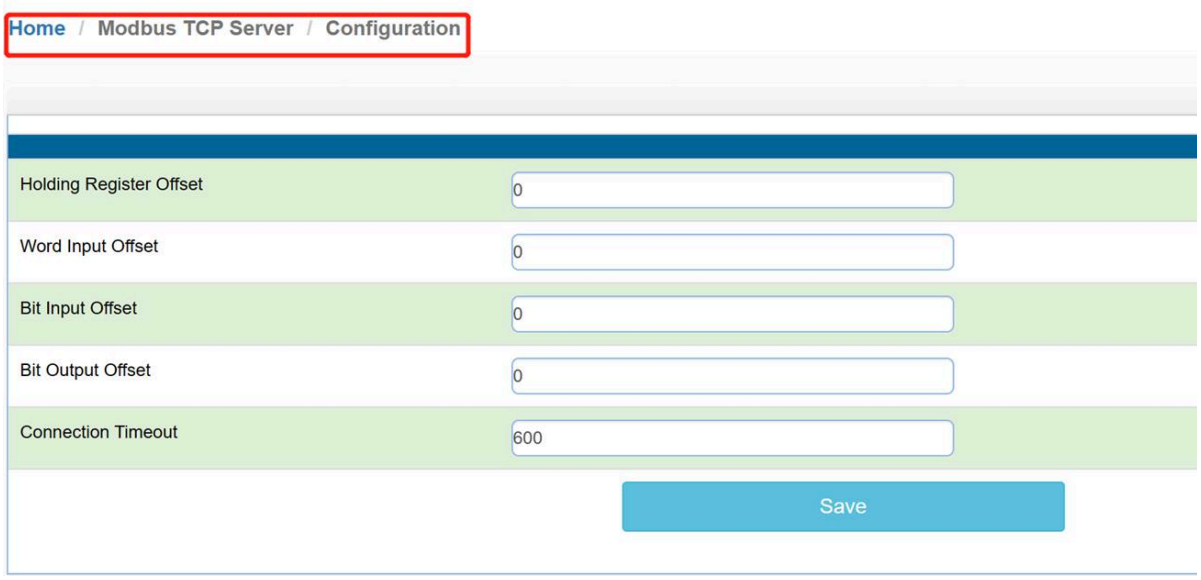
Modbus TCP/IP Server Configuration (Slave)

The configuration of the Modbus TCP/IP Server typically uses the default initial settings.

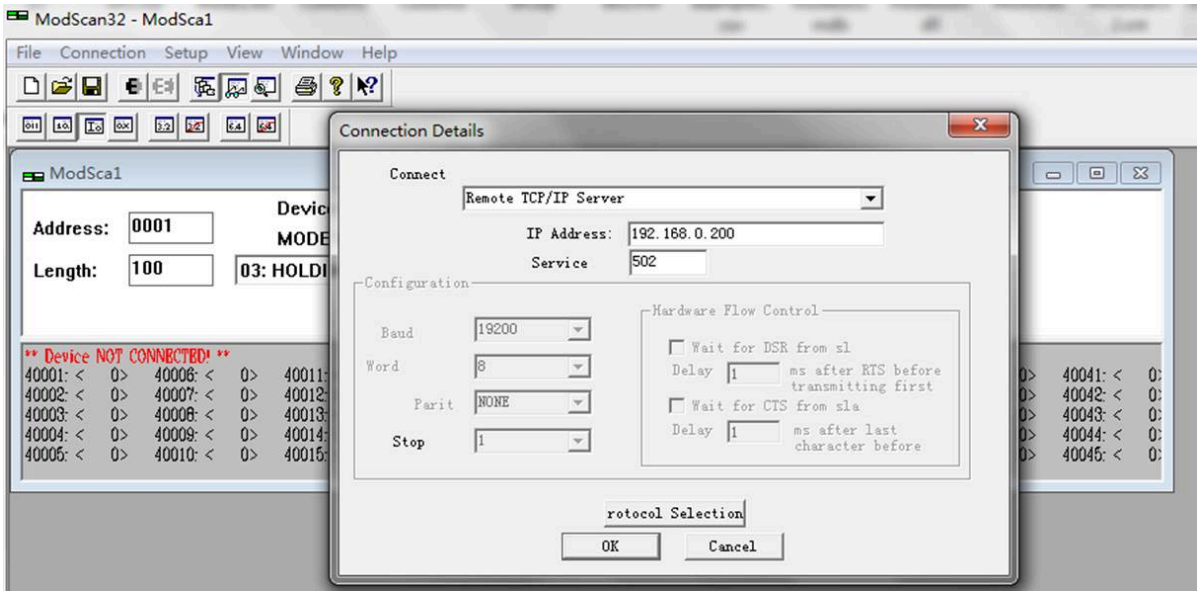


The internal registers of the module correspond to the following Modbus TCP/IP addresses:

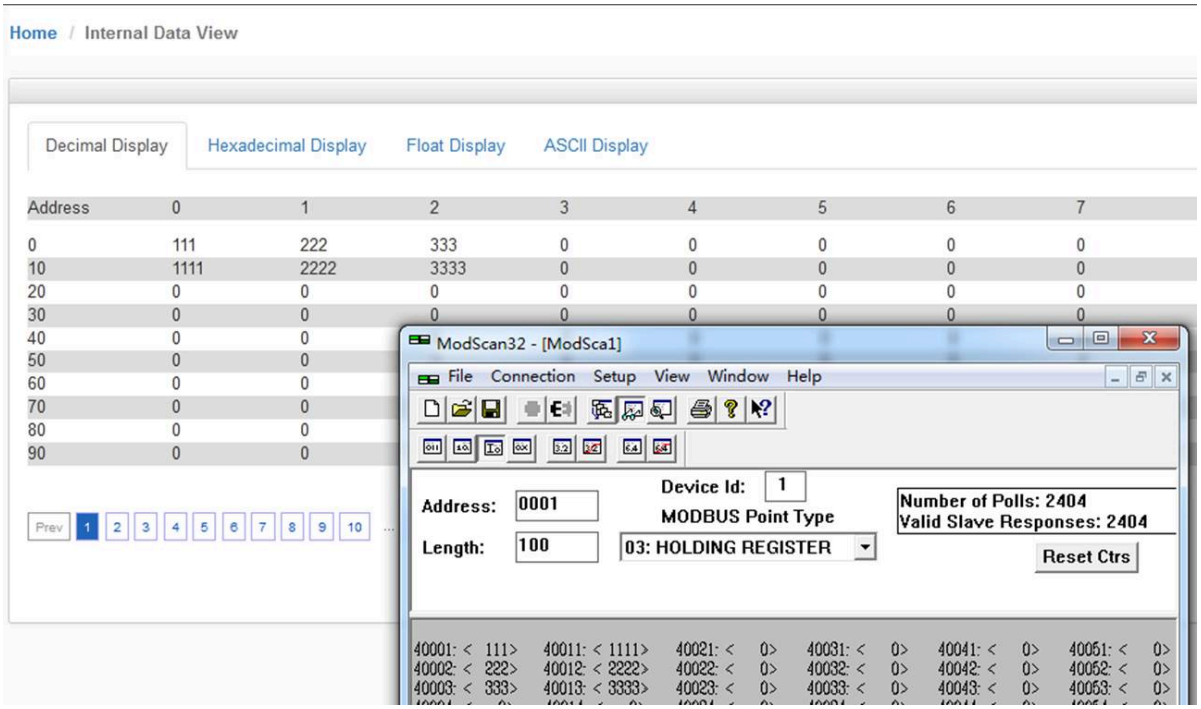
Internal registers of the module	**0**	**1**	**100**	**1000**	**2000**
Modbus Address (Register 4)	40001	40002	40101	41001	42001
Modbus Address (Register 3)	30001	30002	30101	31001	32001
Modbus Address (Register 1)	10001-10016	10017-10032	11601-11616	26001-26016	42001-42016
Modbus Address (Register 0)	00001-00016	00017-00032	01601-01616	16001-16016	32001-32016

Users can use the Modbus TCP/IP simulation software ModScan32 to test the connection to the module's Modbus TCP/IP Server. Change the local computer's IP address to 192.168.0.177 (in the same subnet as the Modbus TCP/IP gateway port).

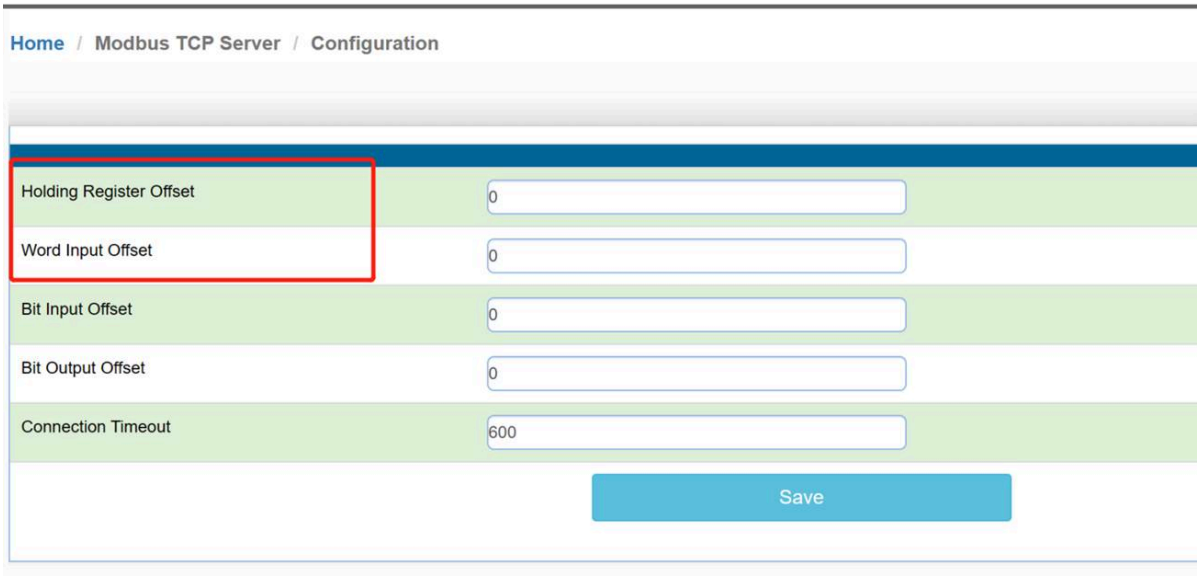
For example: Open the Modbus TCP simulation software ModScan32, which simulates the Modbus TCP master. Use function code FC03 to read and write 100 consecutive words of internal data from registers 0 to 99. Address 40001 corresponds to internal register 0, and 40100 corresponds to internal register 99, and so on. Select "Connection," then choose " Remote TCP/IP Server," and enter the IP address of the module's E1 port (192.168.0.200) with the default port number 502. Then click OK.



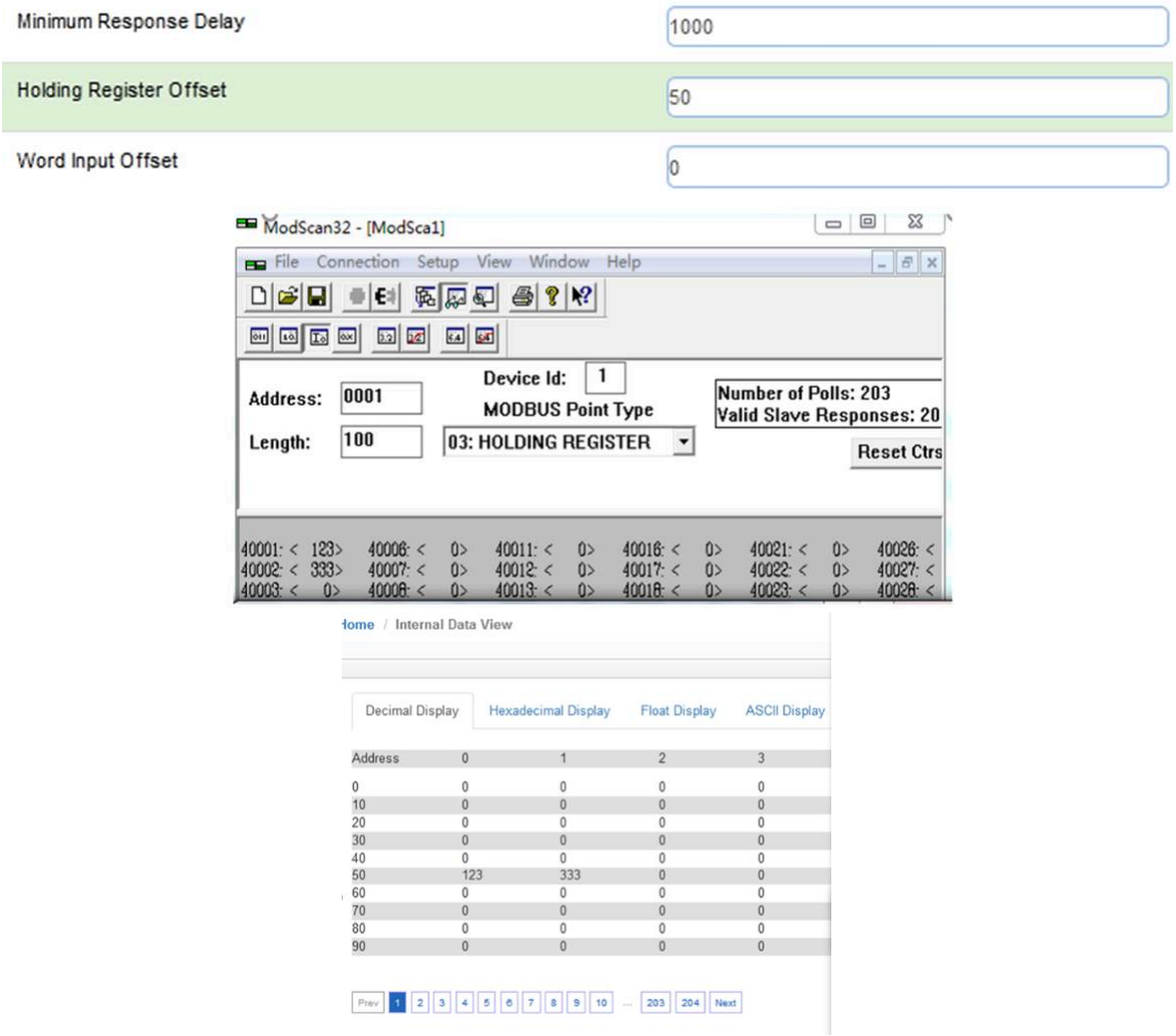
The ModScan32 software allows simultaneous reading and writing of internal registers. Write some data to addresses 40001-40003 and 40011-40013, then check the data in internal registers 0-2 and 10-12. The data should correspond correctly. You can also see that the software has sent and received 2404 times in the upper right corner. If there are any errors, the number of sent and received data packets will not be equal.



When the module is set as a Modbus TCP/IP slave, you can see the following two options in the configuration interface.



Usage of Holding Register Offset:
When the Modbus TCP/IP master writes data to the module, entering two values at addresses 40001 and 40002 should normally write these values to internal registers 0-1. However, if the offset is set to 50 (as shown in the image), the data will be written directly to internal registers 50-51. This principle also applies to registers in other areas, such as 4, 3, 1, and 0.



Usage of Word Input Offset:
If the offset is set to 50 (as shown in the image), when the Modbus TCP/IP master inputs two values at addresses 30001 and 30002 in area 3, the data will be directly offset to internal registers 50-51 in the module. Note that the ModScan32 simulation software cannot load values from area 3; please enter the actual data area from the field device.

Minimum Response Delay	1000
Holding Register Offset	0
Word Input Offset	50