



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX BAS 05.0015** issue No.: **3**

Status: **Current**

Date of Issue: **2009-12-08** Page 1 of 4

Certificate history:
Issue No. 3 (2009-12-8)
Issue No. 2 (2009-7-3)
Issue No. 1 (2009-5-6)
Issue No. 0 (2005-6-1)

Applicant: **Measurement Technology Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Electrical Apparatus: **MTL5042 Repeater Power Supply**
Optional accessory:

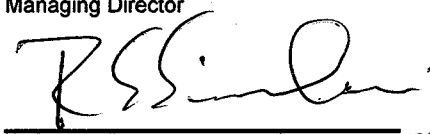
Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0015**
[Ex ia] IIC (-20°C ≤ Ta ≤ +60°C)

Approved for issue on behalf of the IECEx Certification Body: **R S Sinclair**

Position: **Managing Director**

Signature:
(for printed version)


8-12-09

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





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Manufacturer: **Measurement Technology Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Manufacturing location(s):
**MTL Instruments PVT
Limited**
No 3 Old Mahabalipuram
Road
Sholinganallur
Chennai
India

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2000 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition: 3.1
IEC 60079-11 : 1999 Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'
Edition: 4

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:	File Reference:
UK/BAS/04/0920/1	04/0920
GB/BAS/ExTR09.0122/00	09/0437
GB/BAS/ExTR09.0237/00	09/0957



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The MTL5042 Repeater Power Supply 4/20mA provides a fully floating d.c. supply for energising a conventional two or three wire 4-20mA transmitter located in the hazardous area. It restricts the transfer of energy from unspecified safe area apparatus to the intrinsically safe circuit by the limitation of voltage and current. Three transformers provide galvanic isolation between the hazardous and non-hazardous area circuits.

The MTL5042 Repeater Power Supply repeats the hazardous area 4-20mA current signal into a floating non-hazardous circuit to drive a safe area load. For Smart transmitters, the unit permits bi-directional communication signals to be superimposed on the 4-20mA signal. The bi-directional signal may be processed by a suitably certified hand held communicator.

The apparatus comprises three isolating transformers, duplicated diode / zener diode chains and current limiting resistors to provide voltage and current limitation. The above, together with other electronic components are mounted on a printed circuit board and housed in a moulded plastic enclosure. Polarised plugs and sockets are provided for the hazardous and non-hazardous area connections.

See Annex for electrical data.

CONDITIONS OF CERTIFICATION: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 3.1

To permit minor changes to the circuit not affecting the original assessment.

ExTR: GB/BAS/ExTR09.0237/00

File Reference: 09/0957