Parameter list	
Power supply voltage	DC8 ~ 28V (with self-recovery insurance)
Rated power consumption	3W
AC current measurement error	Typical value is ±2% @ 50Hz, ±5%@ not 50Hz
Frequency measurement error	Typical value ±2.5Hz / division factor
AC current resolution	0.04A (40A range)
Data refresh rate	>5Hz/divide factor
Communication interface	RS485 isolation band TVS protection
Working temperature	-20°C~50°C
Working humidity	5%~90% no condensation
Operating frequency	[10Hz*5/divide factor]~400Hz
Communication baud rate	Default 9600, N, 8, 1.
Number of nodes on the same network	up to 32

MODBUS-RTU communication protocol
Function code:0x03, read multiple registers
Example: 01 03 00 00 00 38 44 18
Read 56 words of data from device 01 address 00
Function code:0×06, write single register
Example: 01 06 00 03 00 02 F8 0B
Oriented device 01 address 03Write data 0002H
Function code:0x10, write multiple registers
Example: 01 10 00 03 00 01 02 00 02 27 A2
Oriented device 01 address 03Write data 0002H

Note: The above parameters are only applicable to sine waves with a frequency of at least 50Hz.

Precautions

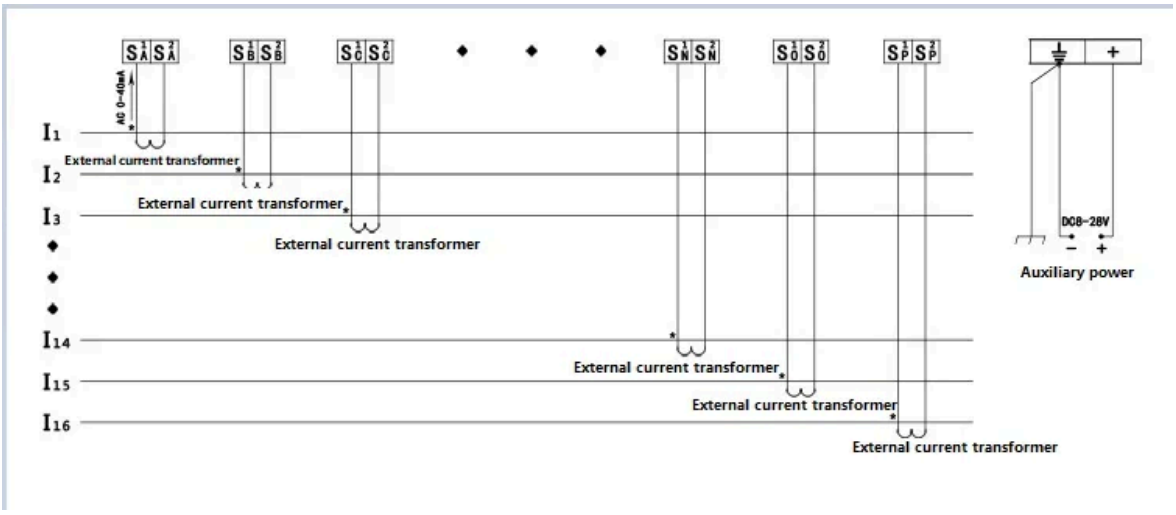
1. Only operators with certain electrical knowledge can perform wiring and other operations on the product.
2. Avoid use in high temperature, humid and dusty environments, and avoid direct sunlight.
3. When using this product, please confirm whether it meets the requirements. Set up backup and security features if the product fails or may cause the machine to malfunction or be lost.

MODBUS register	Decimal	Explain
0000H (read only)	0	Version number (628, representing V6.2.8)
0001H (read only)	1	Current A-H (01-08) channel range, unsigned number (value 40, representing 40A)
0002H (read only)	2	Current I-P (09-16) channel range, unsigned number (value 40, representing 40A)
0003H (read only)	3	The default is 0001H, the high byte has a low four-bit baud rate (0-8), and the high byte has a high four-bit check bit (0-3). Low byte is set The standby address (01H-FFH), 00 is the broadcast address. Baud rate 0-8: 9600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200. Check digit 0-3: N, 8, 1; E, 8, 1; O, 8, 1; N, 8, 2.
0004H (read only)	4	Factory date (high byte year, low byte month)
0005H (read only)	5	Reserved
0006H (read and write)	6	Default 0005H, frequency division coefficient (value 1-5). Working frequency range=[10Hz*5/frequency dividing coefficient]-400Hz
0007H (read and write)	7	High byte measurement result threshold (directly set to 0 when the original measurement result is less than this value). The low byte is the selection factor and the default is 30. Actual frequency selection factor = (1 + frequency selection coefficient / 10), do not modify in non-special circumstances.
0008H (read only)	8	Channel A current, unsigned number, unit 0.01A
0009H (read only)	9	Channel B current, unsigned number, unit 0.01A
000AH (read only)	10	Channel C current, unsigned number, unit 0.01A
000BH (read only)	11	Channel D current, unsigned number, unit 0.01A
000CH (read only)	12	Channel E current, unsigned number, unit 0.01A
000DH (read only)	13	Channel F current, unsigned number, unit 0.01A
000EH (read only)	14	Channel G current, unsigned number, unit 0.01A
000FH (read only)	15	Channel H current, unsigned number, unit 0.01A
0010H (read only)	16	Channel I current, unsigned number, unit 0.01A
0011H (read only)	17	Channel J current, unsigned number, unit 0.01A
0012H (read only)	18	Channel K current, unsigned number, unit 0.01A
0013H (read only)	19	Channel L current, unsigned number, unit 0.01A
0014H (read only)	20	Channel M current, unsigned number, unit 0.01A
0015H (read only)	21	Channel N current, unsigned number, unit 0.01A
0016H (read only)	22	Channel O current, unsigned number, unit 0.01A
0017H (read only)	23	Channel P current, unsigned number, unit 0.01A
0018H (read only)	24	Channel A frequency, unsigned number, unit 0.1Hz
0019H (read only)	25	Channel B frequency, unsigned number, unit 0.1Hz
001AH(read only)	26	Channel C frequency, unsigned number, unit 0.1Hz
001BH (read only)	27	Channel D frequency, unsigned number, unit 0.1Hz
001CH (read only)	28	Channel E frequency, unsigned number, unit 0.1Hz

001DH (read only)	29	Channel F frequency, unsigned number, unit 0.1Hz
001EH (read only)	30	Channel G frequency, unsigned number, unit 0.1Hz
001FH (read only)	31	Channel H frequency, unsigned number, unit 0.1Hz
0020H (read only)	32	Channel I frequency, unsigned number, unit 0.1Hz
0021H (read only)	33	Channel J frequency, unsigned number, unit 0.1Hz
0022H (read only)	34	Channel K frequency, unsigned number, unit 0.1Hz

0023H (read only)	35	Channel L frequency, unsigned number, unit 0.1Hz
0024H (read only)	36	Channel M frequency, unsigned number, unit 0.1Hz
0025H (read only)	37	Channel N frequency, unsigned number, unit 0.1Hz
0026H (read only)	38	Channel O frequency, unsigned number, unit 0.1Hz
0027H (read only)	39	Channel P frequency, unsigned number, unit 0.1Hz
0028H(read write)	40	Channel A current transformer ratio, unsigned number
0029H(read write)	41	Channel B current transformer ratio, unsigned number
002AH(read write)	42	Channel C current transformer ratio, unsigned number
002BH(read write)	43	Channel D current transformer ratio, unsigned number
002CH(read write)	44	Channel E current transformer ratio, unsigned number
002DH(read write)	45	Channel F current transformer ratio, unsigned number
002EH(read write)	46	Channel G current transformer ratio, unsigned number
003FH(read write)	47	Channel H current transformer ratio, unsigned number
0030H(read write)	48	Channel I current transformer ratio, unsigned number
0031H(read write)	49	Channel J current transformer ratio, unsigned number
0032H(read write)	50	Channel K current transformer ratio, unsigned number
0033H(read write)	51	Channel L current transformer ratio, unsigned number
0034H(read write)	52	Channel M current transformer ratio, unsigned number
0035H(read write)	53	Channel N current transformer ratio, unsigned number
0036H(read write)	54	Channel O current transformer ratio, unsigned number
0037H(read write)	55	Channel P current transformer ratio, unsigned number

Derating instructions:
1. When the division factor is set to 5, although the frequency range can reach 10Hz-400Hz, if the frequency is small, the excessive signal will cause the transformer to enter saturation. When the signal frequency is less than 25Hz, the range needs to be derated by 50%. use.
2. For a variable conduction or duty cycle signal such as a thyristor chopped output AC signal, the maximum conduction angle or duty cycle current must not exceed the range. And when the conduction angle or the duty ratio is too small, the reliability of the measurement result decreases. In order to obtain better frequency measurement results, it is generally recommended to keep the selection factor (register address 0007H) as the default value.



HDXXAXXA16GK sixteen AC current acquisition module wiring diagram external current transformer
Safety instructions:
1. The power must be cut off before wiring and it is determined that it is not charged.
2. The ground terminal of the module must be grounded reliably.
3. Wiring and installation by qualified personnel.
4. The added signal should not exceed the device range.
5. Under no circumstances should the CT circuit be open.

Isolation withstand voltage:
Current measurement input to ground: determined by an external AC current transformer
RS485 interface to ground: >DC500V
Auxiliary power input to ground: auxiliary power supply negative ground
Note: The current signal ratings of different current range current mutual inductance measurement inputs may be different.
Warning: This module is only suitable for AC systems with phase voltage (L to N voltage, L to ground voltage) less than 280V.