LANSEN
WIRELESS BUILDING TECHNOLOGY

WMBUS DATA FORMAT

DRY CONTACT DEVICE: LAN-WMBUS-G2-DC(-NO/NC)

Version: 7.2

Verify correct device and version

This document applies to the device LAN-WMBUS-G2-DC with protocol version 20 and 21. 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.

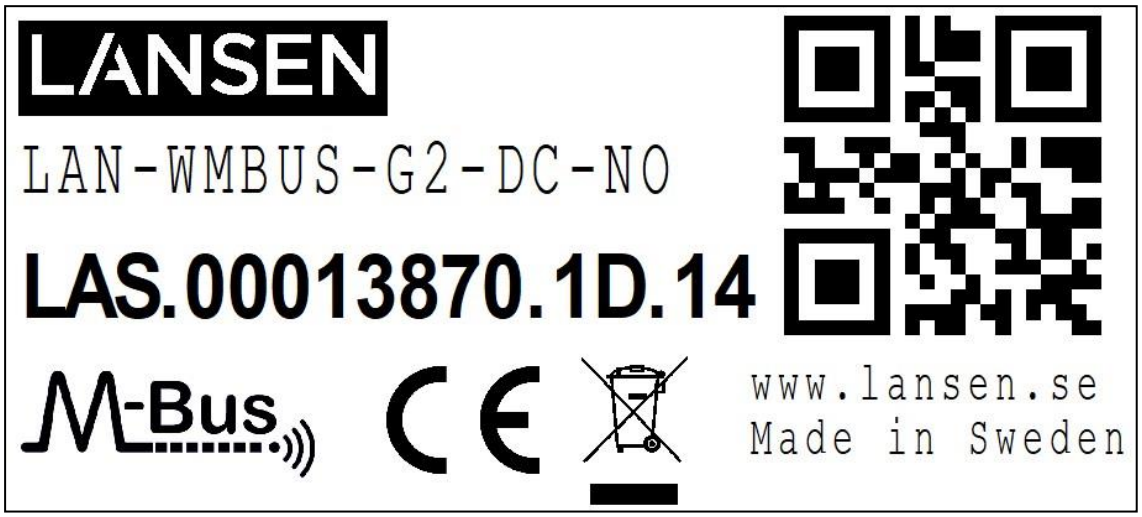
Protocol version in data packets

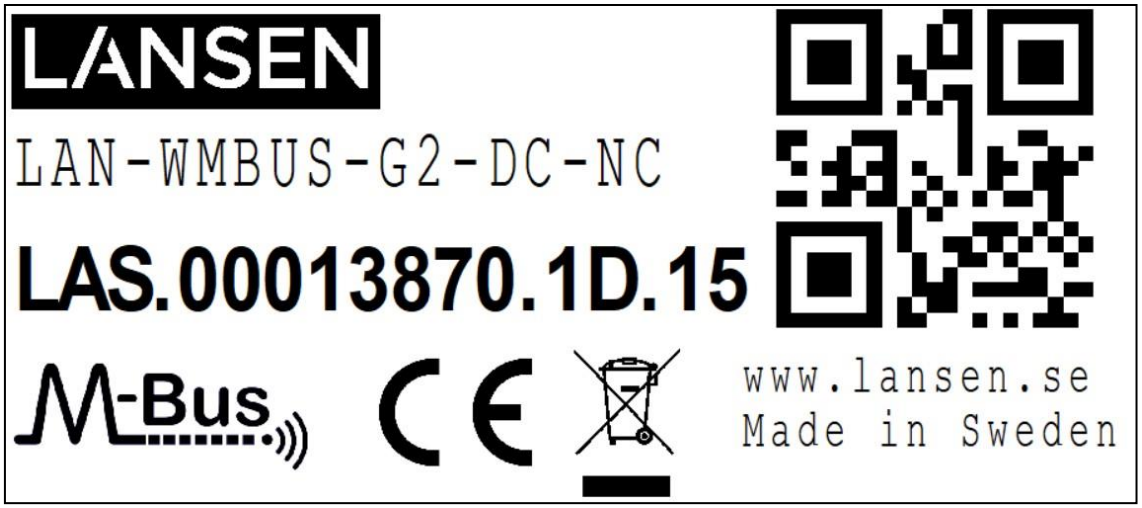
If it is possible to check the information in the data packets sent out by the device, then the protocol version is included in the data field called *A-Field Protocol version*. For more information, see chapter **WMBUS-format**.

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.00013870.1D.14 or LAS.00013870.1D.15, where

- **Manufacturer code:** LAS
- **Serial number:** 00013870
- **Device type:** 1D
- **Protocol version:** 14 (for -NO) or 15 (for -NC)





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WMBUS-format

Art nr.	LAN-WMBUS-G2-DC
Version	20 (0x14) + 21 (0x15)
Information	Packet is sent every 90s (default, can be configured) or when IO changes status or sabotage of device is detected in T mode.
DR1	Digital input value: Current status of both inputs to the device and sabotage status.
DR2	Error messages: Current status of sabotage and battery

Byte No	Field Name	Content	Info	Byte data	
1	L-Field	Length			Link layer
2	C-Field	SND-NR		0x44	
3	M-Field	Meter Manufacturer code	LAS	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	Electricity meter	0x1D	
11	CI-Field	Short header		0x7A	Network layer
12	Access no.	Transmission counter	**Example:** 7	0x07	
13	Status	Device status (error/alarms)	Refer to **Table 1** for possible values	0x00	
14	Configuration	Number of encrypted blocks	**Example:** 3	0x03	
15	Configuration	Encryption		**No encryption:** 0x00 **Encryption mode 5:** 0x05	
16	AES-Verify	Encryption Verification		0x2F	DATA blocks
17	AES-Verify	Encryption Verification		0x2F	
18	DR1	DIF	2-byte integer	0x02	
19	DR1	VIF	Extension table	0xFD	
20	DR1	VIFE	Digital input	0x1B	
21	DR1	Value (LSB)	Refer to **Table** 3 for possible values	0x00	
22	DR1	Value (MSB)		0x00	
23	DR2	DIF	2-byte integer	0x02	
24	DR2	VIF	Extension table	0xFD	
25	DR2	VIFE	Error flags (16-bit)	0x97	
26	DR2	VIFE		0x1D	
27	DR2	Value (LSB)	Refer to **Table 2** for possible values	0x00	
28	DR2	Value (MSB)		0x00	

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)	NO: One (or both) dry contact input is closed NC: One (or both) dry contact input is open
6 (0x40)	Sabotage enclosure (optional if sabotage is mounted)
7 (0x80)	X

Table 2: Error flag values

Bit	Info
0 (0x01)	Sabotage
1 (0x02)	Low battery

Table 3: Digital input values

Bit	Sabotage	Status on dry contact inputs
0 (0x01)	Enclosure opened (only if sabotage is mounted)	X
1 (0x02)	X	X
2 (0x04)	X	NO: One (or both) inputs closed NC: One (or both) inputs open
3 (0x08)	X	X
4 (0x10)	Enclosure opened (only if sabotage is mounted)	X
5 (0x20)	X	X
6 (0x40)	X	NO: Dry contact on input #1 is closed NC: Dry contact on input #1 is open
7 (0x80)	X	NO: Dry contact on input #2 is closed NC: Dry contact on input #2 is open