# Q. How do I read DI Counter for the PETL/tET/tPET Series Modules correctly?

A: If your software shows wrong value of DI Counter for the PETL/tET/tPET series module, verify that the related parameters on your software are correct, as follows:
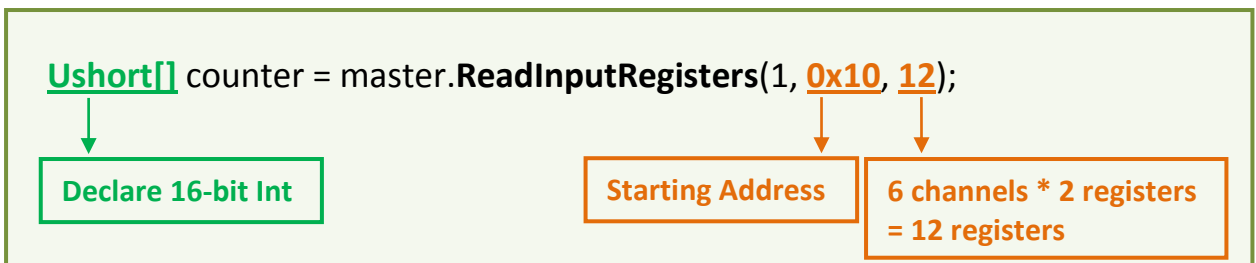
The DI Counter records data as 32-bit value and is transmitted as two 16-bit registers. Consequently, the register address has an offset of 2, i.e., the address of the second channel will be at starting-address + 2, and so on.

DI Counter
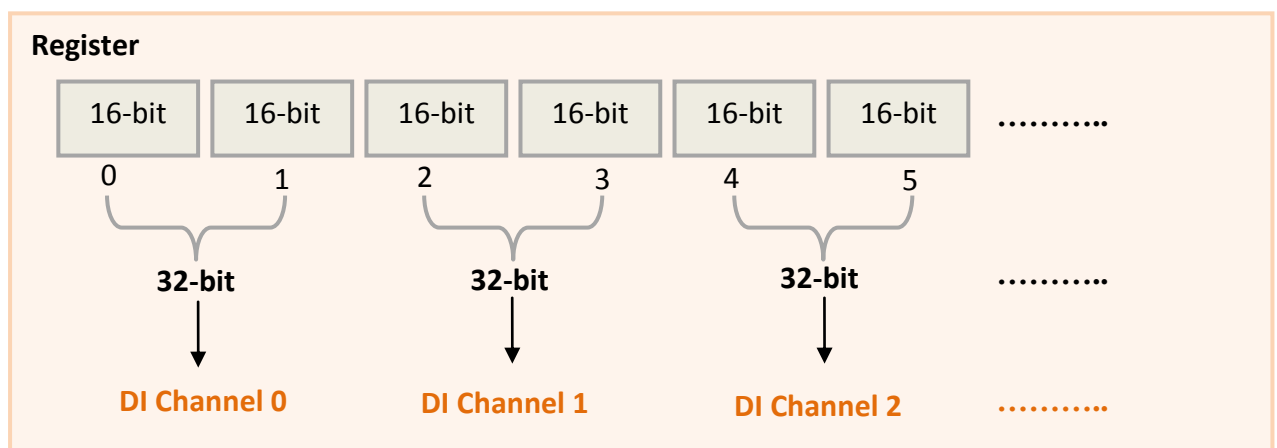
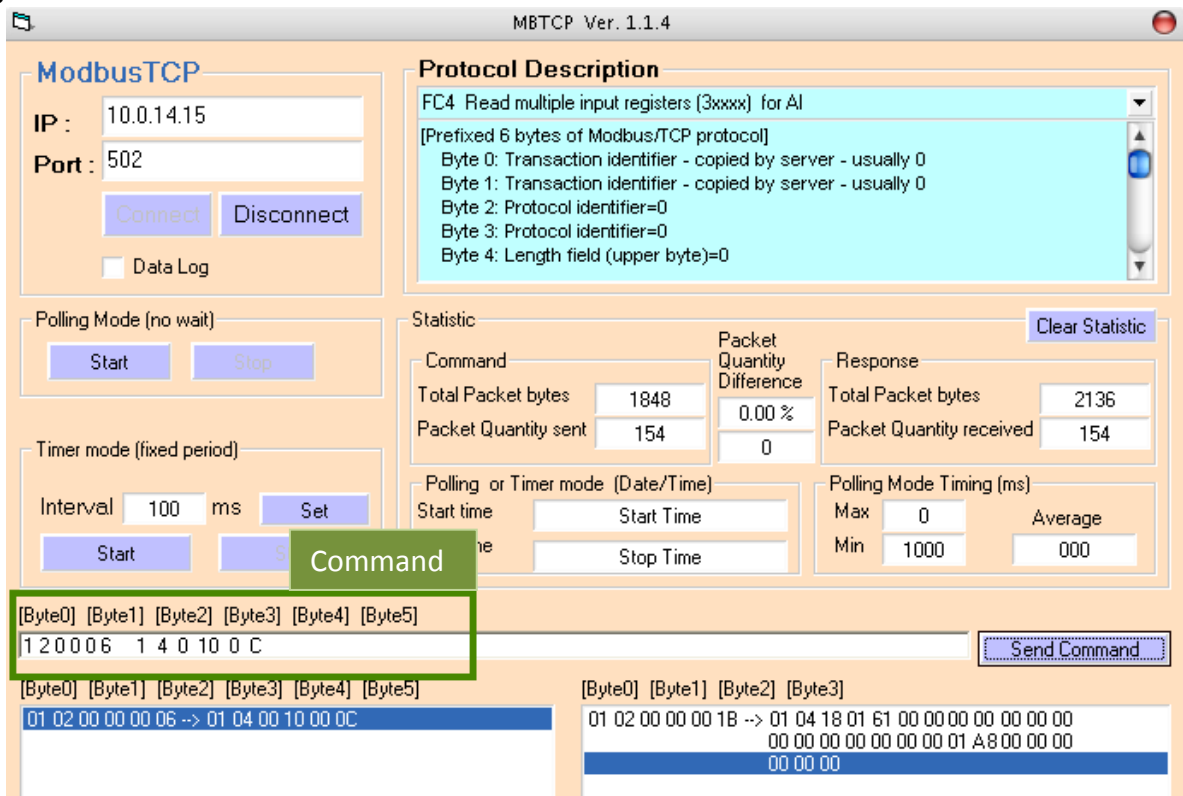Example: Reading the values for 6 DI Counters on a tPET-P6 module.
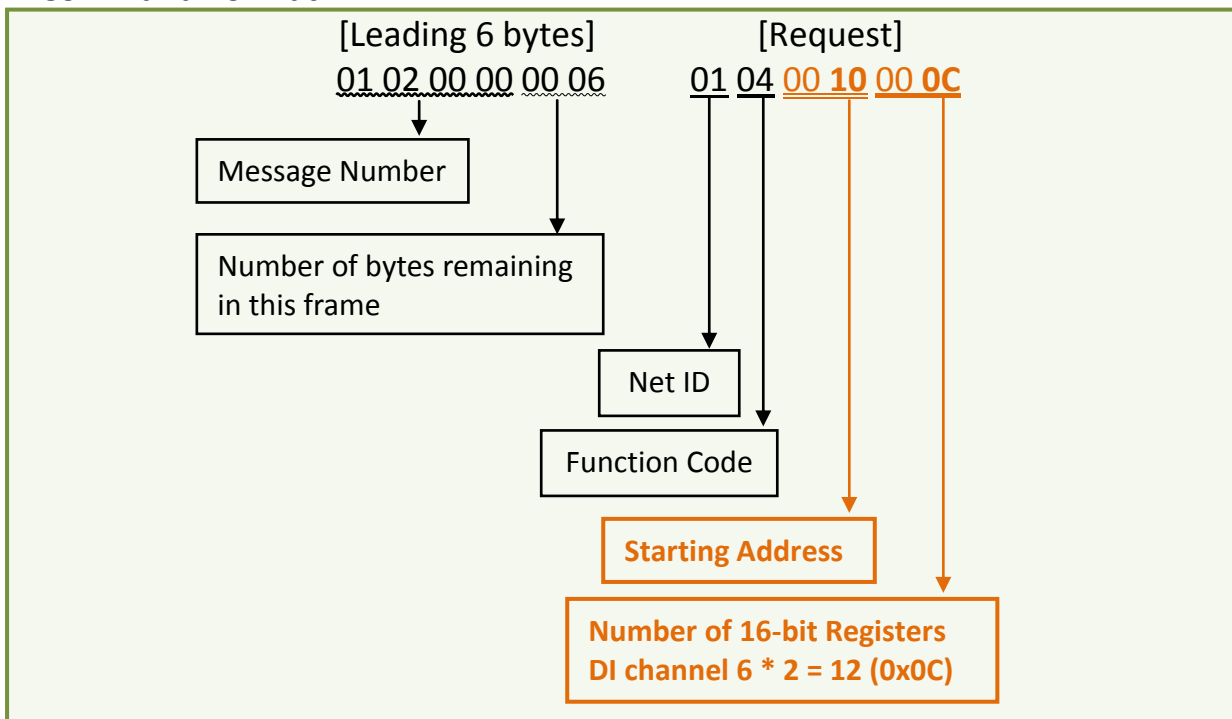
Using the API of nModbus:

For more detailed information about the starting address, channels, and declared length parameters, etc., refer to the Modbus Register Table in the section 6.3 of the user manual for the PETL/tET/tPET series, which can be downloaded from:
http://ftp.icpdas.com/pub/cd/tinymodules/napdos/tpet/document/

Using the Modbus Command:

Command Format:

For more detailed information about the starting address, channels, declared length parameters, etc., refer to the Modbus Register Table in section 6.3 of the user manual for the PETL/tET/tPET series, which can be downloaded from:
http://ftp.icpdas.com/pub/cd/tinymodules/napdos/tpet/document/

Response Format:

Response

Response:

[Leading 6 bytes]   [Response]

01 02 00 00 00 1B   01 04 18 01 61 00 00 00 00 00 00 00 00 00 00

Ch0 = 0x0161   Ch1   Ch2

00 00 00 00 01 A8 00 00 00 00 00 00

Ch3   Ch4 = 0x01A8   Ch5

Message Number

Number of bytes remaining in this frame

Net ID

Function Code

Byte Count of the Response

The DI Channel Number on the tPET-P6