



## EU Type Examination Certificate CML 23ATEX2117X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **MS2801L CorrTran MV RS-485 LPR Transmitter**
- 3 Manufacturer **Metal Samples Company (a Division of Alabama Specialty Products Inc)**
- 4 Address **152 Metal Samples Road,  
Munford,  
AL 36268,  
USA**

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.


- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-1:2014


EN 60079-11:2012

- 10 The equipment shall be marked with the following:

 II 2 (1) G

Ex db [ia Ga] IIC T6 Gb

Ta= -40°C to + 70°C

 II 2 (1) G

Ex db [ia Ga] IIC T5...T4 Gb

Ta= -40°C to + 80°C



This certificate shall only be copied in its entirety and without change

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*A Snowden*

A Snowden  
Certification Manager



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## 11 Description

Metal Samples' MS2801L CorrTran RS485 LPR transmitter measures general corrosion, localized corrosion (pitting), and conductance, and transmits that information to operators via RS485 protocol in real time.

The CorrTran MV works with Metal Samples three-electrode CorrTran style probes and electrodes. Probes are available in a variety of mounting types and materials to suit the applicable type of installation.

Um - 30 V

Probe connection

Uo = 8.6 V

Io = 0.038 A

Po = 0.083 W

Ci = 0

Li = 0

The model number MS2801L-XX-YY is defined as:

- i. First XX →
  1. 00/No digits → Direct Mount
  2. XX → Remote Sensor cable length in Feet
- ii. Second YY →
  1. 00 / No digits — Aluminum enclosure.
  2. 01 – Stainless Steel Enclosure.

The electronics are housed within a flameproof enclosure (refer to the table below for possible enclosures that are suitable) with an IS interface to limit the voltage, current and power to the probe which is situated in the hazardous environment.



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Component	Certificate Numbers
Adalet: XIHDCX2 / XIHXDCX2 XIHMF CX2 / XIHXMFCX2 XIHMMCX2 / XIHXMMCX2 / XIHMMCX XIHMDCX XIHLCX XIHLDGX XIHMDGCX XIHLDGCX XIHNSFCX XIHNSDCX XIHNSFGCX	IECEX UL 08.0005U DEMKO 07 ATEX 0622294U
IME: 8092TM-XX 8092AM-XX	IECEX SIR 08.0025U Sira 08ATEX1082U

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	24 Jul 2023	R16207A/00	Prime certificate issue.

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.



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#### 14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. The MS2801L CorrTran MV RS-485 LPR Transmitter shall only be powered from a supply with a maximum output voltage of 30V and which complies with one of the following:
  - Is a SELV or PELV system
  - A safety isolating transformer complying with the requirements of IEC 61558-2-6 or technically equivalent standard
  - Apparatus complying with the IEC60950 series, IEC61010-1, or a technically equivalent standard
  - Fed directly from cells or batteries
- ii. For all versions of the enclosure that are manufactured from aluminium:

In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in a zone 0 location.
- iii. The MS2801L CorrTran MV RS-485 LPR Transmitter has non-metallic parts incorporated in the enclosure of this equipment which may generate an ignition-capable level of electrostatic charge, under certain extreme circumstances. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.
- iv. The MS2801L CorrTran MV RS-485 LPR Transmitter is not capable of withstanding the 500V insulation test required by Clause 6.3.12 of EN 60079-11. This shall be taken into account when installing the equipment.
- v. Only sensors that are classified as simple apparatus can be used with this equipment.

## Certificate Annex

**Certificate Number** CML 23ATEX2117X  
**Equipment** MS2801L CorrTran MV RS-485 LPR Transmitter  
**Manufacturer** Metal Samples Company (a Division of Alabama Specialty Products Inc)



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
EXBOM-000034L	1 to 2	0	24 Jul 2023	Bill of materials –Digital Board LPR Transmitter (RS485) Isolated
EXBOM-000035L	1 to 2	0	24 Jul 2023	Bill of materials – Power Board LPR Transmitter (RS485) Isolated
EXBOM-000068	1 to 3	0	24 Jul 2023	Bill of materials – LPR Measurement Board with Controller
EXCDB-000034L	1 of 1	0	24 Jul 2023	Circuit Diagram – LPR Transmitter Digital Board (RS485) Isolated
EXCDB-000035L	1 of 1	0	24 Jul 2023	Circuit Diagram – LPR Transmitter Power Board (RS485) Isolated
EXCDB-000068	1 to 2	0	24 Jul 2023	Circuit Diagram – LPR Measurement Board for transmitter
EXET-1907L	1 of 1	0	24 Jul 2023	Assembly Drawing – LPR Transmitter Digital Board (RS-485) Isolated
EXET-1920L	1 of 1	0	24 Jul 2023	Assembly Drawing – LPR Transmitter Power Board (RS485) Isolated
EXET-2905	1 of 1	0	24 Jul 2023	Assembly Drawing - – LPR Measurement Board for transmitter
EXPCB-000034L	1 to 9	0	24 Jul 2023	PCB Fabrication Drawing – LPR Transmitter Digital Board (RS485) Isolated
EXPCB-000035L	1 to 9	0	24 Jul 2023	PCB Fabrication Drawing – LPR Transmitter Power Board (RS485) Isolated
EXPCB-000068	1 to 9	0	24 Jul 2023	PCB Fabrication Drawing - – LPR Measurement Board for transmitter
EXWDB-000177	1 of 1	0	24 Jul 2023	Control Drawing MS2801L LPR RS-485 Transmitter (Multi Drop)
EXMDB-011217	1 to 2	0	24 Jul 2023	LRP Transmitter (RS-485) EX Assembly Model No: MS28X1L
EXMDB-011220	1 of 1	0	24 Jul 2023	Cross-sectional Area and volume Drawing AI Adalet Enclosure. Model; XIHXMFCX2/XIHMFCX2 EXd Instruments
EXMDB-011221	1 of 1	0	24 Jul 2023	Cross-sectional Area and volume Drawing AI Adalet Enclosure. Model; XIHMMCX2/XIHMMCX2 EXd Instruments

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**Certificate Number** CML 23ATEX2117X  
**Equipment** MS2801L CorrTran MV RS-485 LPR Transmitter  
**Manufacturer** Metal Samples Company (a Division of Alabama Specialty Products Inc)



Drawing No	Sheets	Rev	Approved date	Title
EXMDB-011222	1 of 1	0	24 Jul 2023	Cross-sectional Area and volume Drawing AI Adalet Enclosure. Model; XIHLFCX EXd Instruments
EXMDB-011223	1 of 1	0	24 Jul 2023	Cross-sectional Area and volume Drawing SS Adalet Enclosure. Model; XIHNSFCX EXd Instruments
EXMDB-011224	1 of 1	0	24 Jul 2023	Cross-sectional Area and volume Drawing SS IME Enclosure. Model; 8092TM-XX EXd Instruments
EXMDB-011218	1 of 1	0	24 Jul 2023	Hazardous area label MS2801L LPR Transmitter
EXMDB-011219	1 of 1	0	24 Jul 2023	Manufacturer's label MS2801L LPR Transmitter