

Data Representation in Anybus Address Mode

Supported Function Codes

The following function codes can be used in this mode:

Modbus Function	Function Code	Direction	Associated with Buffer
Read Coil	1	Gateway to Modbus	Input- and Output Buffers
Read Input Discretes	2		
Read Holding Registers	3		
Read Input Registers	4		
Write Coil	5	Modbus to Gateway	Output Buffer
Write Single Register	6		
Force Multiple Coils	15		
Force Multiple Registers	16		
Mask Write Register	22		
Read/Write Registers	23	Bidirectional	Input- and Output Buffers

Coil & Register Map

The Input & Output Buffers are mapped to coils and registers as follows:

Register #	Coil #	Buffer	Location in Buffer	Comments
1	1... 16	Input Buffer	0x000... 0x001	Applicable Modbus functions: - Read Coil - Read Input Discretes - Read Holding Registers - Read Input Registers - Read/Write Registers
2	17... 32		0x002... 0x003	
3	33... 48		0x004... 0x005	
4	49... 64		0x006... 0x007	
5	65... 80		0x008... 0x009	
6	81... 96		0x00A... 0x00B	
7	97... 112		0x00C... 0x00D	
...	
255	4065... 4080		0x1FC... 0x1FD	
256	4081... 4096		0x1FE... 0x1FF	
257	4097... 4112	-	-	(reserved)
...	...			
1024	16369... 16384			
1025	16385... 16400	Output Buffer	0x200... 0x201	Applicable Modbus functions: - Read Coil - Read Input Discretes - Read Holding Registers - Read Input Registers - Write Coil - Write Single Register - Force Multiple Coils - Force Multiple Registers - Mask Write Register - Read/Write Registers
1026	16401... 16416		0x202... 0x203	
1027	16417... 16432		0x204... 0x205	
1028	16433... 16448		0x206... 0x207	
1029	16449... 16464		0x208... 0x209	
1030	16465... 16480		0x20A... 0x20B	
1031	16481... 16496		0x20C... 0x20D	
...	
1279	20449... 20464		0x3FC... 0x3FD	
1280	20465... 20480		0x3FE... 0x3FF	

Note 1: The table above applies to all function codes.

Note 2: Coils are mapped MSB first, i.e. coil 0 corresponds to bit 15 of register 0.