

AMC16Z series DC precision power distribution monitoring device

Installation and operation instruction V1.6

Acrel Co.,Ltd.

Declaration

All rights reserved. Without the written permission of the company, the contents of any paragraphs and chapters in this manual shall not be copied, copied or reproduced or disseminated in any form. Otherwise, all consequences shall be borne by the violator.

The company reserves all legal rights.

The company reserves the right to modify the specifications described in this manual without prior notice. Before ordering, please consult your local agent for new specifications.

Contents

1 Overview.....	1
2 Products model.....	1
3 Technical parameters.....	1
4 Outline structure.....	5
5 Terminal block.....	6
5.1 AMC16Z-ZD.....	6
5.2 AMC16Z-FD.....	7
5.3 AMC16Z-FDK24.....	8
5.4 AMC16Z-FDK48.....	9
5.5 AMC16Z-KA.....	10
5.6 AMC16Z-KD.....	10
6 Communication protocol.....	11
6.1 Protocol sketch.....	11
6.2 Transmission mode.....	11
6.3 Function mode brief introduction.....	13
6.4 Communication address.....	14
7 Matters need attention.....	38
8 Common fault diagnosis and troubleshooting methods.....	38

1 Overview

With the rapid development of data centers,the energy consumption of data centers has become more and more prominent. Energy management and power supply and distribution design of data centers have become a hot issue. Efficient and reliable data center power distribution system is an effective way to improve the energy use efficiency of data centers and reduce equipment energy consumption.To realize energy saving of data center,it is necessary to monitor each electrical load first. However,there are many load loops in data center,and traditional measuring instruments cannot meet the requirements of cost,volume,installation,construction and other aspects. Therefore,multi-loop monitoring devices suitable for centralized monitoring of data center are needed.

AMC16Z series DC precise distribution monitoring device is a measurement device designed specifically for data center server power management.The device design exquisite,can for A + B two into line and 96 road for electrical parameters,the input and output parameters of the switch state and the lightning protection device such as real-time monitoring,all alarm threshold measurement channels can be set in A separate,to qualify the limit event trigger system sound and light alarm,immediately on the volume in the traditional instrument,the height of the monitoring circuit integration.

2 Product model

Model	Function description
AMC16Z-ZD	Monitor the full-power parameters of the A+B double-channel DC feed circuit,6-way switch status monitoring,2-way alarm output,1-way temperature and humidity detection,1-way RS485 communication,±12V output (only power supply to the feed circuit module supporting Hall sensor).
AMC16Z-FD	Monitor the full-power parameters of A+B double-channel DC outlet 24 and 1-channel RS485 communication.
AMC16Z-FDK24	Monitor the full-power parameters and switching status of A+B double-channel DC outlet 24 and 1-channel RS485 communication.
AMC16Z-FDK48	Monitor the full-power parameters and switching status of A+B double-channel DC off-line 48 sub-lines and 1-channel RS485 communication.
AMC16Z-KA	Wet contact,monitor A+B total 48 branch switch status,1 channel RS485 communication.
AMC16Z-KD	At the dry contact,the switch status of A+B consists of 48 branches and RS485 communication is monitored.

3 Technical parameters

DC incoming line

Instrument model		AMC16Z-ZD
Measured parameters		Voltage,current,power,electric energy,ambient temperature and humidity
Bus voltage	Rated	48VDC,240VDC,336VDC
	Measured range	±20%
	Overload	Instantaneous voltage 2 times per second
Current incoming line circuit	Rated	5V (Hall sensor,powered by AMC16Z-ZD ±12V)
	Overload	Duration 1.2 times,instantaneous 10 times/second
Temperature and humidity	Temperature range	-40°C-+99°C
	Humidity range	20%-90%
Measurement	Incoming line	Voltage/current Class 0.5,power/electric energy Class 1

precision	Temperature	±1℃
	Humidity	±5%
Auxiliary power		Signal take electricity(≤15W)
Environment	Temperature	Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	Humidity	Relative humidity ≤93%
	Altitude	≤2500m
Switching output		2 way 3A 250VAC /3A 30VDC
Switching input		6 way dry contact
Communication		RS485/Modbus-RTU
Installation		DIN35mm guide rail or floor mounted
Protection grade		IP20
Pollution levels		2
Security	Insulation	All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	Pressure	A circuit voltage and current signal // B circuit voltage and current signal // Switching output // other ports should meet AC2kV 1min between pairs,switching input and other ports should meet AC0.5kV 1min,leakage current should be less than 2mA,no breakdown or flash over phenomenon.
Electromagnetic compatibility	Anti static interference	Class 4
	Resistance to rapid transient pulse groups	Class 3
	Resistant to surge interference	Class 4
	Radio frequency electromagnetic radiation	Class 3

DC outgoing line

Instrument model		AMC16Z-FD
Measured parameter		Voltage,current,power,electric energy
Bus voltage	Rated	48VDC,240VDC,336VDC
	Measured range	±20%
	Overload	Instantaneous voltage 2 times per second
Current outlet line circuit	Rated	5V (Hall sensor,external power supply ±12V)
	Range	
	Overload	Duration 1.2 times,instantaneous 10 times/second
Measurement precision	Outgoing line	Voltage/current level 0.5,power/electric energy level 1
Auxiliary power supply		Get power supply from AMC16Z-ZD; DC 12-24V when used alone
Environment	Temperature	Work: -15℃ ~ 55℃ Storage: -25℃ ~ 70℃
	Humidity	Relative humidity ≤93%
	Altitude	≤2500m
Communication		RS485/Modbus-RTU
Installation		DIN35mm guide rail or floor mounted
Protection level		IP20
Pollution levels		2

Security	Insulation	All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	Pressure	A voltage current signal // B voltage current signal // Other ports meet AC2kV 1min between pairs,leakage current should be less than 2mA,no breakdown or flash over phenomenon.
Electromagnetic compatibility	Anti-static interference	Class 4
	Radio frequency electromagnetic radiation	Class 3

Note: The secondary input voltage of dc incoming and outgoing modules is 5V,and the default value of primary side current is 50A.If the Hall sensor is different,the customer can set the ratio through the touch screen according to the actual use.

Instrument model		AMC16Z-FDK24	AMC16Z-FDK48
Measured parameter		Voltage,current,power,electrical energy,switching state	
Bus voltage	Rated	48VDC,240VDC,336VDC	
	Measured range	$\pm 20\%$	
	Overload	Instantaneous voltage 2 times per second	
Current out coming line circuit	Rated	5V (Hall sensor,external power supply $\pm 12V$)	
	Range		
	Overload	Duration 1.2 times,instantaneous 10 times/second	
Measurement precision	Outgoing line	Voltage/current level 0.5,power/electric energy level 1	
Auxiliary power		Get power supply from AMC16Z-ZD;DC 12-24V when used alone	
Environment	Temperature	Work: $-15^{\circ}\text{C} \sim 55^{\circ}\text{C}$ Storage: $-25^{\circ}\text{C} \sim 70^{\circ}\text{C}$	
	Humidity	Relative humidity $\leq 93\%$	
	Altitude	$\leq 2500\text{m}$	
Communication		RS485/Modbus-RTU	
Installation		DIN35mm guide rail or floor mounted	
Protection level		IP20	
Pollution levels		2	
Security	Insulation	All terminals and the insulation resistance between the conductive pieces not below 100 m Ω	
	Pressure	A voltage current signal // B voltage current signal // Other ports meet AC2kV 1min between pairs,leakage current should be less than 2mA, no breakdown or flashing phenomenon.	
Electromagnetic compatibility	Anti-static interference	Class 4	
	Radio frequency electromagnetic radiation	Class 3	

Note: The secondary input voltage of AMC16Z-FDK module is 5V,and the default value of the primary side current is 50A.If the Hall sensor is different,the customer can set the ratio through the touch screen according to the actual use.

Active switching module

Instrument model		AMC16Z-KA
Input frequency		45-60Hz
Auxiliary power		Get power supply from AMC16Z-ZD;DC 12-24V when used alone
Power frequency withstand voltage		AC 2kV/1min 50Hz between power/input signal ports
Environment	Temperature	Work: -15°C ~ 55°C Storage: -25°C ~ 70°C
	Humidity	Relative humidity ≤93%
	Altitude	≤2500m
Switching input		48-way wet contact(48VDC,240VDC,336VDC)
Communication		RS485/Modbus-RTU
Installation		DIN35mm guide rail or floor mounted
Protection level		IP20
Pollution levels		2
Security	Insulation	All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	Pressure	The input signal of a-channel switching quantity // B-channel switching quantity input signal // other ports should meet AC2kV 1min between pairs,the leakage current should be less than 2mA, and there is no breakdown or flashing phenomenon.
Electromagnetic compatibility	Anti-static interference	Class 4
	Radio frequency electromagnetic radiation	Class 3

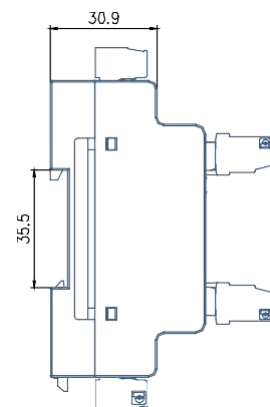
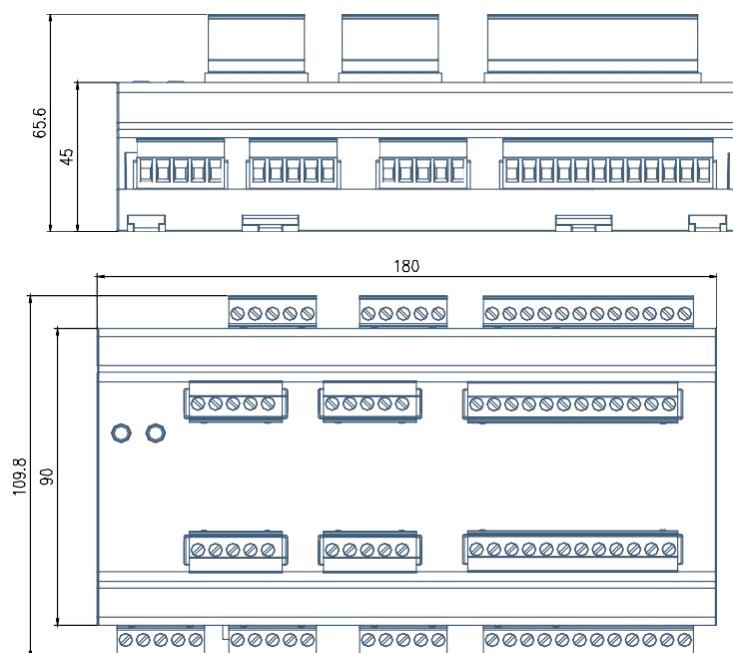
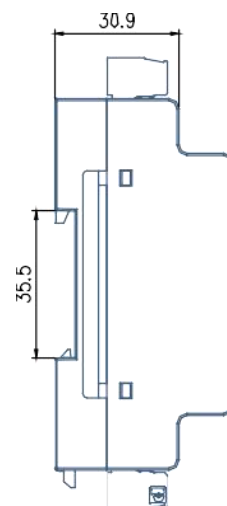
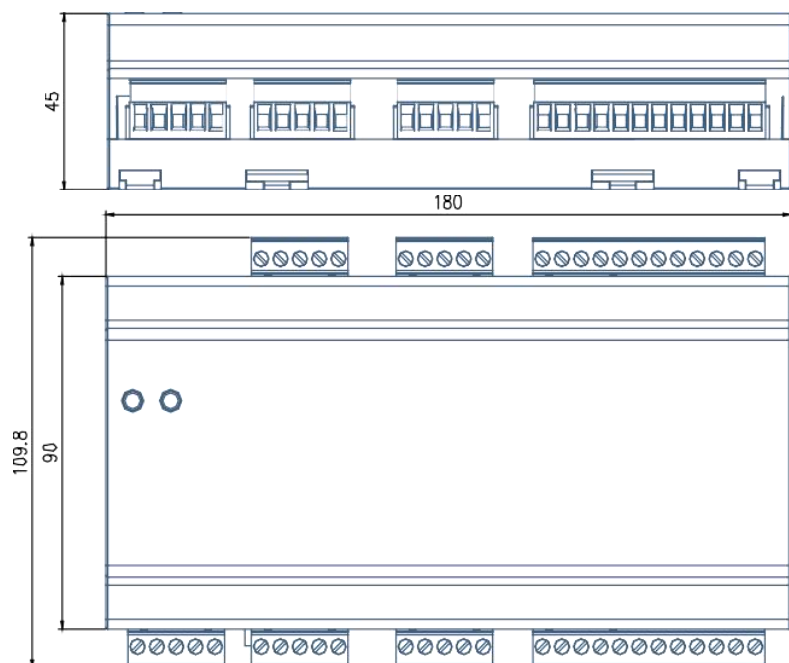
Passive switching module

Technical parameters		AMC16Z-KD
Input frequency		45-60HZ
Auxiliary power		Get power supply from AMC16Z-ZD;DC 12-24V when used alone
Insulation Resistance		100MΩ
Environment	Temperature	Work: -15°C ~ 55°C Storage: -25°C ~ 70°C
	Humidity	Relative humidity ≤93%
	Altitude	≤2500m
Switching input		48-way dry contact
Communication		RS485/Modbus-RTU
Installation		DIN35mm guide rail or wall mounted installation
Protection level		IP20
Pollution levels		2
Security	Insulation	All terminals and the insulation resistance between the conductive pieces not below 100 m Ω
	Pressure	The input signal of a-channel switching quantity // B-channel switching quantity input signal // other ports should meet AC2kV 1min between pairs,the leakage current should be less than 2mA,and there is no breakdown or flashing phenomenon.
Electromagnetic compatibility	Anti-static interference	Class 4
	Radio frequency electromagnetic radiation	Class 3

4 Outline structure

AMC16Z series DC precision distribution monitoring device

Unit:mm



5 Terminal blocks

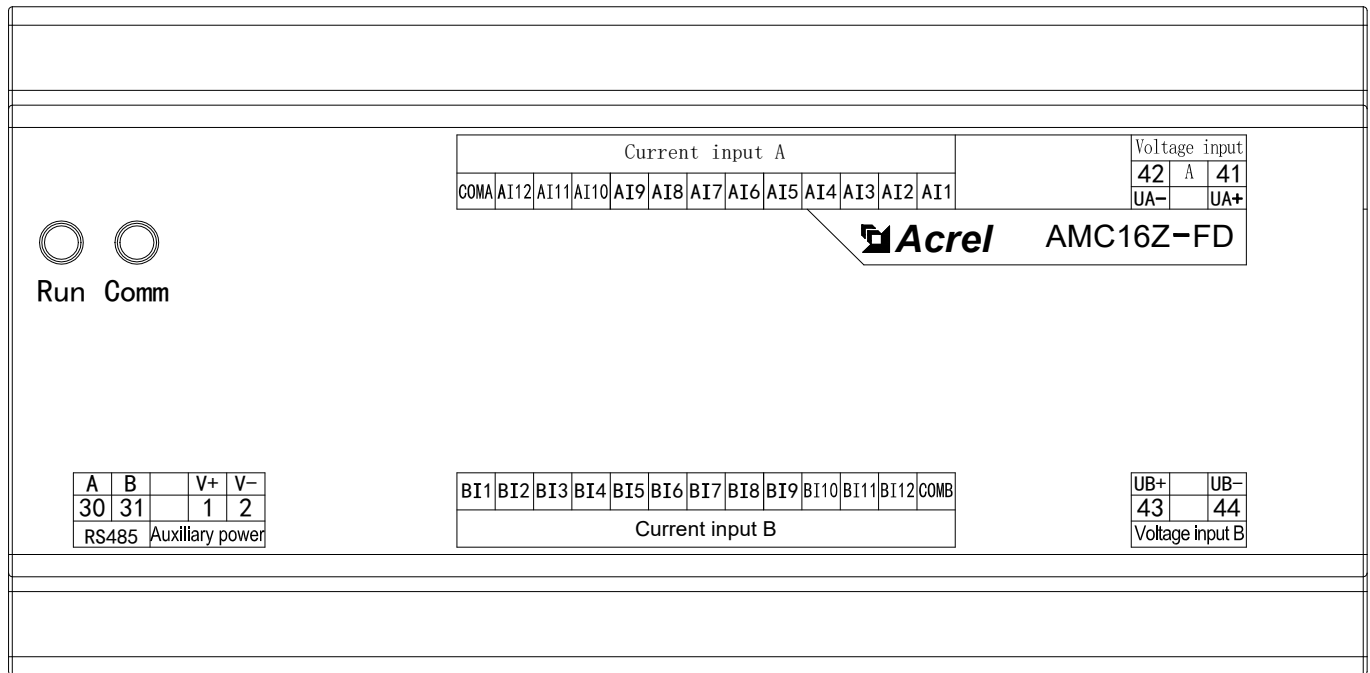
5.1 AMC16Z-ZD

Indicator light		Buzzer		Power B for hall				Voltage input B				Power A for hall				Voltage input A											
53	52	51	50			94	96	6	7			13		12				91	93	4	5			11		10	
D02	D01					+12V	-12V	IB+	IB-			UB-		UB+				+12V	-12V	IA+	IA-			UA-		UA+	
		 AMC16Z-ZD																									
Run		Comm																									
A	B		V+	V-	VSSDATACLKVDD				Input A SPDAInput B SPD BCom																		
30	31		1	2	81828384				61626364656669																		
RS485		Power output		Temperatuer&Humidity				Digital input																			

Terminal No.	Definition	Explanation	Remarks
1	V+	Power Output	The power supply for AMC16Z-FD,AMC16Z-FDK24,AMC16Z-FDK48,AMC16Z-KA,AMC16Z-KD and touch screen. The power supply is not allowed to be connected to other devices (such as indicator light and buzzer)
2	V-		
4	IA+	A-way current input	A-way incoming line DC current (Hall sensor input)
5	IA-		
6	IB+	B-way current input	B-way incoming line DC current (Hall sensor input)
7	IB-		
10	UA+	A-way voltage input	A - way incoming DC voltage input
11	UA-		
12	UB+	B-way voltage input	B- way incoming DC voltage input
13	UB-		
30	A	RS485 communication	Connect to touch screen or RS485 hub
31	B		
50	DO1	Switching output	Buzzer
51			
52	DO2		Indicator light
53			
61	Incoming line A	Switching Input	OF+SD
62			SD
63	Lightning protection A		Judge A-way lightning protector state
64	Incoming line B		OF+SD
65			SD

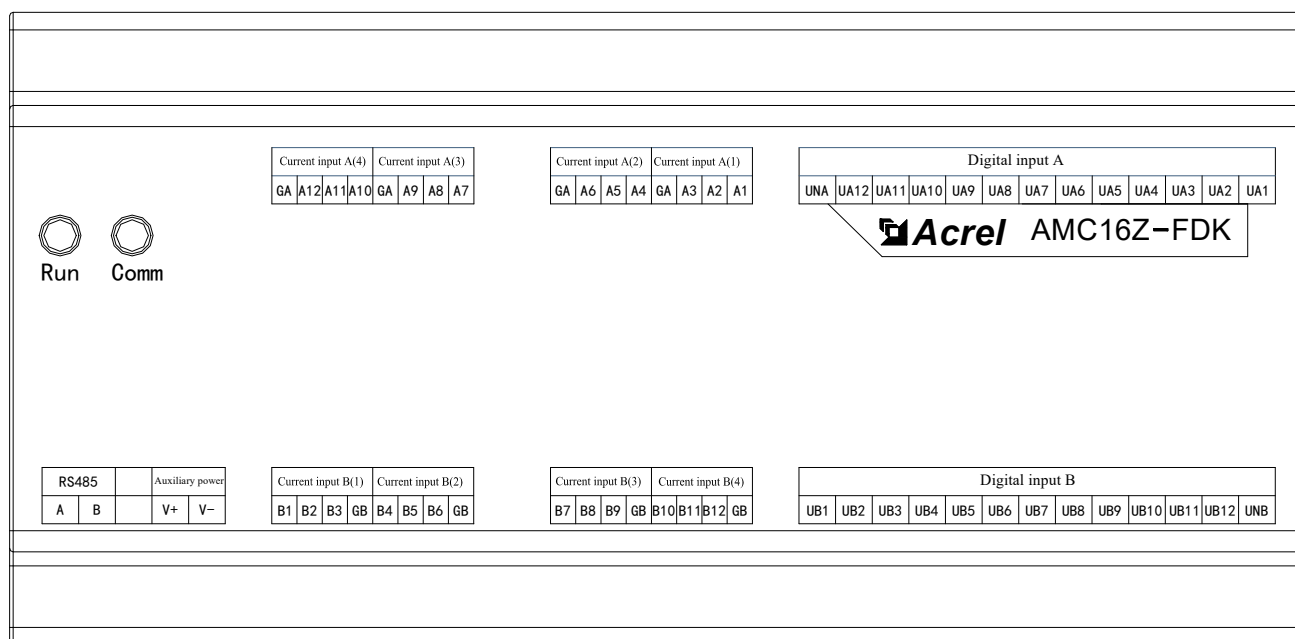
69	Public end		
81	VSS	Temperature and humidity	Connect WH-3 temperature and humidity sensor
82	DATA		
83	CLK		
84	VDD		
91	+12V	A -way Hall power supply	Power supply to the A incoming line is matched with hall
93	-12V		
94	+12V	B -way Hall power supply	Power supply to the B incoming line is matched with hall
96	-12V		

5.2 AMC16Z-FD



Terminal No.	Definition	Explanation	Remarks
1	V+	Auxiliary power	Get power from AMC16Z-ZD or powered by DC12-24V
2	V-		
30	A	RS485 communication	Connect to touch screen or RS485 hub
31	B		
41	UA+	A-way voltage input	A-way outgoing line DC voltage input
42	UA-		
43	UB+	B-way voltage input	B-way outgoing line DC voltage input
44	UB-		
AI1-AI12		A-way current input	A-way outgoing line DC current input(12-way Hall sensor)
COMA			
BI1-BI12		B-way current input	B-way outgoing line DC current input(12-way Hall sensor)
COMB			

5.3 AMC16Z-FDK24



Terminal No.	Explanation	Remarks
V+	Auxiliary power	Get power from AMC16Z-ZD or powered by DC12-24V
V-		
A	RS485 communication	Connect to touch screen or RS485 hub
B		
UA1-UA12	A-way voltage input	A-way switch input
UNA		
UB1-UB12	B-way voltage input	B-way switch input
UNB		
A1-A12	A-way current input	A-way outgoing line DC current input(12-way Hall sensor)
GA		
B1-B12	B-way current input	B-way outgoing line DC current input(12-way Hall sensor)
GB		

5.4 AMC16Z-FDK48



Terminal No.	Explanation	Remarks
V+	Auxiliary power	Get power from AMC16Z-ZD or powered by DC12-24V
V-		
A	RS485 communication	Connect to touch screen or RS485 hub
B		
UA1-UA24	A-way voltage input	A-way switch input
UNA		
UB1-UB24	B-way voltage input	B-way switch input
UNB		
A1-A24	A-way current input	A-way outgoing line DC current input(24-way Hall sensor)
GA		
B1-B24	B-way current input	B-way outgoing line DC current input(24-way Hall sensor)
GB		

5.5 AMC16Z-KA

Digital input A

UNA	K A24	K A23	K A22	K A21	K A20	K A19	K A18	K A17	K A16	K A15	K A14	K A13	K A12	K A11	K A10	K A9	K A8	K A7	K A6	K A5	K A4	K A3	K A2	K A1
-----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	------	------	------	------	------	------	------	------	------

Acrel **AMC16Z-KA**

Digital input B

K B1	K B2	K B3	K B4	K B5	K B6	K B7	K B8	K B9	K B10	K B11	K B12	K B13	K B14	K B15	K B16	K B17	K B18	K B19	K B20	K B21	K B22	K B23	K B24	UNB
------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-----

Run Comm

A	B	V+	V-
30	31	1	2
RS485	Auxiliary power		

Terminal No.	Definition	Explanation	Remarks
1	V+	Auxiliary power	Get power from AMC16Z-ZD or powered by DC12-24V
2	V-		
30	A	RS485 communication	Connect to touch screen or RS485 hub
31	B		
KA1-KA24		A-way switch input	A way active switching input (24 ways)
UNA			
KB1-KB24		B-way switch input	B way active switching input (24 ways)
UNB			

5.6 AMC16Z-KD

RunComm

Digital input A																													
COMA	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	
	A24	A23	A22	A21	A20	A19	A18	A17	A16	A15	A14	A13	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1					

Acrel

AMC16Z-KD

A	B		V+	V-
30	31		1	2
RS485		Auxiliary power		

K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K
B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	B24	COMB					
Digital input B																													

Terminal No.	Definition	Explanation	Remarks
1	V+	Auxiliary power	Get power from AMC16Z-ZD or powered by DC12-24V
2	V-		
30	A	RS485 communication	Connect to touch screen or RS485 hub
31	B		
KA1-KA24		A-way switch input	A-way passive switching input (24 ways)
COMA			
KB1-KB24		B-way switch input	B-way passive switching input (24 ways)
COMB			

6 Communication protocol

This agreement stipulates the physical connection and communication protocol of AMC16Z series DC precision distribution monitoring device and data terminal equipment for data exchange, and its protocol mode is similar to Modbus_RTU communication protocol.

6.1 Protocol overview

The communication protocol used in AMC16Z series DC devices defines in detail the data sequence definitions of address code, function code and check code, which are necessary for specific data exchange. The protocol USES a master-slave responder connection (half duplex) on a single communication line, which means that signals are transmitted in opposite directions on a single communication line. First, the signal of the main computer is addressed to a unique terminal (slave), and then the reply signal from the terminal is transmitted to the host in the opposite direction.

This agreement only allows communication between the host computer (PC, PLC, etc.) and terminal equipment, but does not allow data exchange between independent terminal equipment, so that terminal equipment will not occupy the communication line when they are initialized, but only respond to the query signal arriving at the machine.

6.2 Transmission mode

The information transmission is asynchronous and in bytes. The communication information transmitted between the host and the slave is in 11-bit word format, including 1 starting bit, 8 data bits (the smallest effective bit is sent first), parity bit (no calibration), and 1 stop bit.

6.2.1 Data frame format

Address code	Function code	Data area	CRC Check code
1 Byte	1 Byte	n Byte	2 Byte

6.2.2 Address area

The address field is composed of one byte (8-bit binary code) at the beginning of the frame. The decimal system is 0 to 255. In our system, only 1 to 247 is used. These bits indicate the address of the user-specified terminal device, which will receive data from the host to which it is connected. The address of each terminal must be unique, and only the terminal addressed to will respond to queries containing that address. When a terminal sends back a response, the slave address data in the response tells the host which terminal is communicating with it.

6.2.3 Function area

The function domain code tells the addressable terminal what function to perform. The following table lists the functional codes used in this series of devices, as well as their meanings and functions.

Code	Significance	Act
03	Read data register	Gets the current binary value of one or more registers
16	Preset multiple registers	Sets binary values to a series of multiple registers

6.2.4 Data area

A data domain contains data that a terminal needs to perform a specific function or that a terminal collects in response to a query. The content of this data may be a numeric value, a reference address, or a setting value. For example, the function field code tells the terminal to read a register, while the data field needs to indicate which register to start from and how much data to read. The embedded address and data vary according to the type and content of the slave machine.

6.2.5 Error checking area

This domain allows the host and terminal to check for errors in transit. Sometimes, due to the electrical noise and other disturbance, a set of data from one device to another device online may occur some changes on the road, error checking to ensure that the host or terminal not to response the changed in the process of transmitting data, this will improve the safety and efficiency of the system, and the error checking use 16 bits cyclic redundancy method (CRC16).

6.2.6 Error detection methods

The error checking field occupies two bytes and contains a 16-bit binary value. The CRC value is calculated by the transmitting device and then attached to the data frame. The receiving device recalculates the CRC value upon receiving the data and then compares it with the value in the RECEIVED CRC domain. If the two values are not equal, an error occurs.

During CRC operation, a 16-bit register is preset to all 1, and then the 8 bits in each byte of the data frame are computed continuously with the current value of the register. Only the 8 bits of each byte participate in generating CRC, and the starting and ending bits and the possible parity bits do not affect CRC. When generate CRC, each byte of eight different or with the contents of the registers, then the results to the low displacement, high use "0", its lowest (LSB) removed and test, if it is 1, the register is fixed with a preset value (0 a001h) for an exclusive or operation, if the lowest is 0, do not make any processing.

The above process repeated, until the end of the eight times perform shift operation, when the last one (eighth) after, an 8-bit bytes and register under the current value of exclusive or operation, another eight times for the same shift xor operation, when all the bytes of a data frame processing, generate the final value is CRC value.

The process of generating a CRC is as follows:

(1) Presets a 16-bit register for FFFFH (all 1), called the CRC register.

The 8-bit of the first byte in the data frame is xor with the low byte in the CRC register, and the result is saved back to the CRC register.

The CRC register is moved to the right one bit, the highest bit is filled with 0, the lowest bit is removed and detected.

If the lowest order is 0: repeat step 3 (next shift); If the lowest order is 1: Xor the CRC register with a preset fixed value (0A001H).

Repeat steps 3 and 4 until 8 shifts. This completes a full eight bits.

(2) Repeat steps 2 through 5 to process the next eight bits until all bytes are processed.

The final CRC register value is the CRC value.

In addition,there is another method to calculate CRC using a preset table. Its main characteristic is that the calculation speed is fast,but the table requires a large amount of storage space. This method will not be described here.

6.3 Function Code introduction

6.3.1 Function code 01H,02H: Read discrete input

This function code reads the continuous state of the discrete quantity input from 1 to 2000.The request PDU specifies the starting address,the first input address specified and the input number.Address input from scratch.So the address inputs 1-16 are 0-15.According to each bit in the data field,the discrete input in the response message is divided into one input.Indicates states 1= ON and 0=OFF.The LSB (least significant bit) of the first data byte includes the input addressed in the query.The other inputs are followed in sequence,up to the highest end of the byte,and from low to high in subsequent bytes.If the number of inputs returned is not a multiple of eight,the remaining bits in the last data byte are filled with zeros (up to the highest end of the byte).The number of bytes field indicates the complete number of bytes of data.

The following example reads 10 consecutive switch states of DI7 ~ DI16 from no. 01 slave.

Host send		Send information	Slave return		Return information
Address Code		01H	Address Code		01H
Function Code		02H	Function Code		02H
Starting address	High byte	00H	Byte Amount		02H
	Low byte	06H	Input state 14-7		3FH
Output Amount	High byte	00H	Input state 16-15		02H
	Low byte	0AH	CRC check code	Low byte	29H
CRC check code	Low byte	18H		High byte	89H
	High byte	0CH			

The discrete input state 14-7 is represented as the hexadecimal byte value 3F,or binary 0011 1111.Input 14 is an MSB for this byte,and input 7 is an LSB for this byte.

Represents the discrete input state 16-15 as a hexadecimal byte value 02,or binary 0000 0010.Input 15 is LSB,and zero fills the remaining bits in the last data byte

6.3.2 Function code 03H: read register

This function allows users to obtain data and system parameters collected and recorded by the device.There is no limit to how much data a host can request at a time,but it cannot exceed the defined address range.

The following example is the basic data collected from machine reading no. 01 (2 bytes for each address in the data frame) Uab,Ubc and Uca,where Uab address is 03H,Ubc address is 04H and Uca address is 05H.

Host send		Send information
Address code		01H
Function Code		03H
Starting address	High byte	00H
	Low byte	03H
Register Amount	High byte	00H
	Low byte	03H
CRC check code	Low byte	F5H
	High byte	CBH

Slave return		Return information
Address code		01H
Function Code		03H
Byte Amount		06H
Register Data	High byte	0EH
	Low byte	EEH
Register Data	High byte	0EH
	Low byte	E8H
Register Data	High byte	0EH
	Low byte	E9H
CRC check code	Low byte	8FH
	High byte	7EH

6.3.3 Function code 10H: write multiple registers

Function code 10H allows users to change the contents of multiple registers. System parameters and switching output state of the instrument can be written by this function number. The host can write up to 16 (32 bytes) of data at a time.

The following example is an instrument with a preset address of 01 that outputs a switching amount of DO. Switch put output status indicator register address is 0045H, the first bit corresponds to DO.

Host send		Send information
Address code		01H
Function Code		10H
Starting address	High byte	00H
	Low byte	45H
Register Amount	High byte	00H
	Low byte	01H
Byte Amount		02H
0045H data to be written	High byte	00H
	Low byte	01H
check code	Low byte	69H
	High byte	05H

Slave return		Return information
Address code		01H
Function Code		10H
Function Code		10H
Starting address	High byte	00H
	Low byte	45H
Register Amount	High byte	00H
	Low byte	01H
CRC check code	Low byte	10H
	High byte	1CH

6.4 Communication ADD

6.4.1 AMC16Z-ZD

Remote measuring, remote control

Parameter area (0x00 ~ 0x2F)

Serial No.	Variant	Address	Read/write	Word length	Unit	Data type	Remarks
1	Address	00H	R/W	1	NONE	Uint16	1-247
2	Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600

							4:19200 5:38400 6:57600
3	Check digit	02H	R/W	1	NONE	Uint16	0:no check 2:Odd check 3:Even check
4	Wiring Method	03H	R/W	1	NONE	Uint16	Reserve
5	Rated Voltage	04H	R/W	1	V	Uint16	48,240
6	Rated current	05H	R/W	1	A	Uint16	Reserve
7	Outgoing voltage ratio	06H	R/W	1	NONE	Uint16	Reserve
8	Outgoing current ratio	07H	R/W	1	NONE	Uint16	Reserve
9	Standby	08H	R/W	1	NONE	Uint16	
10	1 st way relay output	09H	R/W	1	NONE	Uint16	
11	2nd way relay output	0AH	R/W	1	NONE	Uint16	
12	Zero screen value setting	0BH	R/W	1	%	Uint16	A decimal
13	Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:1st way 0x8802:2nd way
14	Power zero clearing	0DH	R/W	1	NONE	Uint16	0x6601:1st way 0x6602:2nd way 0x66ff: all

Parameter data area(0x30-0x5FD)

Serial No.	Explanation	Address	Read/write	Word length	Unit	Data type	Remarks
1	A side DC incoming line 1 voltage	30H-31H	R	2	V	float	
2	A side DC incoming line 1 current	32H-33H	R	2	A	float	
3	A side DC incoming line 1 power	34H-35H	R	2	W	float	
4	A side DC incoming line 1 energy	36H-37H	R	2	0.01kWh	Uint32	
5	A side DC incoming line 2 voltage	38H-39H	R	2	V	float	
6	A side DC incoming line 2 current	3AH-3BH	R	2	A	float	
7	A side DC incoming line 2 power	3CH-3DH	R	2	W	float	
8	A side DC incoming line 2 energy	3EH-3FH	R	2	0.01kWh	Uint32	
9	Standby	40H-05F9H	R				
10	Temperature	05FAH-05FBH	R	2	°C	float	
11	Humidity	05FCH-05FDH	R	2	%	float	

Remote signal

Serial No.	Variant	Bit address	Read/write	Remarks
1	1st way switch input	0	R	0 invalid,1 valid
2	2nd way switch input	1	R	Ditto
3	3rd way switch input	2	R	Ditto

4	4th way switch input	3	R	Ditto
5	5th way switch input	4	R	Ditto
6	6th way switch input	5	R	Ditto
7	1st way switch input	6	R	Ditto
8	2nd way switch output	7	R	Ditto

6.4.2 AMC16Z-FD

Remote measurement,remote control

Parameter area(0x00-0x2F)

Serial No.	Variant	Address	Read/write	Word length	Unit	Data type	Remarks
1	Address	00H	R/W	1	NONE	Uint16	1-247
2	Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	Check bit	02H	R/W	1	NONE	Uint16	0:No check 2:Odd check 3:Even check
4	Wiring method	03H	R/W	1	NONE	Uint16	Reserve
5	Rated voltage	04H	R/W	1	V	Uint16	48,240
6	Rated current	05H	R/W	1	A	Uint16	Reserve
7	Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	Reserve
8	Outgoing line current ratio	07H	R/W	1	NONE	Uint16	Reserve
9	Standby	08H	R/W	1	NONE	Uint16	
10	Standby	09H	R/W	1	NONE	Uint16	
11	Standby	0AH	R/W	1	NONE	Uint16	
12	Zero screen setting	0BH	R/W	1	%	Uint16	One decimal
13	Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:1st way 0x8802:2nd way 0x88FF:All
14	Energy zero clearing	0DH	R/W	1	NONE	Uint16	0x6601:1st way 0x6601:2nd way 0x66FF:All

Parameter data area(0x30-0xEF)

Serial No.	Variant	Address	Read/write	Word length	Unit	Remarks
1	A side DC outgoing line 1 voltage	30H-31H	R	2	V	
2	A side DC outgoing line 2 voltage	32H-33H	R	2	V	
3	A side DC outgoing line 3 voltage	34H-35H	R	2	V	
4	A side DC outgoing line 4 voltage	36H-37H	R	2	V	

5	A side DC outgoing line 5 voltage	38H-39H	R	2	V	
6	A side DC outgoing line 6 voltage	3AH-3BH	R	2	V	
7	A side DC outgoing line 7 voltage	3CH-3DH	R	2	V	
8	A side DC outgoing line 8 voltage	3EH-3FH	R	2	V	
9	A side DC outgoing line 9 voltage	40H-41H	R	2	V	
10	A side DC outgoing line 10 voltage	42H-43H	R	2	V	
11	A side DC outgoing line 11 voltage	44H-45H	R	2	V	
12	A side DC outgoing line 12 voltage	46H-47H	R	2	V	
13	B side DC outgoing line 1 voltage	48H-49H	R	2	V	
14	B side DC outgoing line 2 voltage	4AH-4BH	R	2	V	
15	B side DC outgoing line 3 voltage	4CH-4DH	R	2	V	
16	B side DC outgoing line 4 voltage	4EH-4FH	R	2	V	
17	B side DC outgoing line 5 voltage	50H-51H	R	2	V	
18	B side DC outgoing line 6 voltage	52H-53H	R	2	V	
19	B side DC outgoing line 7 voltage	54H-55H	R	2	V	
20	B side DC outgoing line 8 voltage	56H-57H	R	2	V	
21	B side DC outgoing line 9 voltage	58H-59H	R	2	V	
22	B side DC outgoing line 10 voltage	5AH-5BH	R	2	V	
23	B side DC outgoing line 11 voltage	5CH-5DH	R	2	V	
24	B side DC outgoing line 12 voltage	5EH-5FH	R	2	V	
25	A side DC outgoing line 1 current	60H-61H	R	2	A	
26	A side DC outgoing line 2 current	62H-63H	R	2	A	
27	A side DC outgoing line 3 current	64H-65H	R	2	A	
28	A side DC outgoing line 4 current	66H-67H	R	2	A	
29	A side DC outgoing line 5 current	68H-69H	R	2	A	
30	A side DC outgoing line 6 current	6AH-6BH	R	2	A	
31	A side DC outgoing line 7 current	6CH-6DH	R	2	A	
32	A side DC outgoing line 8 current	6EH-6FH	R	2	A	
33	A side DC outgoing line 9 current	70H-71H	R	2	A	
34	A side DC outgoing line 10 current	72H-73H	R	2	A	
35	A side DC outgoing line 11 current	74H-75H	R	2	A	
36	A side DC outgoing line 12 current	76H-77H	R	2	A	
37	B side DC outgoing line 1 current	78H-79H	R	2	A	
38	B side DC outgoing line 2 current	7AH-7BH	R	2	A	
39	B side DC outgoing line 3 current	7CH-7DH	R	2	A	
40	B side DC outgoing line 4 current	7EH-7FH	R	2	A	
41	B side DC outgoing line 4 current	80H-81H	R	2	A	
42	B side DC outgoing line 6 current	82H-83H	R	2	A	
43	B side DC outgoing line 7 current	84H-85H	R	2	A	
44	B side DC outgoing line 8 current	86H-87H	R	2	A	

45	B side DC outgoing line 9 current	88H-89H	R	2	A	
46	B side DC outgoing line 10 current	8AH-8BH	R	2	A	
47	B side DC outgoing line 11 current	8CH-8DH	R	2	A	
48	B side DC outgoing line 12 current	8EH-8FH	R	2	A	
49	A side DC outgoing line 1 power	90H-91H	R	2	W	
50	A side DC outgoing line 2 power	92H-93H	R	2	W	
51	A side DC outgoing line 3 power	94H-95H	R	2	W	
52	A side DC outgoing line 4 power	96H-97H	R	2	W	
53	A side DC outgoing line 5 power	98H-99H	R	2	W	
54	A side DC outgoing line 6 power	9AH-9BH	R	2	W	
55	A side DC outgoing line 7 power	9CH-9DH	R	2	W	
56	A side DC outgoing line 8 power	9EH-9FH	R	2	W	
57	A side DC outgoing line 9 power	A0H-A1H	R	2	W	
58	A side DC outgoing line 10 power	A2H-A3H	R	2	W	
59	A side DC outgoing line 11 power	A4H-A5H	R	2	W	
60	A side DC outgoing line 12 power	A6H-A7H	R	2	W	
61	B side DC outgoing line 1 power	A8H-A9H	R	2	W	
62	B side DC outgoing line 2 power	AAH-ABH	R	2	W	
63	B side DC outgoing line 3 power	ACH-ADH	R	2	W	
64	B side DC outgoing line 4 power	AEH-AFH	R	2	W	
65	B side DC outgoing line 5 power	B0H-B1H	R	2	W	
66	B side DC outgoing line 6 power	B2H-B3H	R	2	W	
67	B side DC outgoing line 7 power	B4H-B5H	R	2	W	
68	B side DC outgoing line 8 power	B6H-B7H	R	2	W	
69	B side DC outgoing line 9 power	B8H-B9H	R	2	W	
70	B side DC outgoing line 10 power	BAH-BBH	R	2	W	
71	B side DC outgoing line 11 power	BCH-BDH	R	2	W	
72	B side DC outgoing line 12 power	BEH-BFH	R	2	W	
73	A side DC outgoing line 1 energy	C0H-C1H	R	2	0.01kWh	
74	A side DC outgoing line 2 energy	C2H-C3H	R	2	0.01kWh	
75	A side DC outgoing line 3 energy	C4H-C5H	R	2	0.01kWh	
76	A side DC outgoing line 4 energy	C6H-C7H	R	2	0.01kWh	
77	A side DC outgoing line 5 energy	C8H-C9H	R	2	0.01kWh	
78	A side DC outgoing line 6 energy	CAH-CBH	R	2	0.01kWh	
79	A side DC outgoing line 7 energy	CCH-CDH	R	2	0.01kWh	
80	A side DC outgoing line 8 energy	CEH-CFH	R	2	0.01kWh	
81	A side DC outgoing line 9 energy	D0H-D1H	R	2	0.01kWh	
82	A side DC outgoing line 10 energy	D2H-D3H	R	2	0.01kWh	
83	A side DC outgoing line 11 energy	D4H-D5H	R	2	0.01kWh	
84	A side DC outgoing line 12 energy	D6H-D7H	R	2	0.01kWh	

85	B side DC outgoing line 1 energy	D8H-D9H	R	2	0.01kWh	
86	B side DC outgoing line 2 energy	DAH-DBH	R	2	0.01kWh	
87	B side DC outgoing line 3 energy	DCH-DDH	R	2	0.01kWh	
88	B side DC outgoing line 4 energy	DEH-DFH	R	2	0.01kWh	
89	B side DC outgoing line 5 energy	E0H-E1H	R	2	0.01kWh	
90	B side DC outgoing line 6 energy	E2H-E3H	R	2	0.01kWh	
91	B side DC outgoing line 7 energy	E4H-E5H	R	2	0.01kWh	
92	B side DC outgoing line 8 energy	E6H-E7H	R	2	0.01kWh	
93	B side DC outgoing line 9 energy	E8H-E9H	R	2	0.01kWh	
94	B side DC outgoing line 10 energy	EAH-EBH	R	2	0.01kWh	
95	B side DC outgoing line 11 energy	ECH-EDH	R	2	0.01kWh	
96	B side DC outgoing line 12 energy	EEH-EFH	R	2	0.01kWh	

6.4.3 AMC16Z-FDK24

When communicating with AMC16Z-FDK24/48,two addresses will be occupied in the same bus. If the address in the table is 1,address 2 will be occupied. The other table addresses in the same bus cannot be set to 2,and the rest addresses can be set to the same.

Remote measurement,remote control

Parameter area(0x00-0x2F)

Serial No.	Variant	Address	Read/write	Word length	Unit	Data type	Remarks
1	Address	00H	R/W	1	NONE	Uint16	1-247
2	Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	Check bit	02H	R/W	1	NONE	Uint16	0:no check 2:Odd check 3:Even check
4	Wiring method	03H	R/W	1	NONE	Uint16	Reserve
5	Rated voltage	04H	R/W	1	V	Uint16	48,240,336
6	Rated current	05H	R/W	1	A	Uint16	Reserve
7	Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	Reserve
8	Outgoing line current ratio	07H	R/W	1	NONE	Uint16	Reserve
9	Standby	08H	R/W	1	NONE	Uint16	
10	Standby	09H	R/W	1	NONE	Uint16	
11	Standby	0AH	R/W	1	NONE	Uint16	
12	Zero screen setting	0BH	R/W	1	%	Uint16	One decimal
13	Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:1st way 0x8802:2nd way 0x88FF:All

14	Energy zero clearing	0DH	R/W	1	NONE	Uint16	06601:1st way 06602:2nd way 0x66FF:All
15	Shake frequency elimination	27H	R/W	1	NONE	Uint16	Default 2
16	High level determination	28H	R/W	1	NONE	Uint16	30, 66, 100

Parameter data area (0x30 ~ 0xED)

Serial No.	Variant	Address	Read/ write	Word length	Unit	Data type	Remarks
1	Section I DC outgoing line 1 voltage	30H-31H	R	2	V	float	
2	Section I DC outgoing line 2 voltage	32H-33H	R	2	V	float	
3	Section I DC outgoing line 3 voltage	34H-35H	R	2	V	float	
4	Section I DC outgoing line 4 voltage	36H-37H	R	2	V	float	
5	Section I DC outgoing line 5 voltage	38H-39H	R	2	V	float	
6	Section I DC outgoing line 6 voltage	3AH-3BH	R	2	V	float	
7	Section I DC outgoing line 7 voltage	3CH-3DH	R	2	V	float	
8	Section I DC outgoing line 8 voltage	3EH-3FH	R	2	V	float	
9	Section I DC outgoing line 9 voltage	40H-41H	R	2	V	float	
10	Section I DC outgoing line 10 voltage	42H-43H	R	2	V	float	
11	Section I DC outgoing line 11 voltage	44H-45H	R	2	V	float	
12	Section I DC outgoing line 12 voltage	46H-47H	R	2	V	float	
13	Section II DC outgoing line 1 voltage	48H-49H	R	2	V	float	
14	Section II DC outgoing line 2 voltage	4AH-4BH	R	2	V	float	
15	Section II DC outgoing line 3 voltage	4CH-4DH	R	2	V	float	
16	Section II DC outgoing line 4 voltage	4EH-4FH	R	2	V	float	
17	Section II DC outgoing line 5 voltage	50H-51H	R	2	V	float	
18	Section II DC outgoing line 6 voltage	52H-53H	R	2	V	float	
19	Section II DC outgoing line 7 voltage	54H-55H	R	2	V	float	
20	Section II DC outgoing line 8 voltage	56H-57H	R	2	V	float	
21	Section II DC outgoing line 9 voltage	58H-59H	R	2	V	float	
22	Section II DC outgoing line 10 voltage	5AH-5BH	R	2	V	float	
23	Section II DC outgoing line 11 voltage	5CH-5DH	R	2	V	float	

24	Section II DC outgoing line 12 voltage	5EH-5FH	R	2	V	float	
25	Section I DC outgoing line 1 current	60H-61H	R	2	A	float	
26	Section I DC outgoing line 2 current	62H-63H	R	2	A	float	
27	Section I DC outgoing line 3 current	64H-65H	R	2	A	float	
28	Section I DC outgoing line 4 current	66H-67H	R	2	A	float	
29	Section I DC outgoing line 5 current	68H-69H	R	2	A	float	
30	Section I DC outgoing line 6 current	6AH-6BH	R	2	A	float	
31	Section I DC outgoing line 7 current	6CH-6DH	R	2	A	float	
32	Section I DC outgoing line 8 current	6EH-6FH	R	2	A	float	
33	Section I DC outgoing line 9 current	70H-71H	R	2	A	float	
34	Section I DC outgoing line 10 current	72H-73H	R	2	A	float	
35	Section I DC outgoing line 11 current	74H-75H	R	2	A	float	
36	Section I DC outgoing line 12 current	76H-77H	R	2	A	float	
37	Section II DC outgoing line 1 current	78H-79H	R	2	A	float	
38	Section II DC outgoing line 2 current	7AH-7BH	R	2	A	float	
39	Section II DC outgoing line 3 current	7CH-7DH	R	2	A	float	
40	Section II DC outgoing line 4 current	7EH-7FH	R	2	A	float	
41	Section II DC outgoing line 5 current	80H-81H	R	2	A	float	
42	Section II DC outgoing line 6 current	82H-83H	R	2	A	float	
43	Section II DC outgoing line 7 current	84H-85H	R	2	A	float	
44	Section II DC outgoing line 8 current	86H-87H	R	2	A	float	
45	Section II DC outgoing line 9 current	88H-89H	R	2	A	float	
46	Section II DC outgoing line 10 current	8AH-8BH	R	2	A	float	
47	Section II DC outgoing line 11 current	8CH-8DH	R	2	A	float	
48	Section II DC outgoing line 12 current	8EH-8FH	R	2	A	float	
49	Section I DC outgoing line 1 power	90H-91H	R	2	W	float	
50	Section I DC outgoing line 2 power	92H-93H	R	2	W	float	
51	Section I DC outgoing line 3 power	94H-95H	R	2	W	float	
52	Section I DC outgoing	96H-97H	R	2	W	float	

	line 4 power						
53	Section I DC outgoing line 5 power	98H-99H	R	2	W	float	
54	Section I DC outgoing line 6 power	9AH-9BH	R	2	W	float	
55	Section I DC outgoing line 7 power	9CH-9DH	R	2	W	float	
56	Section I DC outgoing line 8 power	9EH-9FH	R	2	W	float	
57	Section I DC outgoing line 9 power	A0H-A1H	R	2	W	float	
58	Section I DC outgoing line 10 power	A2H-A3H	R	2	W	float	
59	Section I DC outgoing line 11 power	A4H-A5H	R	2	W	float	
60	Section I DC outgoing line 12 power	A6H-A7H	R	2	W	float	
61	Section II DC outgoing line 1 power	A8H-A9H	R	2	W	float	
62	Section II DC outgoing line 2 power	AAH-ABH	R	2	W	float	
63	Section II DC outgoing line 3 power	ACH-ADH	R	2	W	float	
64	Section II DC outgoing line 4 power	AEH-AFH	R	2	W	float	
65	Section II DC outgoing line 5 power	B0H-B1H	R	2	W	float	
66	Section II DC outgoing line 6 power	B2H-B3H	R	2	W	float	
67	Section II DC outgoing line 7 power	B4H-B5H	R	2	W	float	
68	Section II DC outgoing line 8 power	B6H-B7H	R	2	W	float	
69	Section II DC outgoing line 9 power	B8H-B9H	R	2	W	float	
70	Section II DC outgoing line 10 power	BAH-BBH	R	2	W	float	
71	Section II DC outgoing line 11 power	BCH-BDH	R	2	W	float	
72	Section II DC outgoing line 12 power	BEH-BFH	R	2	W	float	
73	Section I DC outgoing line 1 energy	C0H-C1H	R	2	0.01kWh	Uint32	
74	Section I DC outgoing line 2 energy	C2H-C3H	R	2	0.01kWh	Uint32	
75	Section I DC outgoing line 3 energy	C4H-C5H	R	2	0.01kWh	Uint32	
76	Section I DC outgoing line 4 energy	C6H-C7H	R	2	0.01kWh	Uint32	
77	Section I DC outgoing line 5 energy	C8H-C9H	R	2	0.01kWh	Uint32	
78	Section I DC outgoing line 6 energy	CAH-CBH	R	2	0.01kWh	Uint32	
79	Section I DC outgoing line 7 energy	CCH-CDH	R	2	0.01kWh	Uint32	
80	Section I DC outgoing line 8 energy	CEH-CFH	R	2	0.01kWh	Uint32	

81	Section I DC outgoing line 9 energy	D0H-D1H	R	2	0.01kWh	Uint32	
82	Section I DC outgoing line 10 energy	D2H-D3H	R	2	0.01kWh	Uint32	
83	Section I DC outgoing line 11 energy	D4H-D5H	R	2	0.01kWh	Uint32	
84	Section I DC outgoing line 12 energy	D6H-D7H	R	2	0.01kWh	Uint32	
85	Section II DC outgoing line 1 energy	D8H-D9H	R	2	0.01kWh	Uint32	
86	Section II DC outgoing line 2 energy	DAH-DBH	R	2	0.01kWh	Uint32	
87	Section II DC outgoing line 3 energy	DCH-DDH	R	2	0.01kWh	Uint32	
88	Section II DC outgoing line 4 energy	DEH-DFH	R	2	0.01kWh	Uint32	
89	Section II DC outgoing line 5 energy	E0H-E1H	R	2	0.01kWh	Uint32	
90	Section II DC outgoing line 6 energy	E2H-E3H	R	2	0.01kWh	Uint32	
91	Section II DC outgoing line 7 energy	E4H-E5H	R	2	0.01kWh	Uint32	
92	Section II DC outgoing line 8 energy	E6H-E7H	R	2	0.01kWh	Uint32	
93	Section II DC outgoing line 9 energy	E8H-E9H	R	2	0.01kWh	Uint32	
94	Section II DC outgoing line 10 energy	EAH-EBH	R	2	0.01kWh	Uint32	
95	Section II DC outgoing line 11 energy	ECH-EDH	R	2	0.01kWh	Uint32	

Remote signal

AMC16Z-FAK24/48, the 1st-12th switching value corresponds to the AC outgoing line 1-12 of section I,the 13st-24th switching value corresponds to the AC outgoing line 1-12 of section II,the 25st-36th switching value corresponds to the AC outgoing line 13-24of section I,the 37st-48th switching value corresponds to the AC outgoing line 13-24of section II.

Serial No.	Variant	Address	Read/write	Remarks
1	1st way switch input	0	R	0 invalid,1 valid
2	2nd way switch input	1	R	Ditto
3	3rd way switch input	2	R	Ditto
4	4th way switch input	3	R	Ditto
5	5th way switch input	4	R	Ditto
6	6th way switch input	5	R	Ditto
7	7th way switch input	6	R	Ditto
8	8th way switch input	7	R	Ditto
9	9th way switch input	8	R	Ditto
10	10th way switch input	9	R	Ditto
11	11th way switch input	10	R	Ditto
12	12th way switch input	11	R	Ditto
13	13th way switch input	12	R	Ditto
14	14th way switch input	13	R	Ditto

15	15th way switch input	14	R	Ditto
16	16th way switch input	15	R	Ditto
17	17th way switch input	16	R	Ditto
18	18th way switch input	17	R	Ditto
19	19th way switch input	18	R	Ditto
20	20th way switch input	19	R	Ditto
21	21st way switch input	20	R	Ditto
22	22nd way switch input	21	R	Ditto
23	23rd way switch input	22	R	Ditto
24	24th way switch input	23	R	Ditto
25	25th way switch input	24	R	Ditto
26	26th way switch input	25	R	Ditto
27	27th way switch input	26	R	Ditto
28	28th way switch input	27	R	Ditto
29	29th way switch input	28	R	Ditto
30	30th way switch input	29	R	Ditto
31	31st way switch input	30	R	Ditto
32	32nd way switch input	31	R	Ditto
33	33rd way switch input	32	R	Ditto
34	34th way switch input	33	R	Ditto
35	35th way switch input	34	R	Ditto
36	36th way switch input	35	R	Ditto
37	37th way switch input	36	R	Ditto
38	38th way switch input	37	R	Ditto
39	39th way switch input	38	R	Ditto
40	40th way switch input	39	R	Ditto
41	41st way switch input	40	R	Ditto
42	42nd way switch input	41	R	Ditto
43	43rd way switch input	42	R	Ditto
44	44th way switch input	43	R	Ditto
45	45th way switch input	44	R	Ditto
46	46th way switch input	45	R	Ditto
47	47th way switch input	46	R	Ditto
48	48th way switch input	47	R	Ditto

6.4.4 AMC16Z-FDK48

When communicating with AMC16Z-FDK24/48,two addresses will be occupied in the same bus. If the address in the table is 1,address 2 will be occupied. The other table addresses in the same bus cannot be set to 2,and the rest addresses can be set to the same.

Remote measurement,remote control

Parameter data area(0x00-0x2F)

Serial No.	Variant	Address	Read/write	Word length	Unit	Data type	Remarks
1	Address	00H	R/W	1	NONE	Uint16	1-247
2	Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	Check bit	02H	R/W	1	NONE	Uint16	0:No check 2:Odd check 3:Even check
4	Wiring method	03H	R/W	1	NONE	Uint16	Reserve
5	Rated voltage	04H	R/W	1	V	Uint16	48,240,336
6	Rated current	05H	R/W	1	A	Uint16	Reserve
7	Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	Reserve
8	Outgoing line current ratio	07H	R/W	1	NONE	Uint16	Reserve
9	Standby	08H	R/W	1	NONE	Uint16	
10	Standby	09H	R/W	1	NONE	Uint16	
11	Standby	0AH	R/W	1	NONE	Uint16	
12	Zero screen setting	0BH	R/W	1	%	Uint16	One decimal
13	Current check zero	0CH	R/W	1	NONE	Uint16	0x8801:1st way 0x8802:2nd way 0x88FF:All
14	Energy zero clearing	0DH	R/W	1	NONE	Uint16	06601:1st way 0x6602:2nd way 0x66FF:All
15	Chattering elimination times	27H	R/W	1	NONE	Uint16	Default 2
16	High level determination	28H	R/W	1	NONE	Uint16	30, 66, 100

Parameter data area(0x30-0x10EF)

Serial No.	Variant	Address	Read/write	Word length	Unit	Data type	Remarks
1	Section I DC outgoing line 1 voltage	30H-31H	R	2	V	float	
2	Section I DC outgoing line 2 voltage	32H-33H	R	2	V	float	
3	Section I DC outgoing line 3 voltage	34H-35H	R	2	V	float	
4	Section I DC outgoing line 4 voltage	36H-37H	R	2	V	float	
5	Section I DC outgoing line 5 voltage	38H-39H	R	2	V	float	
6	Section I DC outgoing line 6 voltage	3AH-3BH	R	2	V	float	

7	Section I DC outgoing line 7voltage	3CH-3DH	R	2	V	float	
8	Section I DC outgoing line 8 voltage	3EH-3FH	R	2	V	float	
9	Section I DC outgoing line 9 voltage	40H-41H	R	2	V	float	
10	Section I DC outgoing line 10 voltage	42H-43H	R	2	V	float	
11	Section I DC outgoing line 11 voltage	44H-45H	R	2	V	float	
12	Section I DC outgoing line 12 voltage	46H-47H	R	2	V	float	
13	Section II DC outgoing line 1 voltage	48H-49H	R	2	V	float	
14	Section II DC outgoing line 2 voltage	4AH-4BH	R	2	V	float	
15	Section II DC outgoing line 3 voltage	4CH-4DH	R	2	V	float	
16	Section II DC outgoing line 4 voltage	4EH-4FH	R	2	V	float	
17	Section II DC outgoing line 5 voltage	50H-51H	R	2	V	float	
18	Section II DC outgoing line 6 voltage	52H-53H	R	2	V	float	
19	Section II DC outgoing line 7 voltage	54H-55H	R	2	V	float	
20	Section II DC outgoing line 8 voltage	56H-57H	R	2	V	float	
21	Section II DC outgoing line 9 voltage	58H-59H	R	2	V	float	
22	Section II DC outgoing line 10 voltage	5AH-5BH	R	2	V	float	
23	Section II DC outgoing line 11 voltage	5CH-5DH	R	2	V	float	
24	Side B DC outgoing line 12 voltage	5EH-5FH	R	2	V	float	
25	Section I DC outgoing line 1 current	60H-61H	R	2	A	float	
26	Section I DC outgoing line 2 current	62H-63H	R	2	A	float	
27	Section I DC outgoing line 3 current	64H-65H	R	2	A	float	
28	Section I DC outgoing line 4 current	66H-67H	R	2	A	float	
29	Section I DC outgoing line 5 current	68H-69H	R	2	A	float	
30	Section I DC outgoing line 6 current	6AH-6BH	R	2	A	float	
31	Section I DC outgoing line 7 current	6CH-6DH	R	2	A	float	
32	Section I DC outgoing line 8 current	6EH-6FH	R	2	A	float	
33	Section I DC outgoing line 9 current	70H-71H	R	2	A	float	
34	Section I DC outgoing line 10 current	72H-73H	R	2	A	float	
35	Section I DC outgoing line	74H-75H	R	2	A	float	

	11 current						
36	Section I DC outgoing line 12 current	76H-77H	R	2	A	float	
37	Section II DC outgoing line 1 current	78H-79H	R	2	A	float	
38	Section II DC outgoing line 2 current	7AH-7BH	R	2	A	float	
39	Section II DC outgoing line 3 current	7CH-7DH	R	2	A	float	
40	Section II DC outgoing line 4 current	7EH-7FH	R	2	A	float	
41	Section II DC outgoing line 5 current	80H-81H	R	2	A	float	
42	Section II DC outgoing line 6 current	82H-83H	R	2	A	float	
43	Section II DC outgoing line 7 current	84H-85H	R	2	A	float	
44	Section II DC outgoing line 8 current	86H-87H	R	2	A	float	
45	Section II DC outgoing line 9 current	88H-89H	R	2	A	float	
46	Section II DC outgoing line 10 current	8AH-8BH	R	2	A	float	
47	Section II DC outgoing line 11 current	8CH-8DH	R	2	A	float	
48	Section II DC outgoing line 12 current	8EH-8FH	R	2	A	float	
49	Section I DC outgoing line 1 power	90H-91H	R	2	W	float	
50	Section I DC outgoing line 2 power	92H-93H	R	2	W	float	
51	Section I DC outgoing line 3 power	94H-95H	R	2	W	float	
52	Section I DC outgoing line 4 power	96H-97H	R	2	W	float	
53	Section I DC outgoing line 5 power	98H-99H	R	2	W	float	
54	Section I DC outgoing line 6 power	9AH-9BH	R	2	W	float	
55	Section I DC outgoing line 7 power	9CH-9DH	R	2	W	float	
56	Section I DC outgoing line 8 power	9EH-9FH	R	2	W	float	
57	Section I DC outgoing line 9 power	A0H-A1H	R	2	W	float	
58	Section I DC outgoing Line 10 power	A2H-A3H	R	2	W	float	
59	Section I DC outgoing line 11 power	A4H-A5H	R	2	W	float	
60	Section I DC outgoing line 12 power	A6H-A7H	R	2	W	float	
61	Section II DC outgoing line 1 power	A8H-A9H	R	2	W	float	
62	Section II DC outgoing line 2 power	AAH-ABH	R	2	W	float	
63	Section II DC outgoing line 3 power	ACH-ADH	R	2	W	float	

64	Section II DC outgoing line 4 power	AEH-AFH	R	2	W	float	
65	Section II DC outgoing line 5 power	B0H-B1H	R	2	W	float	
66	Section II DC outgoing line 6 power	B2H-B3H	R	2	W	float	
67	Section II DC outgoing line 7 power	B4H-B5H	R	2	W	float	
68	Section II DC outgoing line 8 power	B6H-B7H	R	2	W	float	
69	Section II DC outgoing line 9 power	B8H-B9H	R	2	W	float	
70	Section II DC outgoing line 10 power	BAH-BBH	R	2	W	float	
71	Section II DC outgoing line 11 power	BCH-BDH	R	2	W	float	
72	Section II DC outgoing line 12 power	BEH-BFH	R	2	W	float	
73	Section I DC outgoing line 1 energy	C0H-C1H	R	2	0.01kWh	Uint32	
74	Section I DC outgoing line 2 energy	C2H-C3H	R	2	0.01kWh	Uint32	
75	Section I DC outgoing line 3 energy	C4H-C5H	R	2	0.01kWh	Uint32	
76	Section I DC outgoing line 4 energy	C6H-C7H	R	2	0.01kWh	Uint32	
77	Section I DC outgoing line 5 energy	C8H-C9H	R	2	0.01kWh	Uint32	
78	Section I DC outgoing line 6 energy	CAH-CBH	R	2	0.01kWh	Uint32	
79	Section I DC outgoing line 7 energy	CCH-CDH	R	2	0.01kWh	Uint32	
80	Section I DC outgoing line 8 energy	CEH-CFH	R	2	0.01kWh	Uint32	
81	Section I DC outgoing line 9 energy	D0H-D1H	R	2	0.01kWh	Uint32	
82	Section I DC outgoing line 10 energy	D2H-D3H	R	2	0.01kWh	Uint32	
83	Section I DC outgoing Line 11 energy	D4H-D5H	R	2	0.01kWh	Uint32	
84	Section I DC outgoing line 12energy	D6H-D7H	R	2	0.01kWh	Uint32	
85	Section II DC outgoing line 1 energy	D8H-D9H	R	2	0.01kWh	Uint32	
86	Section II DC outgoing line 2 energy	DAH-DBH	R	2	0.01kWh	Uint32	
87	Section II DC outgoing line 3 energy	DCH-DDH	R	2	0.01kWh	Uint32	
88	Section II DC outgoing line 4 energy	DEH-DFH	R	2	0.01kWh	Uint32	
89	Section II DC outgoing line 5 energy	E0H-E1H	R	2	0.01kWh	Uint32	
90	Section II DC outgoing line 6 energy	E2H-E3H	R	2	0.01kWh	Uint32	
91	Section II DC outgoing line 7 energy	E4H-E5H	R	2	0.01kWh	Uint32	
92	Section II DC outgoing	E6H-E7H	R	2	0.01kWh	Uint32	

	line 8 energy						
93	Section II DC outgoing line 9 energy	E8H-E9H	R	2	0.01kWh	Uint32	
94	Section II DC outgoing line 10 energy	EAH-EBH	R	2	0.01kWh	Uint32	
95	Section II DC outgoing line 11 energy	ECH-EDH	R	2	0.01kWh	Uint32	
96	Section II DC outgoing line 12 energy	EEH-EFH	R	2	0.01kWh	Uint32	
97	Section I DC outgoing line 13 voltage	1030H-1031H	R	2	V	float	
98	Section I DC outgoing line 14 voltage	1032H-1033H	R	2	V	float	
99	Section I DC outgoing line 15 voltage	1034H-1035H	R	2	V	float	
100	Section I DC outgoing line 16 voltage	1036H-1037H	R	2	V	float	
101	Section I DC outgoing line 17 voltage	1038H-1039H	R	2	V	float	
102	Section I DC outgoing line 18 voltage	103AH-103BH	R	2	V	float	
103	Section I DC outgoing line 19 voltage	103CH-103DH	R	2	V	float	
104	Section I DC outgoing line 20 voltage	103EH-103FH	R	2	V	float	
105	Section I DC outgoing line 21 voltage	1040H-1041H	R	2	V	float	
106	Section I DC outgoing line 22 voltage	1042H-1043H	R	2	V	float	
107	Section I DC outgoing line 23 voltage	1044H-1045H	R	2	V	float	
108	Section I DC outgoing line 24 voltage	1046H-1047H	R	2	V	float	
109	Section II DC outgoing line 13 voltage	1048H-1049H	R	2	V	float	
110	Section II DC outgoing line 14 voltage	104AH-104BH	R	2	V	float	
111	Section II DC outgoing line 15 voltage	104CH-104DH	R	2	V	float	
112	Section II DC outgoing line 16 voltage	104EH-104FH	R	2	V	float	
113	Section II DC outgoing line 17 voltage	1050H-1051H	R	2	V	float	
114	Section II DC outgoing line 18 voltage	1052H-1053H	R	2	V	float	
115	Section II DC outgoing line 19 voltage	1054H-1055H	R	2	V	float	
116	Section II DC outgoing line 20 voltage	1056H-1057H	R	2	V	float	
117	Section II DC outgoing line 21 voltage	1058H-1059H	R	2	V	float	
118	Section II DC outgoing line 22 voltage	105AH-105BH	R	2	V	float	
119	Section II DC outgoing line 23 voltage	105CH-105DH	R	2	V	float	
120	Section II DC outgoing line 24 voltage	105EH-105FH	R	2	V	float	

121	Section I DC outgoing line 13 current	1060H-1061H	R	2	A	float	
122	Section I DC outgoing line 14 current	1062H-1063H	R	2	A	float	
123	Section I DC outgoing line 15 current	1064H-1065H	R	2	A	float	
124	Section I DC outgoing line 16 current	1066H-1067H	R	2	A	float	
125	Section I DC outgoing line 17 current	1068H-1069H	R	2	A	float	
126	Section I DC outgoing line 18 current	106AH-106BH	R	2	A	float	
127	Section I DC outgoing line 19 current	106CH-106DH	R	2	A	float	
128	Section I DC outgoing line 20 current	106EH-106FH	R	2	A	float	
129	Section I DC outgoing line 21 current	1070H-1071H	R	2	A	float	
130	Section I DC outgoing line 22 current	1072H-1073H	R	2	A	float	
131	Section I DC outgoing line 23 current	1074H-1075H	R	2	A	float	
132	Section I DC outgoing line 24 current	1076H-1077H	R	2	A	float	
133	Section II DC outgoing line 13 current	1078H-1079H	R	2	A	float	
134	Section II DC outgoing Line 14 current	107AH-107BH	R	2	A	float	
135	Section II DC outgoing line 15 current	107CH-107DH	R	2	A	float	
136	Section II DC outgoing line 16 current	107EH-107FH	R	2	A	float	
137	Section II DC outgoing line 17 current	1080H-1081H	R	2	A	float	
138	Section II DC outgoing line 18 current	1082H-1083H	R	2	A	float	
139	Section II DC outgoing line 19 current	1084H-1085H	R	2	A	float	
140	Section II DC outgoing line 20 current	1086H-1087H	R	2	A	float	
141	Section II DC outgoing line 21 current	1088H-1089H	R	2	A	float	
142	Section II DC outgoing line 22 current	108AH-108BH	R	2	A	float	
143	Section II DC outgoing line 23 current	108CH-108DH	R	2	A	float	
144	Section II DC outgoing line 24 current	108EH-108FH	R	2	A	float	
145	Section I DC outgoing line 13 power	1090H-1091H	R	2	W	float	
146	Section I DC outgoing line 14 power	1092H-1093H	R	2	W	float	
147	Section I DC outgoing line 15 power	1094H-1095H	R	2	W	float	
148	Section I DC outgoing line 16 power	1096H-1097H	R	2	W	float	
149	Section I DC outgoing line	1098H-1099H	R	2	W	float	

	17 power						
150	Section I DC outgoing line 18 power	109AH-109BH	R	2	W	float	
151	Section I DC outgoing line 19 power	109CH-109DH	R	2	W	float	
152	Section I DC outgoing line 20 power	109EH-109FH	R	2	W	float	
153	Section I DC outgoing line 21 power	10A0H-10A1H	R	2	W	float	
154	Section I DC outgoing line 22 power	10A2H-10A3H	R	2	W	float	
155	Section I DC outgoing line 23 power	10A4H-10A5H	R	2	W	float	
156	Section I DC outgoing line 24 power	10A6H-10A7H	R	2	W	float	
157	Section II DC outgoing line 13 power	10A8H-10A9H	R	2	W	float	
158	Section II DC outgoing line 14 power	10AAH-10ABH	R	2	W	float	
159	Section II DC outgoing line 15 powe	10ACH-10ADH	R	2	W	float	
160	Section II DC outgoing line 16 power	10AEH-10AFH	R	2	W	float	
161	Section II DC outgoing line 17 power	10B0H-10B1H	R	2	W	float	
162	Section II DC outgoing line 18 power	10B2H-10B3H	R	2	W	float	
163	Section II DC outgoing line 19 power	10B4H-10B5H	R	2	W	float	
164	Section II DC outgoing line 20 power	10B6H-10B7H	R	2	W	float	
165	Section II DC outgoing line 21 power	10B8H-10B9H	R	2	W	float	
166	Section II DC outgoing line 22 power	10BAH-10BBH	R	2	W	float	
167	Section II DC outgoing line 23 power	10BCH-10BDH	R	2	W	float	
168	Section II DC outgoing line 24 power	10BEH-10BFH	R	2	W	float	
169	Section I DC outgoing line 13 energy	10C0H-10C1H	R	2	0.01kWh	UInt32	
170	Section I DC outgoing line 14 energy	10C2H-10C3H	R	2	0.01kWh	UInt32	
171	Section I DC outgoing line 15 energy	10C4H-10C5H	R	2	0.01kWh	UInt32	
172	Section I DC outgoing line 16 energy	10C6H-10C7H	R	2	0.01kWh	UInt32	
173	Section I DC outgoing line 17 energy	10C8H-10C9H	R	2	0.01kWh	UInt32	
174	Section I DC outgoing line 18 energy	10CAH-10CBH	R	2	0.01kWh	UInt32	
175	Section I DC outgoing line 19 energy	10CCH-10CDH	R	2	0.01kWh	UInt32	
176	Section I DC outgoing line 20 energy	10CEH-10CFH	R	2	0.01kWh	UInt32	
177	Section I DC outgoing line 21 energy	10D0H-10D1H	R	2	0.01kWh	UInt32	

178	Section I DC outgoing line 22 energy	10D2H-10D3H	R	2	0.01kWh	Uint32	
179	Section I DC outgoing line 23 energy	10D4H-10D5H	R	2	0.01kWh	Uint32	
180	Section I DC outgoing line 24 energy	10D6H-10D7H	R	2	0.01kWh	Uint32	
181	Section II DC outgoing line 13 energy	10D8H-10D9H	R	2	0.01kWh	Uint32	
182	Section II DC outgoing line 14 energy	10DAH-10DBH	R	2	0.01kWh	Uint32	
183	Section II DC outgoing line 15 energy	10DCH-10DDH	R	2	0.01kWh	Uint32	
184	Section II DC outgoing line 16 energy	10DEH-10DFH	R	2	0.01kWh	Uint32	
185	Section II DC outgoing line 17 energy	10E0H-10E1H	R	2	0.01kWh	Uint32	
186	Section II DC outgoing line 18 energy	10E2H-10E3H	R	2	0.01kWh	Uint32	
187	Section II DC outgoing line 19 energy	10E4H-10E5H	R	2	0.01kWh	Uint32	
188	Section II DC outgoing line 20 energy	10E6H-10E7H	R	2	0.01kWh	Uint32	
189	Section II DC outgoing line 21 energy	10E8H-10E9H	R	2	0.01kWh	Uint32	
190	Section II DC outgoing line 22 energy	10EAH-10EBH	R	2	0.01kWh	Uint32	
191	Section II DC outgoing line 23 energy	10ECH-10EDH	R	2	0.01kWh	Uint32	
192	Section II DC outgoing line 24 energy	10EEH-10EFH	R	2	0.01kWh	Uint32	

Remote signal

AMC16Z-FAK24/48, the 1st-12th switching value corresponds to the AC outgoing line 1-12 of section I, the 13st-24th switching value corresponds to the AC outgoing line 1-12 of section II, the 25st-36th switching value corresponds to the AC outgoing line 13-24 of section I, the 37st-48th switching value corresponds to the AC outgoing line 13-24 of section II.

Serial No.	Variant	Address	Read/write	Remarks
1	1st way switch input	0	R	0 invalid, 1 valid
2	2nd way switch input	1	R	Ditto
3	3rd way switch input	2	R	Ditto
4	4th way switch input	3	R	Ditto
5	5th way switch input	4	R	Ditto
6	6th way switch input	5	R	Ditto
7	7th way switch input	6	R	Ditto
8	8th way switch input	7	R	Ditto
9	9th way switch input	8	R	Ditto
10	10th way switch input	9	R	Ditto
11	11th way switch input	10	R	Ditto
12	12th way switch input	11	R	Ditto
13	13th way switch input	12	R	Ditto
14	14th way switch input	13	R	Ditto
15	15th way switch input	14	R	Ditto
16	16th way switch input	15	R	Ditto

17	17th way switch input	16	R	Ditto
18	18th way switch input	17	R	Ditto
19	19th way switch input	18	R	Ditto
20	20th way switch input	19	R	Ditto
21	21st way switch input	20	R	Ditto
22	22nd way switch input	21	R	Ditto
23	23rd way switch input	22	R	Ditto
24	24th way switch input	23	R	Ditto
25	25th way switch input	24	R	Ditto
26	26th way switch input	25	R	Ditto
27	27th way switch input	26	R	Ditto
28	28th way switch input	27	R	Ditto
29	29th way switch input	28	R	Ditto
30	30th way switch input	29	R	Ditto
31	31st way switch input	30	R	Ditto
32	32nd way switch input	31	R	Ditto
33	33rd way switch input	32	R	Ditto
34	34th way switch input	33	R	Ditto
35	35th way switch input	34	R	Ditto
36	36th way switch input	35	R	Ditto
37	37th way switch input	36	R	Ditto
38	38th way switch input	37	R	Ditto
39	39th way switch input	38	R	Ditto
40	40th way switch input	39	R	Ditto
41	41st way switch input	40	R	Ditto
42	42nd way switch input	41	R	Ditto
43	43rd way switch input	42	R	Ditto
44	44th way switch input	43	R	Ditto
45	45th way switch input	44	R	Ditto
46	46th way switch input	45	R	Ditto
47	47th way switch input	46	R	Ditto
48	48th way switch input	47	R	Ditto

6.4.5 AMC16Z-KA

Remote measurement,remote control

Parameter data area(0x00-0x2F)

Serial No.	Variant	Address	Read/ write	Word length	Unit	Data type	Remarks
1	Address	00H	R/W	1	NONE	Uint16	1-247
2	Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	Check bit	02H	R/W	1	NONE	Uint16	0:No check 2:Odd check 3:Even check

4	Wiring method	03H	R/W	1	NONE	Uint16	Reserve
5	Rated voltage	04H	R/W	1	V	Uint16	48,240,336
6	Rated current	05H	R/W	1	A	Uint16	Reserve
7	Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	Reserve
8	Outgoing line current ratio	07H	R/W	1	NONE	Uint16	Reserve
9	High level determination	08H	R/W	1	V	Uint16	

Parameter data area (0x30-0x8F)

Serial No.	Variant	Address	Read/ write	Word length	Unit	Data type	Remarks
1	1st Switch voltage	30H-31H	R	2	V	float	
2	2nd Switch voltage	32H-33H	R	2	V	float	
3	3rd Switch voltage	34H-35H	R	2	V	float	
4	4th Switch voltage	36H-37H	R	2	V	float	
5	5th Switch voltage	38H-39H	R	2	V	float	
6	6th Switch voltage	3AH-3BH	R	2	V	float	
7	7th Switch voltage	3CH-3DH	R	2	V	float	
8	8th Switch voltage	3EH-3FH	R	2	V	float	
9	9th Switch voltage	40H-41H	R	2	V	float	
10	10th Switch voltage	42H-43H	R	2	V	float	
11	11th Switch voltage	44H-45H	R	2	V	float	
12	12th Switch voltage	46H-47H	R	2	V	float	
13	13th Switch voltage	48H-49H	R	2	V	float	
14	14th Switch voltage	4AH-4BH	R	2	V	float	
15	15th Switch voltage	4CH-4DH	R	2	V	float	
16	16th Switch voltage	4EH-4FH	R	2	V	float	
17	17th Switch voltage	50H-51H	R	2	V	float	
18	18th Switch voltage	52H-53H	R	2	V	float	
19	19th Switch voltage	54H-55H	R	2	V	float	
20	20th Switch voltage	56H-57H	R	2	V	float	
21	21st Switch voltage	58H-59H	R	2	V	float	
22	22nd Switch voltage	5AH-5BH	R	2	V	float	
23	23rd Switch voltage	5CH-5DH	R	2	V	float	
24	24th Switch voltage	5EH-5FH	R	2	V	float	
25	25th Switch voltage	60H-61H	R	2	V	float	
26	26th Switch voltage	62H-63H	R	2	V	float	
27	27th Switch voltage	64H-65H	R	2	V	float	
28	28th Switch voltage	66H-67H	R	2	V	float	
29	29th Switch voltage	68H-69H	R	2	V	float	
30	30th Switch voltage	6AH-6BH	R	2	V	float	

31	31st Switch voltage	6CH-6DH	R	2	V	float	
32	32nd Switch voltage	6EH-6FH	R	2	V	float	
33	33rd Switch voltage	70H-71H	R	2	V	float	
34	34th Switch voltage	72H-73H	R	2	V	float	
35	35th Switch voltage	74H-75H	R	2	V	float	
36	36th Switch voltage	76H-77H	R	2	V	float	
37	37th Switch voltage	78H-79H	R	2	V	float	
38	38th Switch voltage	7AH-7BH	R	2	V	float	
39	39th Switch voltage	7CH-7DH	R	2	V	float	
40	40th Switch voltage	7EH-7FH	R	2	V	float	
41	41st Switch voltage	80H-81H	R	2	V	float	
42	42nd Switch voltage	82H-83H	R	2	V	float	
43	43rd Switch voltage	84H-85H	R	2	V	float	
44	44th Switch voltage	86H-87H	R	2	V	float	
45	45th Switch voltage	88H-89H	R	2	V	float	
46	46th Switch voltage	8AH-8BH	R	2	V	float	
47	47th Switch voltage	8CH-8DH	R	2	V	float	
48	48th Switch voltage	8EH-8FH	R	2	V	float	

Remote signal

Serial No.	Variant	Address	Read/write	Remarks
1	1st way switch input	0	R	0 invalid,1 valid
2	2nd way switch input	1	R	Ditto
3	3rd way switch input	2	R	Ditto
4	4th way switch input	3	R	Ditto
5	5th way switch input	4	R	Ditto
6	6th way switch input	5	R	Ditto
7	7th way switch input	6	R	Ditto
8	8th way switch input	7	R	Ditto
9	9th way switch input	8	R	Ditto
10	10th way switch input	9	R	Ditto
11	11th way switch input	10	R	Ditto
12	12th way switch input	11	R	Ditto
13	13th way switch input	12	R	Ditto
14	14th way switch input	13	R	Ditto
15	15th way switch input	14	R	Ditto
16	16th way switch input	15	R	Ditto
17	17th way switch input	16	R	Ditto
18	18th way switch input	17	R	Ditto
19	19th way switch input	18	R	Ditto
20	20th way switch input	19	R	Ditto
21	21st way switch input	20	R	Ditto
22	22nd way switch input	21	R	Ditto
23	23rd way switch input	22	R	Ditto

24	24th way switch input	23	R	Ditto
25	25th way switch input	24	R	Ditto
26	26th way switch input	25	R	Ditto
27	27th way switch input	26	R	Ditto
28	28th way switch input	27	R	Ditto
29	29th way switch input	28	R	Ditto
30	30th way switch input	29	R	Ditto
31	31st way switch input	30	R	Ditto
32	32nd way switch input	31	R	Ditto
33	33rd way switch input	32	R	Ditto
34	34th way switch input	33	R	Ditto
35	35th way switch input	34	R	Ditto
36	36th way switch input	35	R	Ditto
37	37th way switch input	36	R	Ditto
38	38th way switch input	37	R	Ditto
39	39th way switch input	38	R	Ditto
40	40th way switch input	39	R	Ditto
41	41st way switch input	40	R	Ditto
42	42nd way switch input	41	R	Ditto
43	43rd way switch input	42	R	Ditto
44	44th way switch input	43	R	Ditto
45	45th way switch input	44	R	Ditto
46	46th way switch input	45	R	Ditto
47	47th way switch input	46	R	Ditto
48	48th way switch input	47	R	Ditto

6.4.6 AMC16Z-KD

Remote measurement,remote control

Parameter area(0x00-0x2F)

Serial No.	Variant	Address	Read/ write	Word length	Unit	Data type	Remarks
1	Address	00H	R/W	1	NONE	Uint16	1-247
2	Baud rate	01H	R/W	1	NONE	Uint16	0:115200 1:2400 2:4800 3:9600 4:19200 5:38400 6:57600
3	Check bit	02H	R/W	1	NONE	Uint16	0:No check 2:Odd check 3:Even check
4	Wiring method	03H	R/W	1	NONE	Uint16	Reserve
5	Rated voltage	04H	R/W	1	V	Uint16	Reserve
6	Rated current	05H	R/W	1	A	Uint16	Reserve
7	Outgoing line voltage ratio	06H	R/W	1	NONE	Uint16	Reserve
8	Outgoing line current ratio	07H	R/W	1	NONE	Uint16	Reserve

Remote signal

Serial No.	Variant	Bit address	Read/write	Remarks
1	1st way switch input	0	R	0 invalid,1 valid
2	2nd way switch input	1	R	Ditto
3	3rd way switch input	2	R	Ditto
4	4th way switch input	3	R	Ditto
5	5th way switch input	4	R	Ditto
6	6th way switch input	5	R	Ditto
7	7th way switch input	6	R	Ditto
8	8th way switch input	7	R	Ditto
9	9th way switch input	8	R	Ditto
10	10th way switch input	9	R	Ditto
11	11th way switch input	10	R	Ditto
12	12th way switch input	11	R	Ditto
13	13th way switch input	12	R	Ditto
14	14th way switch input	13	R	Ditto
15	15th way switch input	14	R	Ditto
16	16th way switch input	15	R	Ditto
17	17th way switch input	16	R	Ditto
18	18th way switch input	17	R	Ditto
19	19th way switch input	18	R	Ditto
20	20th way switch input	19	R	Ditto
21	21st way switch input	20	R	Ditto
22	22nd way switch input	21	R	Ditto
23	23rd way switch input	22	R	Ditto
24	24th way switch input	23	R	Ditto
25	25th way switch input	24	R	Ditto
26	26th way switch input	25	R	Ditto
27	27th way switch input	26	R	Ditto
28	28th way switch input	27	R	Ditto
29	29th way switch input	28	R	Ditto
30	30th way switch input	29	R	Ditto
31	31st way switch input	30	R	Ditto
32	32nd way switch input	31	R	Ditto
33	33rd way switch input	32	R	Ditto
34	34th way switch input	33	R	Ditto
35	35th way switch input	34	R	Ditto
36	36th way switch input	35	R	Ditto
37	37th way switch input	36	R	Ditto
38	38th way switch input	37	R	Ditto
39	39th way switch input	38	R	Ditto
40	40th way switch input	39	R	Ditto
41	41st way switch input	40	R	Ditto
42	42nd way switch input	41	R	Ditto
43	43rd way switch input	42	R	Ditto
44	44th way switch input	43	R	Ditto
45	45th way switch input	44	R	Ditto
46	46th way switch input	45	R	Ditto
47	47th way switch input	46	R	Ditto
48	48th way switch input	47	R	Ditto

7 Matters needing attention

7.1 The device should be installed in a dry, clean place away from heat source and strong electromagnetic field.

7.2 Communication cables should be shielded twisted pair.

8 Common fault diagnosis, troubleshooting methods

8.1 The voltage and current are measured correctly but the power is not measured accurately

- * Check whether the current input direction is correct;
- * Check whether the corresponding phase of each current loop is correct; The outgoing loop shall be adjusted according to the actual access.

8.2 Abnormal communication

- * Check whether the communication cable is connected normally;
- * Check whether terminals A and B of communication are interlaced;
- * Check whether the address of the device is set correctly and whether the communication baud rate is set correctly;
- * If the multi-device communication is not normal, try whether the single device communication is normal;

8.3 The current of AMC16Z-ZD has a value when the load has no current

- * Adjust the current zero value of AMC16Z-ZD (the zero value of DC Hall sensor is inconsistent and has a big difference, which needs to be adjusted).

Headquarters: Acrel Co.,LTD.

Address: No.253 Yulv Road Jiading District,Shanghai,China

Postcode: 201801

Manufacturer: Jiangsu Acrel Electrical Manufacturing Co.,LTD.

Address: No.5 Dongmeng Road,Dongmeng industrial Park,Nanzha Street,Jiangyin City,Jiangsu Province,China

TEL./WeChat/WhatsApp: 0086 188 6162 8731

Web-site: www.acrel-electric.uk

Postcode: 214405

E-mail: elsie.ren@email.acrel.cn