

## 19.3 About MODBUS Address Type

Address types under MODBUS protocol in EB8000 are 0x, 1x, 3x, 4x, 5x, 6x, 3x\_bit and 4x\_bit.

Modbus RTU function code:

0x	0x01 Read coil	0x05 write single coil
0x_multi_coils	0x01 Read coil	0x0f write multiple coil
1x	0x02 Read discrete input	N/A for write operation
3x	0x04 Read input register	N/A for write operation
4x	0x03 Read holding register	0x10 write multiple register
5x	0x03 Read holding register	0x10
6x	0x03 Read holding register	0x06 write single register
3x_bit	0x04 Read input register	N/A for write operation
4X_bit	0x03 Read holding register	0x10 write multiple register

### Note:

- ① Address type “5x” is mapping to Hold Reg. The communication protocol of 5x is almost same as “4x” except “5x” makes double word swap.

If 4x contains following information

```
Address  1  2  3  4  5  6  ...
Data in word  0x1 0x2 0x3 0x4 0x5 0x6
Data  0x20001 0x40003 0x60005
```

For 5x, it becomes

```
Address  1  2  3  4  5  6  ...
Data in word  0x2 0x1 0x4 0x3 0x6 0x5
Data  0x10002 0x30004 0x50006
```

- ② Address type 6x is limited to data of one word only.
- ③ The communication protocol of 3x\_bit and 4x\_bit are the same as 3x and 4x. The difference is that 3x\_bit and 4x\_bit read single bit of the whole data.