

Purpose

The following tables list the Modbus function codes supported by the Modbus TCP and RTU servers on a CLICK CPU. The two tables present the same information. The first is indexed by CLICK address, and the second is indexed by Modbus function code.

CLICK Address to Modbus Function Code				
CLICK Address	Modbus Address Range	Function Codes	Function Name	Size
X001 - X816	100001 - 100272	2	Read Discrete Inputs	1 - 2000 bits
Y001 - Y816	8193 - 8464	1	Read Coils	1 - 2000 bits
		5	Write Single Coil	1 bit
		15	Write Multiple Coils	1 - 1968 bits
C1 - C2000	16385 - 18384	1	Read Coils	1 - 2000 bits
		5	Write Single Coil	1 bit
		15	Write Multiple Coils	1 - 1968 bits
T1 - T500	145057 - 145556	2	Read Discrete Inputs	1 - 2000 bits
CT1 - CT250	149153 - 149402	2	Read Discrete Inputs	1 - 2000 bits
SC1 - SC1000	161441 - 162440	2	Read Discrete Inputs	1 - 2000 bits
DS1 - DS4500	400001 - 404500	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words
DD1-DD1000	416385 - 418383	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words
DH1 - DH500	424577 - 425076	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words
DF1 - DF500	428673 - 429671	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words
XD0 - XD8	357345 - 357361	4	Read Input Registers	1 - 125 words
		23	(Read)/Write Multiple Registers	1 - 121 words
YD0 - YD8	457857 - 457873	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	Read/(Write) Multiple Registers	1 - 123 words
TD1 - TD500	445057 - 445556	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words
CTD1 - CTD250	449153 - 449651	3	Read Holding Registers	1 - 125 words
		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words
SD1 - SD1000	361441 - 362440	4	Read Input Registers	1 - 125 words
		23	(Read)/Write Multiple Registers	1 - 121 words
TXT1 - TXT1000	436865 - 437365	3	Read Holding Registers	1 - 125 words

		6	Write Single Register	1 word
		16	Write Multiple Registers	1 - 123 words
		23	(Read)/Write Multiple Registers	1 - 121 words
			Read/(Write) Multiple Registers	1 - 123 words

Modbus Function Code to CLICK Address				
Function Codes	Function Name	Size	Modbus Address Range	CLICK Address
1	Read Coils	1 - 2000 bits	8193 - 8464	Y001 - Y816
			16385 - 18384	C1 - C2000
2	Read Discrete Inputs	1 - 2000 bits	100001 - 100272	X001 - X816
			145057 - 145556	T1 - T500
			149153 - 149402	CT1 - CT250
			161441 - 162440	SC1 - SC1000
3	Read Holding Registers	1 - 125 words	400001 - 404500	DS1 - DS4500
			416385 - 418383	DD1-DD1000
			424577 - 425076	DH1 - DH500
			428673 - 429671	DF1 - DF500
			436865 - 437365	TXT1 -TXT1000
			445057 - 445556	TD1 - TD500
			449153 - 449651	CTD1 - CTD250
			457345 - 457361	XD0 - XD8
			457857 - 457873	YD0 - YD8
4	Read Input Registers	1 - 125 words	357345 - 357361	XD0 - XD8
			361441 - 362440	SD1 - SD1000
5	Write Single Coil	1 bit	8193-8464	Y001-Y816
			16385-18384	C1-C2000
6	Write Single Register	1 word	400001 - 404500	DS1 - DS4500
			416385 - 418383	DD1-DD1000
			424577 - 425076	DH1 - DH500
			428673 - 429671	DF1 - DF500
			436865 - 437365	TXT1 -TXT1000
			445057 - 445556	TD1 - TD500
			449153 - 449651	CTD1 - CTD250
			457857 - 457873	YD0 - YD8
15	Write Multiple Coils	1 - 1968 bits	8193-8464	Y001-Y816
			16385-18384	C1-C2000
16	Write Multiple Registers	1 - 123 words	400001 - 404500	DS1 - DS4500
			416385 - 418383	DD1-DD1000
			424577 - 425076	DH1 - DH500
			428673 - 429671	DF1 - DF500
			436865 - 437365	TXT1 -TXT1000
			445057 - 445556	TD1 - TD500
			449153 - 449651	CTD1 - CTD250
			457857 - 457873	YD0 - YD8
23	Read/Write Multiple Registers	(Read) 1 - 125 words	400001 - 404500	DS1 - DS4500
			416385 - 418383	DD1-DD1000
			424577 - 425076	DH1 - DH500
			428673 - 429671	DF1 - DF500
			436865 - 437365	TXT1 -TXT1000
			445057 - 445556	TD1 - TD500
			449153 - 449651	CTD1 - CTD250
			457345 - 457361	XD0 - XD8
			457857 - 457873	YD0 - YD8
			400001 - 404500	DS1 - DS4500
		(Write) 1 - 121 words	416385 - 418383	DD1-DD1000
			424577 - 425076	DH1 - DH500

			428673 - 429671	DF1 - DF500
			436865 - 437365	TXT1 -TXT1000
			445057 - 445556	TD1 - TD500
			449153 - 449651	CTD1 - CTD250
			457857 - 457873	YD0 - YD8

Related Topics**Send Instruction: Modbus TCP****Receive Instruction: Modbus TCP****Send Instruction: Modbus RTU****Receive Instruction: Modbus RTU****Modbus TCP Setup**