




Translation

**EC-Type Examination Certificate**

- (1) **EC-Type Examination Certificate**
- (2) **- Directive 94/9/EC -**  
**Equipment and protective systems intended for use**  
**in potentially explosive atmospheres**
- (3) **BVS 08 ATEX E 100**
- (4) **Equipment:**       **Communication module type ACM500-\*\*\*\***
- (5) **Manufacturer:**   **Mettler-Toledo (ChangZhou) Measurement Technology Ltd.**
- (6) **Address:**         **111 West TaiHu Road, XinBei District**  
**ChangZhou, JiangSu, 213125, PRC**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.  
The examination and test results are recorded in the test and assessment report BVS PP 08.2130 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:  
EN 60079-0:2006    General requirements  
EN 60079-11:2007   Intrinsic safety 'i'  
EN 60079-28:2007   Optical radiation  
EN 61241-0:2006    General requirements  
EN 61241-11:2006   Intrinsic safety 'ID'
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.  
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate
- (12) The marking of the equipment shall include the following:
-  **II (2) G [Ex ib] IIC**       for ACM500-CL\*\*  
**II (2) D [Ex ibD]**  
**II (2) GD [Ex op is] IIC**   for ACM500-FO\*\*

**DEKRA EXAM GmbH**  
Bochum, dated 06. November 2008

Signed: Dr. Jockers  
Certification body

Signed: Dr. Eickhoff  
Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**

**BVS 08 ATEX E 100**

(15) 15.1 Subject and type

Communication module type ACM500-\*\*\*\*

Instead of the \*\*\*\* in the complete denomination letters or numerals will be inserted which characterize the following modifications:

Type ACM500-\*\*\*\*



Marking without influence for explosion protection  
 CL = with CL-Interface  
 FO = with FO-Interface

15.2 Description

The communication module is an associated apparatus mounted outside the hazardous area and is used, in conjunction with weighing indicators in the hazardous area, for data transmission between the safe and the hazardous area.

The communication module consists of an interface board fastened inside a metallic enclosure; inside this enclosure a main board with up to two interface boards (max. voltage  $U_m$  AC/DC 250 V) and a power supply unit are also fastened.

The connection to apparatus in the hazardous area is either be done by IS circuits, which are passive (type ACM500-CL\*\*), or by fibre optic cables (type ACM500-FO\*\*).

15.3 Parameters

15.3.1 Non-intrinsically safe circuits  
 Max. voltage

$U_m$  AC/DC 250 V

15.3.2 Intrinsically safe interface circuits COM 4 and COM 5

15.3.2.1 Type ACM500-CL\*\*, level of protection Ex ib IIC  
 Values for each circuit

Voltage

$U_i$  DC 10 V

Current

$I_i$  300 mA

Power

$P_i$  500 mW

Internal Capacitance

$C_i$  120 nF

Internal inductance

$L_i$  negligible

15.3.2.2 Type ACM500-FO\*\*, op is  
 value for each optical output

< 5 mW

15.3.3 Ambient temperature range

$T_a$  -10 °C up to +40 °C

(16) Test and assessment report  
BVS PP 08.2130 EG as of 06.11.2008

(17) Special conditions for safe use  
None

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We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 06. November 2008  
BVS-Schu / Her      A 20080542

**DEKRA EXAM GmbH**



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Certification body



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Special services unit