

Legioterm Modbus TCP/IP

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1.0 Scope

This document is a User Interface Specification for the Legioterm Modbus/TCP product feature. This is a mapping of the various dynamic variables to their Modbus/TCP register locations.

This document supports the Modbus feature in the following controller software versions: V1.0

2.0 Introduction

The Legioterm product supports TCP/IP communications on either Ethernet 10 Mbps Half duplex or 100 Mbps Full duplex. All configurations of set points are accomplished with a computer running a browser (such as Microsoft Internet Explorer) connected to the Legioterm.

The default IP address for Legioterm is 192.160.10.10

3.0 OVERVIEW

Modbus/TCP is a form of Modbus that uses the TCP/IP layers as a base layer for controlling the communications between different devices. The Modbus/TCP protocol supports multiple types of data transactions, from reading single bits per transaction, to advanced object-oriented operations. However, to ensure the most compatible system available, the simplest function set is to be made available.

4.0 MODBUS/TCP DRIVER

4.1 MODBUS PROTOCOL

The Modbus protocol, as well as the TCP extension, is well documented in the specifications which are available at <http://www.modbus.org>, a website established by the Modbus Organization for supporting and organizing the Modbus protocol. Only the use of the protocol is documented here.

4.1.1 TCP

The Modbus/TCP extension includes 7 additional bytes to the original Modbus protocol, which allows for transport over the TCP/IP layers.

5.0 Legioterm Data Files/Register Assignment

The following table summarizes the registers used for the Modbus TCP data.

This registers are only read only.

Register	Data Type	Sensor	Description	Data Format
30001	16bit	Temperature	Water Temperature	Celsius
30002	16bit	Flow	Water flow	l/m
30003	16bit	ORP	Clorine measurement	0-700
30004	16bit	Cond	Conductivity	0-300
30005	16bit	Volt	Anode Volt	Volt
30006	16bit	Current	Ampere	A

The LegioTerm is set as **unit 3**.