

Han-WMBus

HAN-NVE to Wireless M-Bus converter (Datasheet)



A simple way to convert the HAN-NVE output to Wireless M-Bus. Connect directly to the HAN meter. Easy installation and configuration. Works for Aidon, Kaifa and Kamstrup meters.

Technical Specifications

Mechanical

Casing Material	ABS White
Protection Class	IP40
Dimensions	77x45x30 mm
Weight	70g
Mounting	Wall mount with Velcro

Electrical

Power supply	Powered by HAN meter
Connections:	RJ45 or SMA for external antenna version

Environmental

Operating Temperature	0–50C
Usage environment	Indoor
Storage temperature	-40 – 85C

User Interface

LED	Blinks during activity
Rotary Switch	For configuration

Wireless M-Bus

Frequency	868.95 MHz
Transmit Power	9dBm (8mW)
Transmit interval	10 or 30 seconds, configurable
Encryption	Mode 5
Wireless M-Bus mode	T1
Wireless M-Bus	EN13757:2018

EU Declaration of Conformity

RED Directive 2014/53/EU according to article 3.1b
ETSI EN 301489-1 v2.2.3
ETSI EN 301489-3 v2.3.2
part 5.9.3 of ETSI EN 300 220-1 v3.1.1
EN IEC 61000-6-3:2021
EN IEC 61000-6-1:2019
Year of CE-marking 2025
ROHS 2011/65/EU

Variants

AION-HAN-WMBUS	Internal antenna
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Han For WM-Bus Manual

HAN-NVE to Wireless M-Bus converter (Manual)

Setup

Connect the converter to your HAN-NVE meter. Set the rotary switch according to the following table

Meter	Switch	Period	Switch	Period
Kamstrup	0	30 sec	1	10 sec
Aidon	2	30 sec	3	10 sec
Kaifa	4	30 sec	5	10 sec

The LED on the converter will start blinking. One blink when a HAN telegram arrives, a double blink when an M-Bus telegram is sent.

The converter will start as soon as it is connected to the HAN meter. Notice however that it may take up to an hour to get all information from the meter.

The data is saved during power down and the converter will therefore not start with zero values next time.

Encryption

The telegrams are encrypted and you will receive a decryption key with the meter. Unencrypted operation is not possible.

The full secondary address is needed for decryption

Id:	Eight digit number
Manufacturer:	2174 (HKT)
Version:	01
Medium:	02

Telegram content

The wireless telegrams are the same for the supported Aidon, Kaifa and Kamstrup meters. For one-phase meters, the missing phase values are set to zero. There are minor differences in the scaling of some values and the length of the HAN Id's but otherwise the telegrams are equal.

The wireless telegram content is listed below.

Aidon Telegram

Byte	Description	DIB	VIB	Data	HAN data
0	L-Field			222	
1	C-Field			44h	
2	Manufacturer			7421h (HKT)	
4	ID				
8	Version			0	
9	Medium			2 (Electricity)	
10	CI-Field			7Ah	
11	Accumulator			0--255	
12	Status				
13	Config Word				
15	AES check			2F2Fh	
17	LVAR Type	0Dh	7C03"1SG"	16x char	Meter ID
40	LVAR GS1	0Dh	7C04"epyT"	4x char	Meter Type
52	Power+ Q1 [W]	04h	ABFC883Bh	Int32	Active Power+ (Q1+Q4)
61	Power- Q3 [W]	04h	ABFC893Ch	Int32	Active Power- (Q2+Q3)
70	Reactive Power+ Q1 [VAr]	04h	FB94FC883Bh	Int32	Reactive Power+ (Q1+Q2)
80	Reactive Power- Q1 [VAr]	04h	FB94FC8A3Ch	Int32	Reactive Power- (Q3+Q4)
90	Current L1 [100mA]	04h	FDDBF0C01h	Int32	Current Phase L1
99	Current L2 [100mA]	04h	FDDBF0C02h	Int32	Current Phase L2
108	Current L3 [100mA]	04h	FDDBF0C03h	Int32	Current Phase L3
117	Voltage L1 [0.1V]	04h	FDC8FC01h	Int32	Voltage L1
126	Voltage L2 [0.1V]	04h	FDC8FC02h	Int32	Voltage L2
135	Voltage L3 [0.1V]	04h	FDC8FC03h	Int32	Voltage L3
144	Timestamp	06h	6Dh	Int48	Timestamp
152	Energy+ Q1 [10Wh]	07h	84FC883Bh	Int64	Cum Active imp en A+ (Q1+Q4)
165	Energy- Q2 [10Wh]	07h	84FC893Ch	Int64	Cum Active exp en A- (Q2+Q3)
178	React Energy + Q1 [10VArh]	07h	FB82FC88BB74h	Int64	Cum React imp en R+ (Q1+Q2)
293	React Energy - Q3 [10VArh]	07h	FB82FC88BC74h	Int64	Cum React exp en R- (Q3+Q4)
208	Filler			15x 2F	

Kaifa Telegram

Byte	Description	DIB	VIB	Data	HAN data
0	L-Field			222	
1	C-Field			44h	
2	Manufacturer			7421h (HKT)	
4	ID				
8	Version			0	
9	Medium			2 (Electricity)	
10	CI-Field			7Ah	
11	Accumulator			0--255	
12	Status				
13	Config Word				
15	AES check			2F2Fh	
17	LVAR Type	0Dh	7C03"1SG"	16x char	Meter ID
40	LVAR GS1	0Dh	7C04"epyT"	8x char	Meter Type
56	Power+ Q1 [W]	04h	ABFC883Bh	Int32	Active Power+ (Q1+Q4)
65	Power- Q3 [W]	04h	ABFC893Ch	Int32	Active Power- (Q2+Q3)
74	Reactive Power+ Q1 [W]	04h	FB94FC883Bh	Int32	Reactive Power+ (Q1+Q2)
84	Reactive Power- Q1 [W]	04h	FB94FC8A3Ch	Int32	Reactive Power- (Q3+Q4)
94	Current L1 [mA]	04h	FDD9FC01h	Int32	Current Phase L1
103	Current L2 [mA]	04h	FDD9FC02h	Int32	Current Phase L2
112	Current L3 [mA]	04h	FDD9FC03h	Int32	Current Phase L3
121	Voltage L1 [0.1V]	04h	FDC8FC01h	Int32	Voltage L1
130	Voltage L2 [0.1V]	04h	FDC8FC02h	Int32	Voltage L2
139	Voltage L3 [0.1V]	04h	FDC8FC03h	Int32	Voltage L3
148	Timestamp	06h	6Dh	Int48	Timestamp
156	Energy+ Q1 [Wh]	07h	83FC883Bh	Int64	Cum Active imp en A+ (Q1+Q4)
169	Energy- Q2 [Wh]	07h	83FC893Ch	Int64	Cum Active exp en A- (Q2+Q3)
182	React Energy + Q1 [Wh]	07h	FB82FC88BB73h	Int64	Cum React imp en R+ (Q1+Q2)
197	React Energy - Q3 [Wh]	07h	FB82FC88BC73h	Int64	Cum React exp en R- (Q3+Q4)
212	Filler			11x 2F	

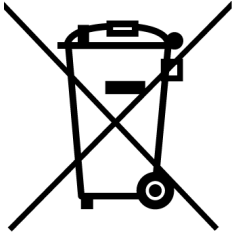
Kamstrup Telegram

Byte	Description	DIB	VIB	Data	HAN data
0	L-Field			222	
1	C-Field			44h	
2	Manufacturer			7421h (HKT)	
4	ID				
8	Version			0	
9	Medium			2 (Electricity)	
10	CI-Field			7Ah	
11	Accumulator			0--255	
12	Status				
13	Config Word				
15	AES check			2F2Fh	
17	LVAR Type	0Dh	7C03"1SG"	16x char	Meter ID
40	LVAR GS1	0Dh	7C04"epyT"	18x char	Meter Type
66	Power+ Q1 [W]	04h	ABFC883Bh	Int32	Active Power+ (Q1+Q4)
75	Power- Q3 [W]	04h	ABFC893Ch	Int32	Active Power- (Q2+Q3)
84	Reactive Power+ Q1 [W]	04h	FB94FC883Bh	Int32	Reactive Power+ (Q1+Q2)
94	Reactive Power- Q1 [W]	04h	FB94FC8A3Ch	Int32	Reactive Power- (Q3+Q4)
104	Current L1 [10mA]	04h	FDDAFC01h	Int32	Current Phase L1
113	Current L2 [10mA]	04h	FDDAFC02h	Int32	Current Phase L2
122	Current L3 [10mA]	04h	FDDAFC03h	Int32	Current Phase L3
131	Voltage L1 [V]	04h	FDC9FC01h	Int32	Voltage L1
140	Voltage L2 [V]	04h	FDC9FC02h	Int32	Voltage L2
149	Voltage L3 [V]	04h	FDC9FC03h	Int32	Voltage L3
158	Timestamp	06h	6Dh	Int48	Timestamp
166	Energy+ Q1 [10Wh]	07h	84FC883Bh	Int64	Cum Active imp en A+ (Q1+Q4)
179	Energy- Q2 [10Wh]	07h	84FC893Ch	Int64	Cum Active exp en A- (Q2+Q3)
192	React Energy + Q1 [10Wh]	07h	FB82FC88BB74h	Int64	Cum React imp en R+ (Q1+Q2)
207	React Energy - Q3 [10Wh]	07h	FB82FC88BC74h	Int64	Cum React exp en R- (Q3+Q4)
222	Filler			2F	

Environmental

This product does not contain any battery.

Please notice the WEEE symbol



Disposal of this product must be done at a recycling facility with other electronic waste, do not throw it with other household waste. This is done to save natural resources and keep the environment clean. For information concerning the nearest recycling facility, please contact your nearest local authority or the shop where you bought the product.

Please search for WEEE and RoHS for further information.