# 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

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<Address> = Device address in network (01-99)
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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	• None
-100	Error Sending Message	<ul> <li>Turn the PLC on</li> <li>Plug in the PLC ethernet cable</li> <li>Check the configured IP address field on Device &gt; Node</li> <li>Ping the PLC using the prompt command</li> </ul>
-101	Error Sending and Waiting Message	
- 102105	Error Creating the TCP/IP connection	
-106	Error Receiving Message	
-112	Timeout Start Message	<ul> <li>Turn the PLC on</li> <li>Plug in the PLC ethernet cable</li> <li>Ping the PLC using the prompt command</li> <li>Check the configured IP address field on Device &gt; Node</li> <li>Increase the driver timeout field on Device &gt; Channel</li> </ul>
-113	Timeout between Treated Characters	
-114	Timeout End Message	
-115	Timeout Connect	
-200	Protocol Error	<ul> <li>Check if the PLC model is compatible with the driver documentation</li> <li>Check the configured address field on Device &gt; Points</li> </ul>
-201	Invalid Protocol	<ul> <li>Check if the PLC model is compatible with the driver documentation</li> <li>Contact technical support</li> </ul>
-202	Invalid Station	<ul> <li>Check the configured IP address field on Device &gt; Node</li> <li>Restart the driver</li> </ul>
-204	Invalid Message Sequence	<ul> <li>Check if the PLC model is compatible with the driver documentation</li> <li>Check the configured address field on Device &gt; Point</li> </ul>