



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 BVS 17.0098

Issue No: 0

Certificate history:

Issue No. 0 (2017-12-20)

Status: **Current**

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Date of Issue: **2017-12-20**

Applicant: **VEGA Grieshaber KG**
Am Hohenstein 113
77761 Schiltach
Germany

Equipment: **Radio device type PMT81(*)(*).*1*******
Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d", Equipment protection by intrinsic safety "i", Equipment dust ignition protection by enclosure "t"**

Marking:
Ex db ia [ia Ga] IIC T6 Gb
Ex db ia [ia IIIC Da] IIC T6 Gb

Ex ia tb [ia Da] IIIC T70°C Db
Ex ia tb [ia IIC Ga] IIIC T70°C Db

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

Jörg Koch

Position:

Head of Certification Body

*Signature:
(for printed version)*

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:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.





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Manufacturer: **VEGA Grieshaber KG**
Am Hohenstein 113
77761 Schiltach
Germany

Additional Manufacturing location(s):

VEGA Americas, Inc.
4241 Allendorf Drive
Cincinnati
Ohio 45209
United States of America

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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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

Test Report:

DE/BVS/ExTR17.0096/00

Quality Assessment Report:

DE/TUN/QAR06.0002/08



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

General product information:

The PLICSMOBILE T81 is an external GSM/GPRS/UMTS radio device for transmission of measured values and remote parameter adjustment of plics® sensors. The associated apparatus has an intrinsically safe output circuit of type of protection 'ia' which may be routed into areas that require EPL Ga or Da.

Type Code:

PMT81(*)*(*)*******

The asterisks are not relevant for explosion protection.

Parameter:

See Annex

SPECIFIC CONDITIONS OF USE: NO

Annex:

[BVS_17_0098_Vega_Annex.pdf](#)



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Annex
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Parameter:

1. Electrical parameters

1.1 Power supply (terminals 1 [+], 2 [-])

Nominal input voltage	U_n	DC	9.6 ... 32	V
Maximum input voltage	U_m	DC	32	V

1.2 Intrinsically safe communication and output circuit (connector M12)

Maximum output voltage	U_o	DC	29.75	V
Maximum output current	I_o		95	mA
Maximum output power	P_o		707	mW

Connection with a combination of capacitance and inductance:

		IIC	IIB / III	
Maximum external inductance	L_o	0.05 mH	0.1 mH	10 mH
Maximum external capacitance	C_o	68 nF	569 nF	200 nF

1.3 Bluetooth module

Frequency range		2.402...2.480	GHz
Maximum output power	≤	2.5	mW

1.4 GSM/GPRS/UMTS modem

Frequency range		0.824...2.170	GHz
Maximum output power	≤	1381	mW

2. Thermal parameters

Ambient temperature range		-20 °C ≤ T_{amb} ≤ 50 °C	
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