

WMBUS DATA FORMAT

PULSE COUNTER: LAN-WMBUS-G2-P(-DB)





Verify correct device and version

This document applies to the device LAN-WMBUS-G2-P and LAN-WMBUS-G2-P-DB with protocol version 20. There are two ways of finding out the protocol version of the device; either by looking at the label on the device or by looking at the data packets sent out by the device. See chapters **Protocol version in data packets** and **Protocol version in label** below for more information.

Protocol version in data packets

If it is possible to check the information in the data packets sent out by the device, then the protocol version is included in the data field called *A-Field Protocol version*. For more information, see chapter **WMBUS-format**.

Protocol version in label

The protocol version can be found on the label. An example of a label is shown in the figure below and the relevant information is described by LAS.00013870.0.14, where

- Manufacturer code: LAS
- Serial number: 00013870
- Device type: 0
- Protocol version: 14





WMBUS-format

Art nr.			LAN-WMBUS-C	G2-P(-DB)			
			20 (0x14)	0.5-0.2-1 (-D.B)			
I			LAN-WMBUS-G2-P: Packet is sent every 300 seconds (default, can be configured) in T-mode				
Information			LAN-WMBUS-G2-P-DB: Packet is sent every 20 seconds (default, can be configured) in T-mode)				
			Number of pulses	, C			
			Number of pulses on Port 2				
			1				
Byte No	Field Name	Content		Info	Byte data		
1	L-Field	Length			0x2E		
2	C-Field	SND-NR		- LAS	0x44	Linklayer	
3	M-Field	Meter Manufacturer code			0x33		
4	M-Field	Meter Manufacturer code			0x30		
5	A-Field	Meter serial number (LSB)		Example: 0001067	0x67		
6	A-Field	Meter serial number			0x00		
7	A-Field	Meter serial number			0x01		
8	A-Field	Meter serial number (MSB)			0x00		
9	A-Field	Protocol version			0x14		
10	A-Field	Meter type		Device other	0x00		
11	CI-Field	Short header			0x7A		
12	Access no.	Transmission counter Device status (error/alarms) Number of encrypted blocks		Example: 7	0x07	Networklayer	
13	Status			Refer to Table 1 for possible values 0x00 Example: 3 0x03			
14	Configuration						
15	Configuration	Encryption			No encryption: 0x00		
	Ü	11		Encryption mode 5: 0x05			
16	AES-Verify	Encryption Verification			0x2F		
17	AES-Verify	Encryption Verification			0x2F		
18	DR1	DIF		12-digit BCD	0x0E	DATA blocks	
19	DR1	VIF		Extension table	0xFD		
20	DR1	VIF		Dimensionless	0x3A		
21	DR1	Value (LSB)			0x66		
22	DR1	Value			0x55		
23	DR1	Value Value Value Value (MSB) DIF DIFE VIF		Example: 112233445566	0x44		
24	DR1			1	0x33		
25	DR1				0x22		
26	DR1			10 lt t DCD - E	0x11		
27	DR2			12-digit BCD + Extension	0x8E		
28	DR2			Subunit 1	0x40		
29	DR2			Extension table	0xFD		
30	DR2	VIF		Dimensionless	0x3A		
31	DR2	Value (LSB) Value Value			0x11		
32	DR2				0x22		
33	DR2			Example: 665544332211	0x33		
34	DR2	Value		_	0x44		
35	DR2	Value			0x55		
36	DR2	Value (MSB)			0x66		

Table 1: Status byte with errors and alerts

Bit	Info			
0 (0x01)	X			
1 (0x02)	X			
2 (0x04)	Low battery			
3 (0x08)	Permanent error/sabotage enclosure (optional if sabotage is mounted)			
4 (0x10)	X			
5 (0x20)	X			
6 (0x40)	Sabotage enclosure (optional if sabotage is mounted)			
7 (0x80)	X			