



# **Open Metering System Conformance Test**

## **Manufacturer Declaration**

**Issue 4.0.12 / 2023-03-21**

**RELEASE**

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## Document History

Version	Date	Comment	Editor
1.0.0	2011-10-11	Final Version	J. Feuchtmeier
1.9.0	2013-08-09	Adaptions to OMS-S V3 To be released as OMS-CT V2.0	J. Feuchtmeier
2.0.0	2013-10-16	Adaption according Enquiry results document status changed to "Release"	J. Feuchtmeier
2.0.1	2014-08-14	Statement if base pressure for compensation is 1013,25 mbar for Gas meters required  Statement if base temperature for compensation is 15°C for Gas meters required	J. Feuchtmeier
3.0.0	2014-10-06	Adopting version number of the OMS- CT to be in line with the corresponding OMS-S version	J. Feuchtmeier
4.0.0.0	2015-03-04	Start version for OMS-CT V4	J. Feuchtmeier
4.0.0.1	2015-03-04	Evaluation of data points according to the result of meeting #29	J. Feuchtmeier
4.0.0.2	2015-04-10	Adding statement for parametrization of OMS certificated devices according Action#30-1	J. Feuchtmeier
4.0.0	2015-10-16	Version for Enquiry	J. Feuchtmeier
4.0.0	2015-12-16	Version for Vote	J. Feuchtmeier
4.0.0	2016-05-09	Version for Release	J. Feuchtmeier
4.0.1	2017-05-29	Update to OMS-S V4.1.2	J. Feuchtmeier
4.0.2	2017-10-07	-	J. Feuchtmeier
4.0.3	2018-01-18	Frequency deviation measurement according WG3 decision #54-2	J. Feuchtmeier
4.0.4	2019-09-26	Support of PHY_B (433 MHz) Editorial changes	J. Feuchtmeier A. Reissinger
4.0.4	2019-12-22	Version for Release	A. Reissinger
4.0.5	2020-01-28	Adaption of test report documents: no RTT&E report required, measurement report for frequency deviation	J. Feuchtmeier
4.0.6	2020-03-06	Extension of ManDec for Wired M-Bus	P. Leistner, A. Reissinger
4.0.7	2020-03-23 and 2020-05-13	Extension of parameters for Wired M- bus	P. Leistner, A. Reissinger
4.0.8	2022-01-26	Release Candidate	A. Reissinger
4.0.9	2022-07-07	Copyright remark added to front page  Release	A. Reissinger
4.0.10	2022-08-17	Use case declarations added	A. Reissinger

Version	Date	Comment	Editor
4.0.11	2023-01-17	Use case declarations changed  Release candidate	AG3, A. Reissinger
4.0.12	2023-03-06  and  2023-03-21	Consideration of review comments    Final editing in meeting #89  Release	AG3, A. Reissinger

## Declaration

We

*Applicant name and address*

5 declare under our sole responsibility that the product(s) listed in Table 1 to which this declaration relates is/are in conformity with the requirements of the following standards respectively specifications

- EN13757-4:2013 (refer to [EN13757-4])
- EN13757-2:2018 (refer to [EN 13757-2])
- OMS-Specification [OMS-S2] (Version refer to Table 1)

10 Signed by:

## Declaration of the Device under Test

The Table 1 shall be completed by the applicant according to [OMSCT-GEN].

**Table 1: Declaration of manufacturer, product and configuration**

Manufacturer Declaration	To be filled in by the applicant
Name and address of manufacturer	Diehl Metering GmbH Industriestraße 13 91522 Ansbach
OMS Information	
OMS Generation	4
OMS Device type <sup>1</sup>	Basic meter
OMS Interface	T1
Application protocol	M-Bus
Security Profile	Security Profile B
Encryption key	01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 00
Compact Load Profile	No
Product identification	
Product name	HYDRUS Q3 2,5 m³/h
Device type <sup>2</sup>	0x07; water
Extended Device type information <sup>3</sup>	N/A
Serial number	35968527
Version	0x25
Product parameterisation	
Production is always OMS conform	Yes / no (if no please state how this is communicated)
Parameterisation after production	Yes / no (if yes, state how the user is informed about possible non OMS compliant devices)
Features for radio transmission	
Frequency band (acc. to [OMS-S2], Annex O)	PHY_A (868 MHz)
Transmission rate	20 seconds
Installation datagrams	No
Static datagrams	No
Performance class	HT
Ambient temperature range	0°C – 80°C
Type of antenna	Integrated
Initiation of the radio transmission	always on
Features for wired M-Bus	
Unit loads	1 UL
Max. supported baudrate	2400 baud

Manufacturer Declaration		To be filled in by the applicant	
Features for wired M-Bus			
Number of logical M-Bus devices		1 (1 primary address, 1 secondary address)	
Enhanced selection supported		Yes / No	
Temporary logical disconnect Parameters according to Table 2 created by the manufacturer (see example below).		Yes / No	
Feature set device specific <sup>4</sup>			
Parameterisation		Answer datagram 5	
Test mode		yes, device can simulate volume flow	
Power supply		Battery	
Expected lifetime		12 years	
Base pressure of 1013,25 mbar for pressure conversation used <sup>5</sup>		Yes / No	
Base temperature of 15°C for pressure conversation used <sup>6</sup>		Yes / No	
1	Defines the class of DUT: basic meter, sophisticated meter, data concentrator		
2	For the Device Types 04h or 0Ch it has to be stated if it is “district heating” or “sub metering”; for the Device Type 37h also the Device Type of the measurement device has to be stated (e.g. 37h (radio converter): 07h (water), 02h (electricity))		
3	Relevant for Gas Meters only: defines the gas metering conditions: temperature converted, measurement conditions, base conditions		
4	Optional Parameters, content device depended		
5	Applicable for Gas meters (device type 03h) only		
6	Applicable for Gas meters (device type 03h) only		

## Example for Temporary Logical Disconnect

Table 2: Example for communication budget

Parameters for communication budget	To be filled in by the applicant
Communication budget <sup>1</sup>	250 bytes/minute
Regeneration time <sup>1</sup>	180 s
Communication depot <sup>1</sup>	66.000 bytes
<sup>1</sup> For minimum requirements see Table 3	

For a selection of the above given parameters only a range of values is permitted (see the following Table 3).

## 5 Example for Minimum Requirements

Table 3: Example for minimum requirements

Minimum requirements for communication budget	To be filled in by the applicant
Communication budget	50 bytes/minute Alternative entry: Unlimited
Regeneration time	Maximum permitted value: 360 seconds
Communication depot	30.000 bytes



## Declaration of Frequency Deviation

For devices with RTTE/RED test report dated 18.10.2013 or earlier the manufacturer shall state the conformity with the requirements of the OMS-CT.

- 5 If the DUT applies for OMS Conformity Version 4.0 or earlier and the RTTE/RED test report is dated after 18.10.2013 the manufacturer shall provide the measurement report with the conformity declaration.

If the DUT applies for OMS Conformity Version 4.1 or higher the manufacturer shall provide the measurement report with the conformity declaration.

**Table 4: Testing of frequency deviation for different OMS Versions**

OMS Version	Date of RTTE/RED test report	Declaration	To be filled in by the applicant
Up to 4.0	18.10.2013 or earlier	The manufacturer declares that the frequency deviation of the DUT is conform to the applicable requirements	YES/NO
Up to 4.0	Later than 18.10.2013	The manufacturer declares that the frequency deviation of the DUT is conform to the applicable requirements The measurement report ("NameOfReport") is attached	YES/NO YES/NO
4.1 or higher		The measurement report ("NameOfReport") is attached	YES/NO

## Declaration of the Supported Data Points

This List contains all Data points which are conform to [OMS-S2], Annex A and are used to ensure interoperability.

The Table 5 should be completed by the manufacturer according to [OMSCT-GEN].

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**Table 5: Declaration of OMS-conform Data points**

No	OBIS-code	Description	DIF/DIFE	VIF/VIFE
01	8-0:1.0.0*255	Volume (V ), accumulated, total, current value	0C	12..13
02	8-0:1.2.0*255	Volume (V ), accumulated, total, set date value	4C	12..13
03	8-0:0.1.10*255	Local date at set date	42	6C

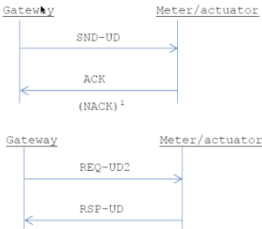
The Manufacturer may also declare in Table 6 additional data points which are not conforming to [OMS-S2], Annex A. This declaration is optional.

**Table 6: Declaration of Non-conform data points**

No	Description	DIF/DIFE	VIF/VIFE

## Declaration of Supported UseCases based on [OMS-S2] Annex M

Table 7: Declaration of supported UseCases

UseCase	To be filled in by the applicant
Supported UseCases	
OMS-UC-00	Mandatory if at least 1 of the UseCases 02..06, UseCases 08..09 is supported by the DUT
OMS-UC-01 (BiDi not mandatory)	Mandatory if "Installation datagram" in Table 1 is set to "yes" otherwise it is not tested.
OMS-UC-02	Yes/No
OMS-UC-03	Yes/No
OMS-UC-03 switching type (applies only if OMS-UC-03 is used)	Direct/Manual
OMS-UC-03 manual switching (applies only if OMS-UC-03 manual switching is used)	Specification for the manual switching procedure including the OPEN_TIMEOUT parameter provided by document xyz
OMS-UC-03 target time delay (applies only if OMS-UC-03 is used)	Definition of the "TargetTime Delay for ASP10" value
OMS-UC-04	Yes/No
OMS-UC-05	Yes/No
OMS-UC-06	Yes/No
OMS-UC-07 (BiDi not mandatory)	Yes/No
OMS-UC-08	Yes/No
Additional parameters	
Credit Handling: The DUT is prepared with 4000 available Credits	Yes/no (optional: state number of available credits)
Supported Communication sequences	 <pre> sequenceDiagram     participant Gateway     participant Meter_actuator as Meter/actuator     Gateway-&gt;&gt;Meter_actuator: SND-UD     Meter_actuator--&gt;Gateway: ACK     Meter_actuator--&gt;Gateway: (NACK)¹     Gateway-&gt;&gt;Meter_actuator: REQ-UD2     Meter_actuator--&gt;Gateway: RSP-UD     </pre>
DUT support SND-UD	Mandatory
DUT support Seq_SND-UD2 for all implemented OMS- UC	Yes/No

## Test Equipment and Documentation

Table 8: Test equipment and documentation

Test equipment and documentation	To be filled in by the applicant
Test equipment	
Communication adapter	IZAR OH BT (optical transceiver)
Communication software	HYDRO-SET (configuration software)
Provided Documentation	
Test documentation	Description of communication and test commands
Test report for EN 300 220-1 essential requirements	No. 50445-081090-5
Measurement report for frequency deviation	