

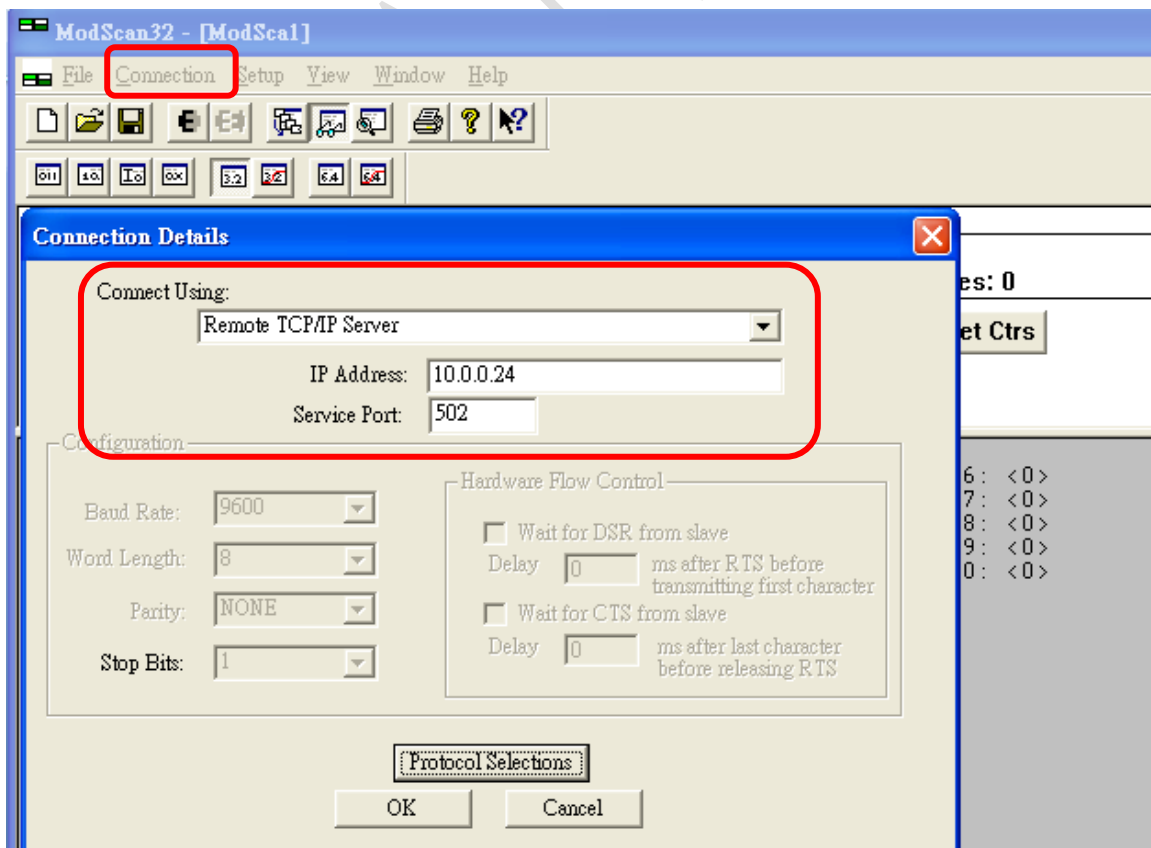
Date	2015/07/16	SR#	1-2120491236
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP	Related OS	N/A
Abstract	How to Verify Modbus-TCP Function with ADAM Module		
Keyword	ADAM, Modbu/TCP		
Related Product	ADAM-60XX & ADAM-62XX Series		

■ Problem Description:

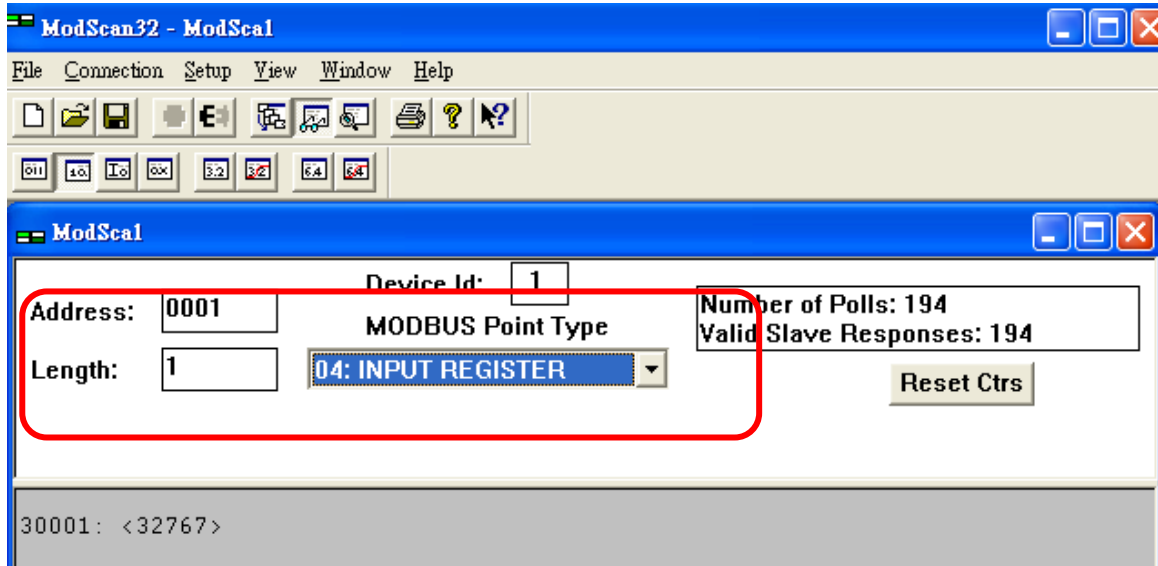
This document demonstrates the SOP of how to verify Modbus/TCP function with ADAM Module

■ Brief Solution - Step by Step:

1. Execute ModSim utility and open a connection with following parameters, and then click OK
 - Connect Using: Remote TCP/IP Server => Communicating via Ethernet Modbus/TCP
 - IP Address: 10.0.0.24 => ADAM-6024's IP Address
 - Service Port: 502 => Typically using 502 as Modbus/TCP communication port

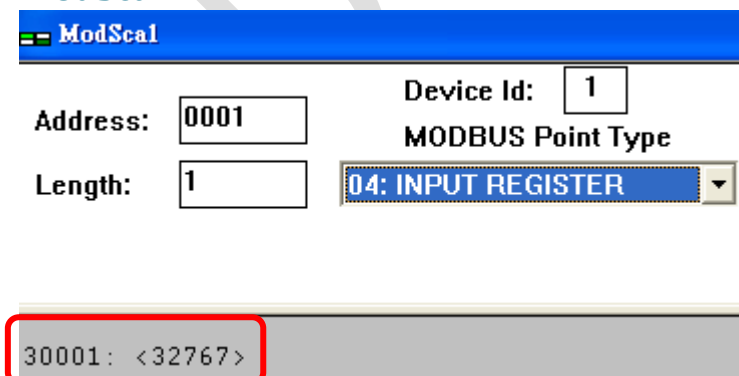


2. Then input parameters according to your test criteria.
 - **MODBUS Point Type:** 04: Input Register => Means Analog Input(AI)
 - **Address:** **0001** => In this case, we like the tag address starting from 0001 since AI 0+ AI0- is the 1st AI channel(i.e. with tag address 30001) of ADAM- 6024.
 - **Length:** **1** => Means how many tag addresses/channels you like to access from ADAM-6024. Since we ONLY need to access one channel(i.e. Channel 0) from ADAM-6024, length = 1)



3. As you can see from address "30001" at AI Channel 0 of ADAM-6024, the ModBus value we received is "32767". And the reason we receive ModBus value of "32767" is because the power source is being sending an analog signal at 12V.
You may refer table below for 4~20mA in terms of ModBus value between 0 ~ 65535 [i.e. 0 Lowest(0mA), 65535 Highest(20mA)].

ModScan:



Power Source(@ mA):

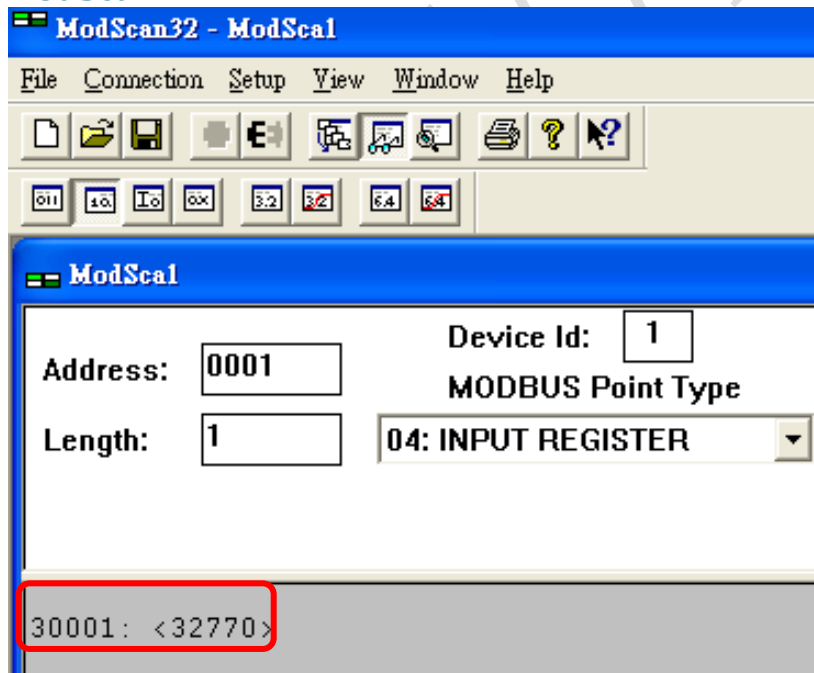


4-20 mA Referance Table in terms of Modbus Value:

Calibrator Analog Output 4 ~ 20 mA	ModBus Value 0 ~ 65535
4	0
5	4096
6	8192
7	12288
8	16384
9	20480
10	24576
11	28672
12	32768
13	36864
14	40960
15	45056
16	49152
17	53248
18	57344
19	61440
20	65535

4. If you check AI Channel 0 result from ADAM-Utility, you will see the AI input signal at mA will be automatically translated in terms of Modbus value .

ModScan:



ADAM-Uility:

