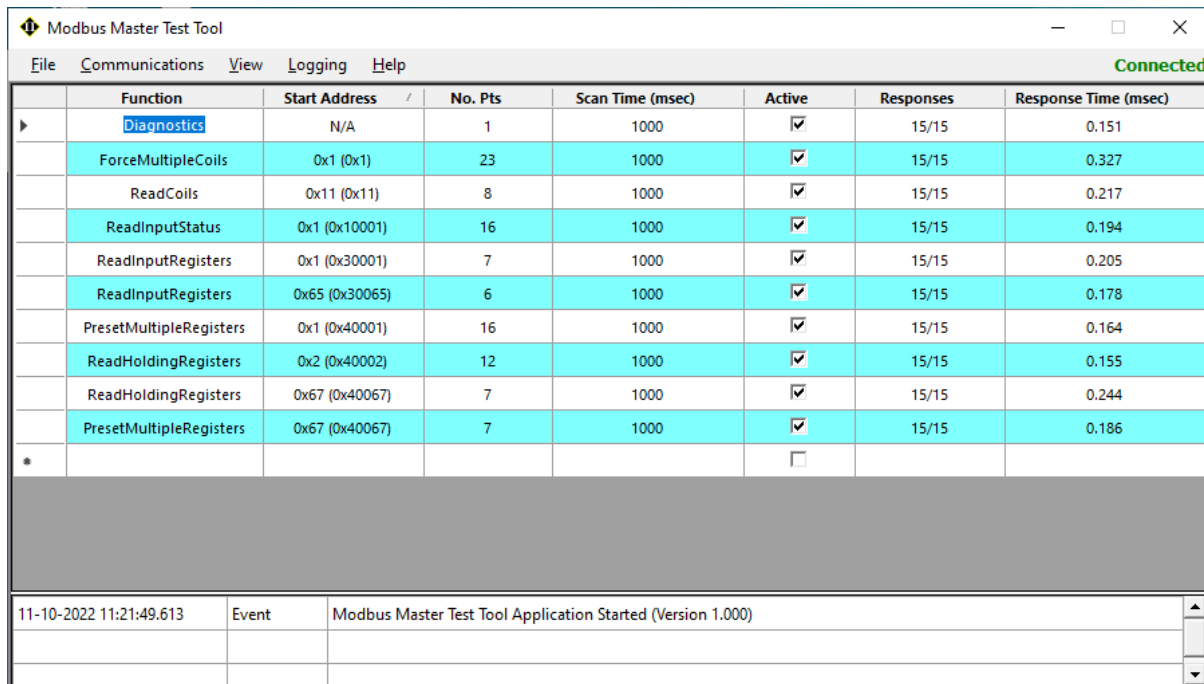


# Intelligent Information: Modbus Master Test Tool



Function	Start Address	No. Pts	Scan Time (msec)	Active	Responses	Response Time (msec)
Diagnostics	N/A	1	1000	<input checked="" type="checkbox"/>	15/15	0.151
ForceMultipleCoils	0x1 (0x1)	23	1000	<input checked="" type="checkbox"/>	15/15	0.327
ReadCoils	0x11 (0x11)	8	1000	<input checked="" type="checkbox"/>	15/15	0.217
ReadInputStatus	0x1 (0x10001)	16	1000	<input checked="" type="checkbox"/>	15/15	0.194
ReadInputRegisters	0x1 (0x30001)	7	1000	<input checked="" type="checkbox"/>	15/15	0.205
ReadInputRegisters	0x65 (0x30065)	6	1000	<input checked="" type="checkbox"/>	15/15	0.178
PresetMultipleRegisters	0x1 (0x40001)	16	1000	<input checked="" type="checkbox"/>	15/15	0.164
ReadHoldingRegisters	0x2 (0x40002)	12	1000	<input checked="" type="checkbox"/>	15/15	0.155
ReadHoldingRegisters	0x67 (0x40067)	7	1000	<input checked="" type="checkbox"/>	15/15	0.244
PresetMultipleRegisters	0x67 (0x40067)	7	1000	<input checked="" type="checkbox"/>	15/15	0.186
*				<input type="checkbox"/>		

11-10-2022 11:21:49.613	Event	Modbus Master Test Tool Application Started (Version 1.000)
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*Modbus Master Test Tool Application*

## Overview

This application was part of a research project to determine if a Rapid Application Development environment (e.g., .NET) could be used to develop communication gateways.

Using interrupts and events the development environment proved suitable for communication gateways and these drivers could be written in a very rapid timescale. As part of this project two test tools were developed; Modbus Master and Modbus Slave.

The Modbus Master test tool was developed to determine the capabilities of a 'foreign' Modbus Slave device. Individual messages can be configured and sent with the response time being recorded.

This tool supports both serial and Ethernet communication and all configuration files, for both communication and Modbus message configuration, can be saved and re-loaded.

To download the demo version, click [here](#).

## Main Features

- Single or multiple Modbus messages can be sent to determine the functions and addresses supported by the Slave device
- Message response times shown so an appropriate scan cycle time can be determined
- Bits can be forced to determine if the Slave device uses least (LSB) or most (MSB) order
- Start addresses can be modified to determine, for bit addresses, if these must be byte or word aligned
- Registers can be forced to determine the word order of registers within multi-word formats and if they are supported e.g., 32 and 64-bit signed and unsigned integers, 32 and 64-bit floating point
- Custom Modbus messages can be sent to determine support of diagnostic and lesser used function codes
- Message exchange and data can be logged for further analysis

