

MODBUS TABLE ORGANIZATION

Starting Address of the Group Registers (Dec)	Starting Address of the Group Registers (Hex)	System Version (Release)	System Version (Build)	Group Name (Text)	Group Code (Hex)	Group Complexity (Hex)	Group Version (Hex)
200	C8			Commands	F030	D1	000
8192	2000			Measures	F030	D1	000

MODBUS PROTOCOL DETAILS

Function Code (Dec)	Exception Codes (Dec)	Data Encoding
3	1, 2, 3	"Big Endian" (most significant byte first)
16	1, 2, 3	

MODBUS OVER SERIAL DETAILS

Physical Layer	Trasmission Modes	Device Addressing	Baud Rates (bit/s)	Data Bits	Data bits trasmission sequence	Parity	Stop Bits
standard EIA/TIA 485 (RS-485) two-wire configuration	RTU	1÷247	programmable	8	Least significant bit first	no	1

MASTER/SLAVE COMMUNICATION TIMING

Timer Descrtiption	Timer Value (msec)
Inter-character time-out	25
Response delay (from master request)	25÷100
Delay Time (between two master trasmissions)	>25

REFER ALSO TO: www.modbus.org - MODBUS over serial line specification and implementation guide V1.02
 - MODBUS APPLICATION PROTOCOL SPECIFICATION V1.1b

NOTE: [File and printed copies of this document are not subject to document change control.](#)

Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [bit]	Description	Note	Read Function Codes (Dec)	Data Storing (2)
				(no DISCRETE INPUTS available)			

Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [bit]	Description	Note	Read Function Codes (Dec)	Write Function Codes (Dec)	Data Storing (2)
				(no COILS available)				

Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
8193	8192	2000	16		Measures							
8193	8192	2000	2		Voltage	unsigned integer	1	mV			3	
8195	8194	2002	2		Current	unsigned integer	1	mA			3	
8197	8196	2004	2		Active power	unsigned integer	0,01	W			3	
8199	8198	2006	1		Sign of active power	unsigned integer	1	-	0, 1	0=positive, 1=negative	3	
8200	8199	2007	1		Power factor	unsigned integer	0,01	-			3	
8201	8200	2008	1		Sector of power factor	unsigned integer	1	-	0, 1, 2	0="1" or "0", 1="ind" (L), 2="cap" (C)	3	
8202	8201	2009	1		Frequency	unsigned integer	0,1	Hz			3	
8203	8202	200A	2		Positive active energy	unsigned integer	0,1	kWh			3	Y
8205	8204	200C	2		Positive partial active energy	unsigned integer	0,1	kWh			3	Y
8207	8206	200E	2		Operating time counter	unsigned integer	1	sec			3	Y

(2) If Y the data is stored in a non-volatile memory

Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Scale	Unit	Range	Note	Read Function Codes (Dec)	Write Function Codes (Dec)	Data Storing (2)
8193	8192	2000			Commands							
8193	8192	2000	1		Reset Commands. [IND] 10 [00C8] [0001] [02] [00XY] where: X=0; Y=1 ; reset " positive partial active energy " X=0; Y=8 ; reset " operating time counter "				See DETAILS		16	

DETAILS	
Reset Commands	[IND] = Device's modbus address