to have his or her functional safety competency confirmed by the TÜV Rheinland upon successfully passing the exam.

Why should you attend

IEC 61508 ed. 2.0, released in April 2010, clearly indicates as a 'Normative' requirement that anybody involved in safety lifecycle activities shall be competent to carry out the activities for which they are accountable.
Take advantage of this course, examination and certificate to prove your clients, peers and management, your competency in the field of Functional Safety.
Success in the final examination confirms your functional safety knowledge on your personal name, adding a great value to your professional figure.

Course Provider

Courses are held by Tino Vande Capelle.
Tino is providing 'INDEPENDENT' Functional Safety (FS) Consultancy as freelance & self-employed, capitalising +28 years process safety sector experience. In August 2005, Tino has become a Senior FS Expert & Trainer for Safety Instrumented Systems (SIS).
His FS Expert ID is 109/05 and can be found on the TÜV Rheinland website (www.tuvasi.com)

Success in the final examination certifies your functional safety knowledge, adding great value to your professional career. Please contact us for further details of Course locations and costs.

Course Dates:

10th to 13th April	**- Saddleworth, Nr Manchester**
19th to 22nd June	**- Aberdeen**
1st to 4th October	**- Saddleworth, Nr Manchester**
27th to 30th November	**- Reading**

"Safety Instrumented System" SIL Manual (4th edition) is now available.
The experience in safety and electronics acquired during the years has lead G.M. International to the writing of a comprehensive manual on IEC61508 and IEC 61511. This effort has already proven in the first two editions, to be a great benefit for engineers, maintenance personnel and whoever wishes to approach the concept of functional safety.

Copies available upon request