

RI-A5RSBAC Module

BACnet/MSTP Communication Module for RI-F500 Series



- Baud rate: 1200/2400/4800/9600/19200 bps
- Real-time data measurement from RI-F500 / RI-F550

Product Description

The RI-A5RSBAC is a BACnet/MSTP communication module used to extend the bus communication function of the RI-F500 Series Network Analysers.

Baud rate: 1200/2400/4800/9600/19200 bps
Based on MSTP communication method

Relevant parameters can be configured through the host computer or RI-F500 Series Network Analyser.

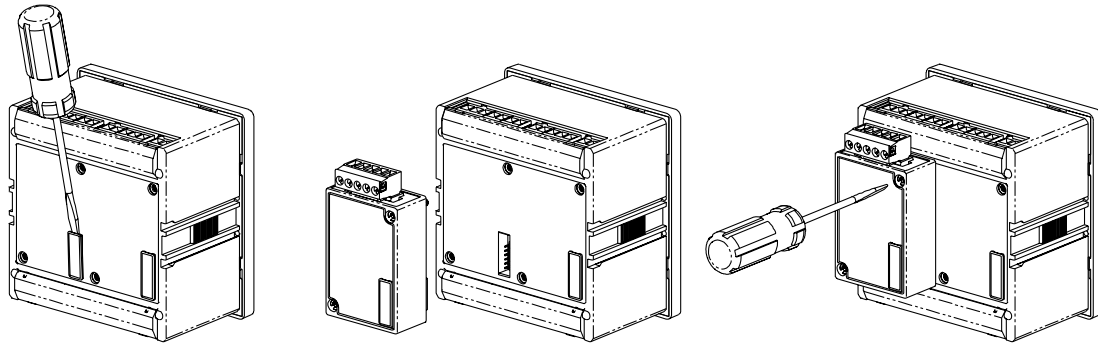
Safety Instruction

It is recommended to use this module as a reference to the following content: RI-F500 Series User Manual, BACnet Standard 135-2008.

Please read this user manual carefully before using this module. This module must be installed and serviced only by professional personnel. Manufacturer shall not be held responsible for failure to comply with the instructions in this manual.

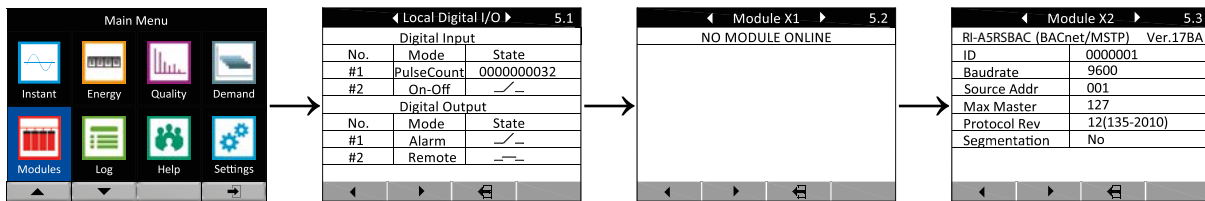
Installation and Operation

Disconnect the power supply of RI-F500/RI-F550, and then connect the RI-A5RSBAC module to slot X2 (take slot X2 as example).



Connect the RI-F500/RI-F550 to the power supply, and then enter the module interface of the RI-F500/RI-F550 to check the information of slot X2. If the connection between the meter and the module is correct, the parameters of RI-A5RSBAC will be shown.

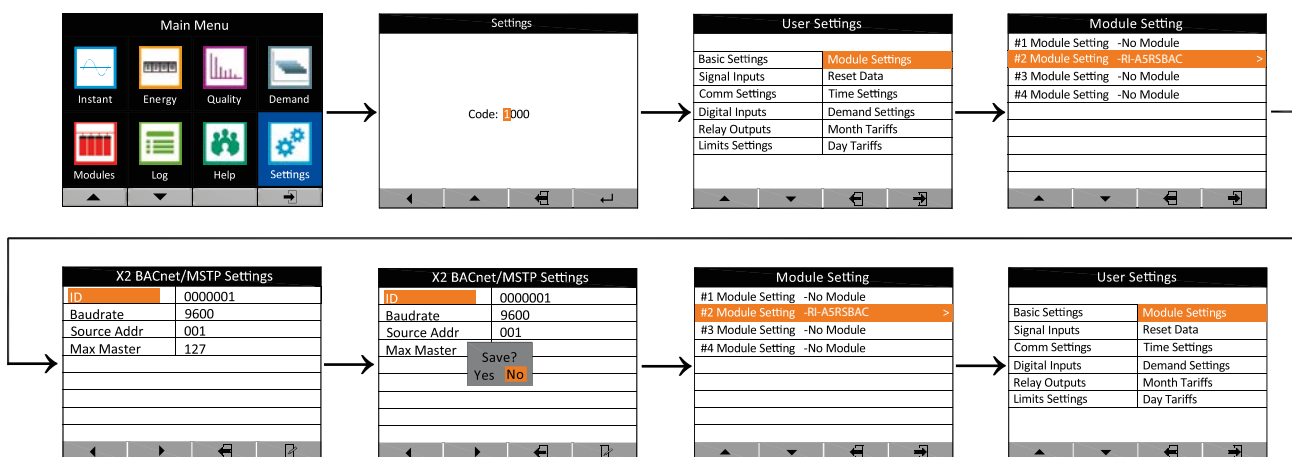
Detailed operation process is shown in the following picture.



Configuration

In the BACnet/MSTP network, users can read the real-time measurement data of RI-F500/RI-F550 (with RI-A5RSBAC module) through standard protocol, or realize remote parameter configuration through fixed instructions.

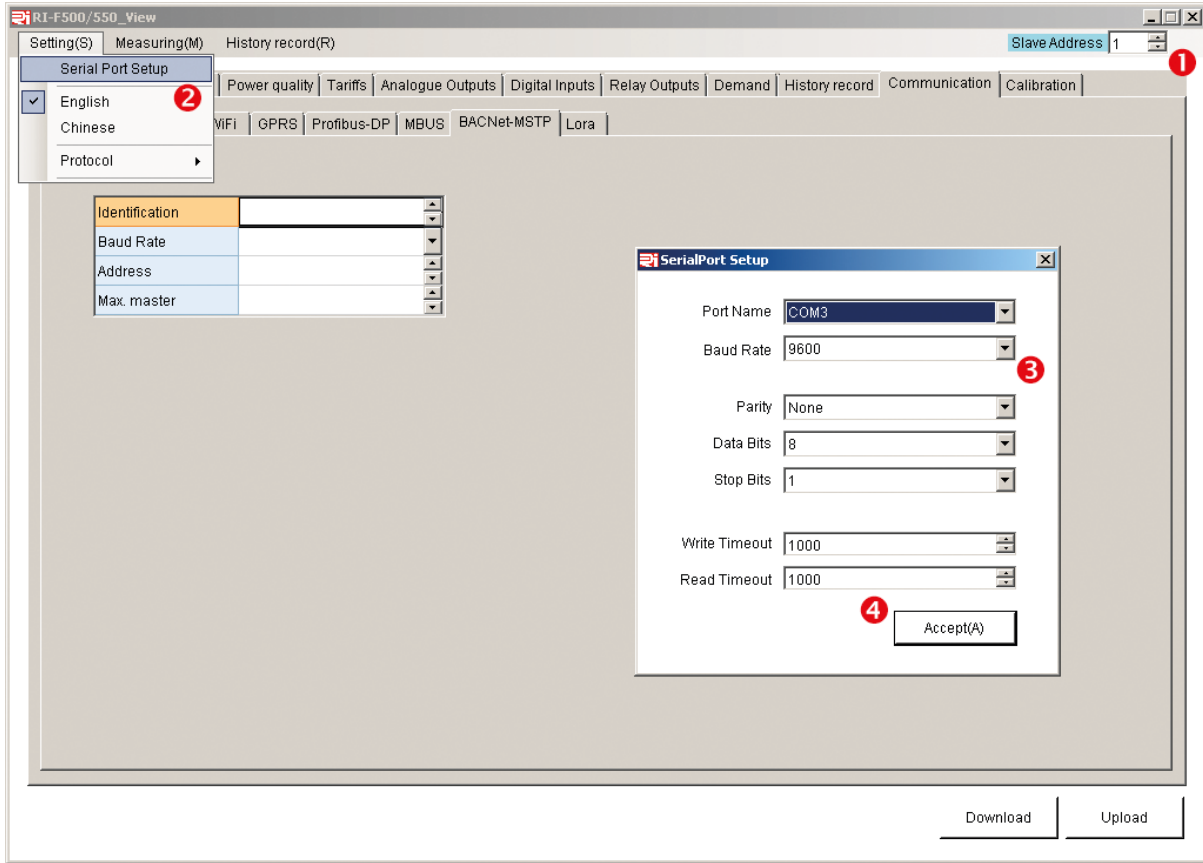
Configuring the RI-A5RSBAC through the RI-F500/RI-F550.



Configuring the RI-A5RSBAC via computer with RI-FXX Viewer software.

After opening the RI-F500 Series host computer:

1. Change the slave address (this address is the Modbus address of the RI-F500/RI-F550)
2. Open serial port settings from setup options
3. Modify port number, baud rate, data format, etc.
4. Click 'Accept' to save the communication settings.



BACnet Protocol Implementation

Product name	BACnet/MSTP Communication Module
Product model	RI-A5RSBAC
Application software version	RI-A5RSBAC.1000.17BA
BACnet protocol version	1
BACnet protocol revised version	7
Product Description	BACnet/MSTP communication module, extending the bus communication function of RI-F500 Series Network Analysers
BACnet standardised equipment configuration	BACnet Standard 135-2008 Annex L
BACnet dedicated controller	B-ASC
List of all supported BACnet interoperability building blocks (BACnet Standard 135-2008 Annex K)	DS-RP-B (data sharing - read attribute - B) DS-WP-B (data sharing – write attribute - B) DS-RPM-B (data sharing – multiple read attributes - B) DM-DDB-B (Device Management – Dynamic Device Binding - B) DM-DOB-B (Device Management - Dynamic Object Binding - B) DM-DCC-B (Device Management – Device Communication Control - B)
Segmentation feature	Segmentation is not supported

Supported standard object types	Dynamic creation of objects is not supported. Dynamic deletion of objects is not supported No optional attributes.
Standard objects for non-standard use	The current value attribute of the analogue output object cannot be directly modified, but the analogue output can be changed by changing the value of AV846~AV877.

Device Object

Supporting private properties	Attribute Identifier : 9600 Type of Data : Integer Meaning : Baud Rate 0 : 1200 bps 1 : 2400 bps 2 : 4800 bps 3 : 9600 bps (default) 4 : 19200 bps Attribute Identifier : 9601 Type of Data : Integer Meaning : MAC address (0...127)
Writable properties	Object identifier Maximum number of primary nodes 9600 9601
Analogue input object	Supporting private properties : No Writable properties : No
Analogue output object	Supporting private properties : No Writable properties : No
Analogue value object	Supporting private properties : No Writable properties : The current value.
Binary input object	Supporting private properties : No Writable properties : No
Binary output object	Supporting private properties : No Writable properties : The current value.
Binary value object	Supporting private properties : No Writable properties : No
Data link layer options	MS/TP Master (Chapter 9) Baud rate: 1200, 2400, 4800, 9600, 19200 bps. Note : The baud rates of 1200, 2400 and 4800 bps are not recommended because they are not standard baud rates in the protocol.
Device address binding	Not supported
Supporting character sets	ANSI X3.4
List of objects	The communication objects include analogue input objects, analogue output objects, analogue value objects, binary input objects, binary output objects, and binary value objects. The total number of objects is about 1000. For details, see the RI-A5RSBAC Communication Manual.

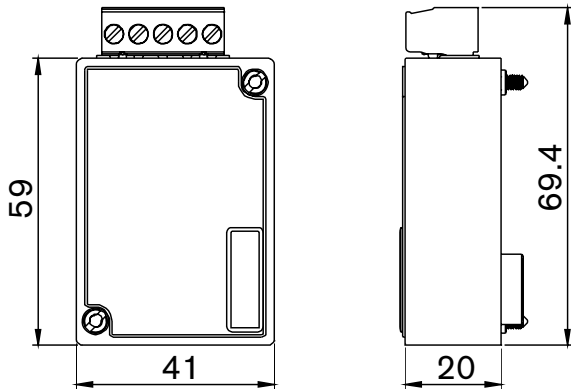
Technical Parameters

Communication Interface	RS485
Baud rate	1200/2400/4800/9600/19200 bps
Operating mode	MACnet/MSTP Master
Communication protocol	MACnet/MSTP

Environmental Conditions

Operating temperature	-25°C...+75°C
Storage temperature	-40°C...+85°C
Relative humidity	0...95%, non-condensing

Dimensions



Model Selection Table

Communications	Model
BACnet Communication Module - RS485	RI-A5RSBAC
<i>TCP/IP version available</i>	<i>RI-A5IPBAC</i>