

Hiking DDS238-2 ZN/S energy meter

Modbus holding registers:

Register(s)	Meaning	Scale Unit	Data format	R/W
0000h-0001h	total energy	1/100 kWh	unsigned dword	R ¹
0002h-0003h	reserved		unsigned dword	
0004h-0005h	reserved		unsigned dword	
0006h-0007h	reserved		unsigned dword	
0008h-0009h	export energy	1/100 kWh	unsigned dword	R ¹
000Ah-000Bh	import energy	1/100 kWh	unsigned dword	R ¹
000Ch	voltage	1/10 V	unsigned word	R
000Dh	current	1/100 A	unsigned word	R
000Eh	active power	1 W	signed word	R
000Fh	reactive power	1 VAr	unsigned word	R
0010h	power factor	1/1000	unsigned word	R
0011h	frequency	1/100 Hz	unsigned word	R
0012h	reserved		unsigned word	
0013h	reserved		unsigned word	
0014h	reserved		unsigned word	
0015h:high	station address	1-247	unsigned char	R/W
0015h:low	baud rate	1-4 ²	unsigned char	R/W
001Ah	relay ³		unsigned word	R/W

Notes:

Note 1:

Total, export and import energy counters can be erased by writing 0 in total energy registers.

Note 2:

Value mapping, default 1.

Value	Baud rate
1	9600 Bd
2	4800 Bd
3	2400 Bd
4	1200 Bd

Note 3:

In DDS238-2 ZN/SR model the relay can be switched by 0x001A register.

Value	Relay
0	Off
1	On

Data formats

Data format	Length	Byte order
char	8 bits	
word	16 bits	Big endian
dword	32 bits	Big endian

Writing registers

The meter does not understand the 'write sigle register' function code (06h), only the 'write multiple registers' function code (10h).