

Alfa

Summary Information

Communication Driver Name: Alfa
Current Version: 1.0.0.3
Implementation DLL: T.ProtocolDriver.Alfa.dll
Manufacturer: Alfa Instrumentos

Channel Configuration

Protocol Options

Not used in this driver

Settings

Serial Channel:

Default configuration for the AA communication protocol:

- **Server Mode:** False
- **Accept Unsolicited:** False

Default configuration for the TRC communication protocol:

- **Server Mode:** True
- **Accept Unsolicited:** True

Set the other fields according to your configuration.

TCP/IP Channel:

Node Connections: Defines the maximum number of parallel requests that will be sent to each node (asynchronous communication)

Node Configuration

Station Configuration

Serial Channel:

Configuration for the AA communication protocol:

- Station syntax: <Address>
- Where:

<Address> = Device address in the network (01-99)

E.g.: 03

Configuration for the TRC communication protocol:

- Not used for this protocol. The Driver will receive every message from the network.

TCP/IP Channel:

- Station syntax: <IP address>;<Port number>;<Address>
- Where:

<IP Address> = IP address of the scale in the Modbus network

<Port Number> = TCP port where the device is listening

<Address> = Device address in network (01-99)

E.g.: 192.168.1.101 ; 502 ; 1

Example Node Configuration

Name	Node	PrimaryStation	SecondaryStation	Description
Alfa1	Alfa TCP	192.168.1.101 ; 502 ; 1		Node with TCP Channel
Alfa2	Alfa Serial	1		Node with Serial Channel

Point Configuration

Address

The syntax for the Alfa communication points is: <Type>

Where:

<Type> indicates the part of the message that will be stored in the configured Point

The valid types are:

- **Tare:** Returns only Tare value
- **Weight:** Returns only Weight value
- **Return:** Returns full message

Example Points Configuration

TagName	Address	DataType	AccessType	Description
Scale1 Tare	Tare	Native	Read	
Scale1 Weight	Weight	Native	Read	
Scale1 FullMessage	Return	Native	Read	

E.g.: For a typical message like 'PB: 00,254kg T: 00,000kg', each Point shown in the above table will receive the following data:

Scale1 FullMessage= PB: 00,254kg T: 00,000kg

Scale1 Weight= 00,254kg

Scale1 Tare= 00,000kg

Troubleshoot

The status of the driver execution can be observed through the diagnostic tools, which are:

- Trace window
- Property Watch
- Module Information

The above tools indicate if the operations have succeeded or have failed. A status of 0 (zero) means communication is successful. Negative values indicate internal driver errors, and positive values indicate protocol error codes.

Error Codes

Error Code	Description	Possible Solution
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0	Success	<ul style="list-style-type: none"> • None
-100	Error Sending Message	<ul style="list-style-type: none"> • Turn the PLC on • Plug in the PLC ethernet cable • Check the configured IP address field on Device > Node • Ping the PLC using the prompt command
-101	Error Sending and Waiting Message	
- 102 . . . -105	Error Creating the TCP/IP connection	
-106	Error Receiving Message	
-112	Timeout Start Message	<ul style="list-style-type: none"> • Turn the PLC on • Plug in the PLC ethernet cable • Ping the PLC using the prompt command • Check the configured IP address field on Device > Node • Increase the driver timeout field on Device > Channel
-113	Timeout between Treated Characters	
-114	Timeout End Message	
-115	Timeout Connect	
-200	Protocol Error	<ul style="list-style-type: none"> • Check if the PLC model is compatible with the driver documentation • Check the configured address field on Device > Points
-201	Invalid Protocol	<ul style="list-style-type: none"> • Check if the PLC model is compatible with the driver documentation • Contact technical support
-202	Invalid Station	<ul style="list-style-type: none"> • Check the configured IP address field on Device > Node • Restart the driver
-204	Invalid Message Sequence	<ul style="list-style-type: none"> • Check if the PLC model is compatible with the driver documentation • Check the configured address field on Device > Point