



MODBUS PROTOCOL
CENTURIO TOWER





NORME CE
EC RULES(STANDARD EC)
NORMAS DE LA CE

Direttiva Bassa Tensione
Low Voltage Directive
Directiva de baja tensión } 2014/35/UE

Direttiva EMC Compatibilità Elettromagnetica
EMC electromagnetic compatibility directive
EMC directiva de compatibilidad electromagnética } 2014/30/UE



GENERAL SAFETY GUIDELINES

Danger!

In emergencies the instrument should be switched off immediately! Disconnect the power cable from the power supply!

When installing always observe local regulations!

Manufacturer is not liable for any unauthorized use or misuse of this product that may cause injury, damage to persons and / or materials.

Caution!

Instrument must be accessible at all times for both operating and servicing. Access must not be obstructed in any way!

Feeder should be interlocked with a no-flow protection device to automatically shut-off the pumps when there is no flow!

Pumps and accessories must be serviced and repaired by qualified and authorized personnel only!

Always discharge the liquid end before servicing the instrument!

Empty and rinse the liquid end before work on a pump which has been used with hazardous or unknown chemicals!

Always read chemical safety datasheet!

Always wear protective clothing when handling hazardous or unknown chemicals!

Instrument must be operated / serviced by trained technicians only!

All connection operations must be performed while the instrument is not connected to main supply!

MODBUS Centurio RTU and TCP / IP

With the MODBUS protocol we define the format and the mode of communication between a "master" that manages the system and one or more "slaves" that respond to the queries of the master.

MODBUS Centurio RTU

To communicate with the device, via the RS485 device, it is necessary to enable the MODBUS communication in the relative menu. Furthermore it is necessary to configure the communication parameters such as:

IDModbus: Identifier of the RS485 node

BaudRate: Baud rate between 2400bps and 115200 bps

DataBits: 8Bit or 7bit

Parity: None, Even, Odd

Parity: None, Even, Odd

StopBits: 1bit, 2 bit

As mentioned above, MODBUS transactions always involve the master, which manages the line, and one slave at a time (except in the case of broadcast messages).

To identify the recipient of the message, a byte containing the numerical address of the selected slave device is transmitted as the first character.

Each of the slaves will therefore have assigned a different address number that uniquely identifies it.

The admissible addresses are those from 1 to 255, while the 0 address, which can not be assigned to a slave, placed at the top of the message transmitted by the master indicates that this is "broadcast", ie directed to all slaves at the same time.

The second character of the message identifies the function to be performed in the message transmitted by the master, to which the slave in turn responds with the same code to indicate that the function has been performed.

Normally the most used MODBUS are those shown below:

Function Description

01 Read Coil Status

02 Read Input Status

03 Read Holding Registers

04 Read Input registers

05 Force Single Coil

06 Preset Single register

07 Read Status

The last two characters of the message contain the cyclic redundancy check code calculated according to the CRC16 algorithm.

MODBUS FUNCTIONS

Read Output Status (01)

This function allows to request the ON or OFF status of binary logical variables.

Broadcast mode is not allowed.

question

Besides the address of the slave and the function code (01), the message contains the starting address (starting Address) expressed on two bytes and the number of bits to be read also on two bytes. The numbering of the addresses starts at zero (bit1 = 0) for the MODBUS

Example: Request for reading from bit 17 of the bit from 04 to 015.

ADDR	FUNC	DATA start Addr HI	DATA start Addr LO	DATA bit # HI	DATA bit # LO	CRC HI	CRC LO
11	01	00	03	00	0C	CE	9F

Answer

In addition to the slave address and the function code (01), the message includes a character that contains the number of bytes of data and the characters containing the data.

The data is packaged, so that a byte contains the status of 8 bits, the least significant bit of the first byte contains the bit corresponding to the starting address, and so on.

If the number of bits to be read is not a multiple of 8, the last character is completed with zeros in the most significant bits.

Example: Reply to the above request.

ADDR	FUNC	DATA byte count	DATA bit 04..11	DATA bit 12..15	CRC HI	CRC LO
11	01	02	CD	0B	6D	68

Read Output Registers (03)

This function makes it possible to request the value of 16-bit registers (word) containing numeric variables. Besides the address of the slave and the function code (03), the message contains the starting address (starting Address) expressed on two bytes and the number of words to be read also on two bytes. The maximum number of words that can be read is 125.

Example: Request for reading from slave 25 of registers from 4069 to 40071.

ADDR	FUNC	DATA start Addr HI	DATA start Addr LO	DATA bit # HI	DATA bit # LO	CRC HI	CRC LO
19	03	00	44	00	03	46	06

Answer

In addition to the address of the slave and the function code (03), the message includes a character that contains the number of bytes of data and the characters containing the data.

The registers require two bytes each, the first of which contains the most significant part.

Example: Reply to the above request.

ADDR	FUNC	DATA byte count	DATA byte 69 HI	DATA byte 69 LO	DATA byte 70 HI	DATA byte 70 LO	DATA byte 71 HI	DATA byte 71 LO	CRC HI	CRC LO
19	03	06	02	2B	00	00	00	64	AF	7A

Force Single Coil (05)

This function allows to force the status of a single binary variable ON or OFF.

In addition to the address of the slave and the function code (05), the message contains the address of the variable to be forced on two bytes and two characters of which the first is set to FF hex (255) to force the ON status and 00 hex for force OFF, the second is set to zero anyway.

Example: Request to force ON bit 4 on slave 47.

ADDR	FUNC	DATA bit HI	DATA bit LO	DATA ON/OFF	DATA (Zero)	CRC HI	CRC LO
2F	05	00	03	FF	00	7A	74

Answer

The answer is to read the status of the set point change. See Read Status (07)

Preset Single Register (06)

This function allows you to set the value of a single 16-bit register.

In addition to the address of the slave and the function code (06), the message contains the address of the variable expressed in two bytes and the value to be assigned.

Example: Request to force 928 on slave 35 at address 26.

ADDR	FUNC	DATA bit HI	DATA bit LO	DATA WORD HI	DATA WORD LO	CRC HI	CRC LO
23	06	00	19	03	A0	5E	07

Answer

The answer is to read the status of the set point change. See Read Status (07)

Read Status (07)

This function allows you to read the status of eight pre-determined bits with a compact message.

Example: Request status from slave 25.

ADDR	FUNC	CRC HI	CRC LO
19	07	5E	07

Answer

In addition to the address of the slave and the function code (07), the message includes a character that contains the status bits.

ADDR	FUNC	Status_send	CRC HI	CRC LO
2F	05	00	7A	74

Status-send:

- 0 setpoint successfully changed
- 1 wait setpoint editing
- 2 error setpoint changing

ERRORS MANAGEMENT

ADDR	FUNC	DATA exept. code	CRC HI	CRC LO
0A	81	02	7A	74

Codici d'eccezione

CODE	NAME	DECRPTION
01	ILLEGAL FORMAT	Message receiving syntax
02	ILLEGAL DATA ADDRESS	The address to which the data field refers is not is an address allowed on the addressed slave.
03	ILLEGAL DATA VALUE	Wrong function
04	CRC ERROR	Checksum error CRC

MODBUS Centurio TCP / IP

In modbus TCP / IP all master / slave requests and responses are managed via the TCP communication protocol. All requests / replies are sent via TCP on port 502.

The slave supports only 1 simultaneous connection, and the slave ID must be 0

Requests and responses must have 6 bytes of prefix as follows:

byte 0: Transaction identifier - default 0

byte 1: Transaction identifier - default 0

byte 2: protocol identifier = 0

byte 3 protocol identifier = 0

byte 4: frame length () = 0 if the messages are shorter than 256 bytes

byte 5: frame length (lower byte) = number of bytes to send

byte 6: Node identifier

byte 7: Function code of the modbus

byte8: Required data (depends on the function code)

below is an example of a request from the HoldingRegister 03 function, with offset 4 and node ID 01

send: 00 00 00 00 00 06 01 03 00 04 00 01

response: 00 00 00 00 00 05 01 03 02 00 05

The request functions are the same as those of the Modbus RTU

The time between one interrogation and another must be greater than or equal to: 500 ms (thousand seconds)

Address	Number Registri	Format	Proprietà	Function	Description
40001	2	Int16	R	03	Reading channel1 Without decimal point
40002	2	Int16	R	03	Divide factor misura corrente channel1. Accepted values 1, 10 ,100, 1000
40003	2	Int16	R	03	mV sonda Channel 1
40004	2	Int16	R	03	Temperature probe Channel1 If available
40005	2	Int16	R	03	Reading channel2 Without decimal point
40006	2	Int16	R	03	Divide factor misura corrente channel2. Accepted values 1, 10 ,100, 1000
40007	2	Int16	R	03	mV sonda Channel 2
40008	2	Int16	R	03	Temperature probe Channel2 If available
40009	2	Int16	R	03	Reading channel3 Without decimal point
40010	2	Int16	R	03	Divide factor misura corrente channel3. Accepted values 3, 10 ,100, 1000
40011	2	Int16	R	03	mV sonda Channel 3
40012	2	Int16	R	03	Temperature probe Channel3 If available
40013	2	Int16	R	03	Reading channel4 Without decimal point
40014	2	Int16	R	03	Divide factor misura corrente channel4. Accepted values 1, 10 ,100, 1000
40015	2	Int16	R	03	mV sonda Channel 4
40016	2	Int16	R	03	Temperature probe Channel4 If available
40017	2	Int16	R	03	Reading channel5 Without decimal point
40018	2	Int16	R	03	Divide factor misura corrente channel5. Accepted values 5, 10 ,100, 1000
40019	2	Int16	R	03	mV sonda Channel 5
40020	2	Int16	R	03	Temperature probe Channel5 If available
40021	2	Int16	R	03	Reading channel6 Without decimal point
40022	2	Int16	R	03	Divide factor misura corrente channel6. Accepted values 5, 10 ,100, 1000
40023	2	Int16	R	03	mV sonda Channel 6
40024	2	Int16	R	03	Temperature probe Channel6 If available
40031	2	Int16	R	03	Proportional Out Number 1 – value P/M
40032	2	Int16	R	03	Proportional Out Number 2 – value P/M
40033	2	Int16	R	03	Proportional Out Number 3 – value P/M
40034	2	Int16	R	03	Proportional Out Number 4 – value P/M
40035	2	Int16	R	03	Proportional Out Number 5 – value P/M
40036	2	Int16	R	03	Proportional Out Number 6 – value P/M
40037	2	Int16	R	03	Proportional Out Number 7 – value P/M
40038	2	Int16	R	03	Proportional Out Number 8 – value P/M

40041	2	Int16	R	03	Calendar - Year
40042	2	Int16	R	03	Calendar – Month
40043	2	Int16	R	03	Calendar – Day
40044	2	Int16	R	03	Calendar – Hour
40045	2	Int16	R	03	Calendar – Minutes
40046	4	Int32	R	03	Totalizer WM 1
40048	4	Int32	R	03	Totalizer WM 2
Coils Register - Relay					
01	1Bit	Bit	R	01	Relay Out Number 1 – 1 On 0 Off
02	1Bit	Bit	R	01	Relay Out Number 2 – 1 On 0 Off
03	1Bit	Bit	R	01	Relay Out Number 3 – 1 On 0 Off
04	1Bit	Bit	R	01	Relay Out Number 4 – 1 On 0 Off
05	1Bit	Bit	R	01	Relay Out Number 5 – 1 On 0 Off
06	1Bit	Bit	R	01	Relay Out Number 6 – 1 On 0 Off
07	1Bit	Bit	R	01	Relay Out Number 7 – 1 On 0 Off
08	1Bit	Bit	R	01	Relay Out Number 8 – 1 On 0 Off
Coils Register - Input					
11	1Bit	Bit	R	01	Input Number 1 – 1 On 0 Off
12	1Bit	Bit	R	01	Input Number 2 – 1 On 0 Off
13	1Bit	Bit	R	01	Input Number 3 – 1 On 0 Off
14	1Bit	Bit	R	01	Input Number 4 – 1 On 0 Off
15	1Bit	Bit	R	01	Input Number 5 – 1 On 0 Off
16	1Bit	Bit	R	01	Input Number 6 – 1 On 0 Off
17	1Bit	Bit	R	01	Input Number 7 – 1 On 0 Off
18	1Bit	Bit	R	01	Input Number 8 – 1 On 0 Off
Coils Register - Alarm					
21	1Bit	Bit	R	01	Flow Alarm – 1 On 0 Off
24	1Bit	Bit	R	01	WM1 Alarm – 1 On 0 Off
25	1Bit	Bit	R	01	WM2 Alarm – 1 On 0 Off
30	1Bit	Bit	R	01	Bleed1 Timeout – 1 On 0 Off
31	1Bit	Bit	R	01	Bleed2 Timeout – 1 On 0 Off
32	1Bit	Bit	R	01	Bleed3 Timeout – 1 On 0 Off
33	1Bit	Bit	R	01	High TRC – 1 On 0 Off
34	1Bit	Bit	R	01	Low TRC – 1 On 0 Off
35	1Bit	Bit	R	01	High Chlorine – 1 On 0 Off
36	1Bit	Bit	R	01	Low Chlorine – 1 On 0 Off
37	1Bit	Bit	R	01	High pH – 1 On 0 Off
38	1Bit	Bit	R	01	Low pH – 1 On 0 Off
39	1Bit	Bit	R	01	High Redox – 1 On 0 Off
40	1Bit	Bit	R	01	Low Redox – 1 On 0 Off
41	1Bit	Bit	R	01	High mA – 1 On 0 Off
42	1Bit	Bit	R	01	Low mA – 1 On 0 Off
43	1Bit	Bit	R	01	High Conductivity – 1 On 0 Off
44	1Bit	Bit	R	01	Low Conductivity – 1 On 0 Off
Coils Register - Status					
50	1Bit	Bit	R	01	Lockout Biocide 1 – 1 On 0 Off
51	1Bit	Bit	R	01	Lockout Biocide 2 – 1 On 0 Off

Setpoint - Bleed					
40050	2	Int16	R/W	03/06	Bleed1 – Bleed Setpoint
40051	2	Int16	R/W	03/06	Bleed1 – Bleed delay minutes
40052	2	Int16	R/W	03/06	Bleed1 – Bleed DeadBand
40053	2	Int16	R/W	03/06	Bleed1 – Bleed Timeout Hour
40054	2	Int16	R/W	03/06	Bleed1 – Bleed Timeout Minutes
40055	2	Int16	R/W	03/06	Bleed2 – Bleed Setpoint
40056	2	Int16	R/W	03/06	Bleed2 – Bleed delay minutes
40057	2	Int16	R/W	03/06	Bleed2 – Bleed DeadBand
40058	2	Int16	R/W	03/06	Bleed2 – Bleed Timeout Hour
40059	2	Int16	R/W	03/06	Bleed2 – Bleed Timeout Minutes
40060	2	Int16	R/W	03/06	Bleed3 – Bleed Setpoint
40061	2	Int16	R/W	03/06	Bleed3 – Bleed delay minutes
40062	2	Int16	R/W	03/06	Bleed3 – Bleed DeadBand
40063	2	Int16	R/W	03/06	Bleed3 – Bleed Timeout Hour
40064	2	Int16	R/W	03/06	Bleed3 – Bleed Timeout Minutes
Setpoint – Biocide					
40070	2	Int16	R/W	03/06	Biocide1 – Pre Bleed Time - Hour
40071	2	Int16	R/W	03/06	Biocide1 – Pre Bleed Time - Minutes
40072	2	Int16	R/W	03/06	Biocide1 – Pre Bleed Time - Conductivity
40073	2	Int16	R/W	03/06	Biocide1 Circulator Time - Hour
40074	2	Int16	R/W	03/06	Biocide1 Circulator Time - Minutes
40075	2	Int16	R/W	03/06	Biocide1 Pre Biocide - Hour
40076	2	Int16	R/W	03/06	Biocide1 Pre Biocide - Minutes
40077	2	Int16	R/W	03/06	Biocide1 Lockout - Hour
40078	2	Int16	R/W	03/06	Biocide1 Lockout - Minutes
40079	2	Int16	R/W	03/06	Biocide2 – Pre Bleed Time - Hour
40080	2	Int16	R/W	03/06	Biocide2 – Pre Bleed Time - Minutes
40081	2	Int16	R/W	03/06	Biocide2 – Pre Bleed Time - Conductivity
40082	2	Int16	R/W	03/06	Biocide2 Circulator Time - Hour
40083	2	Int16	R/W	03/06	Biocide2 Circulator Time - Minutes
40084	2	Int16	R/W	03/06	Biocide2 Pre Biocide - Hour
40085	2	Int16	R/W	03/06	Biocide2 Pre Biocide - Minutes
40086	2	Int16	R/W	03/06	Biocide2 Lockout - Hour
40087	2	Int16	R/W	03/06	Biocide2 Lockout - Minutes
Setpoint – Inibithor					
40090	2	Int16	R/W	03/06	% Bleed Mode – value percentuale
40091	2	Int16	R/W	03/06	% Time Mode – value percentuale
40092	2	Int16	R/W	03/06	% Time Mode – value Time Hour
40093	2	Int16	R/W	03/06	% Time Mode – value Time Minutes
40094	2	Int16	R/W	03/06	% WaterMeter Mode – value Time Hour
40095	2	Int16	R/W	03/06	% WaterMeter Mode – value Time Minutes
40096	2	Int16	R/W	03/06	% WaterMeter Mode – value Concentration
40097	2	Int16	R/W	03/06	% WaterMeter Mode – Mode WM 0:WM1 1

					WM2 2:WM1+WM2
40098	2	Int16	R/W	03/06	% WaterMeter ppm Mode – 0: mode luitri/ora, 1: mode cc/st
40099	2	Int16	R/W	03/06	% WaterMeter ppm Mode – % WaterMeter Mode – Mode WM 0:WM1 1 WM2 2:WM1+WM2
40100	2	Int16	R/W	03/06	% WaterMeter ppm Mode – Concentration
40101	2	Int16	R/W	03/06	% WaterMeter ppm Mode – value cc/st
40102	2	Int16	R/W	03/06	% WaterMeter ppm Mode – value l/h
40103	2	Int16	R/W	03/06	% WaterMeter ppm Mode – value PPM
Setpoint – Conductivity					
40110	2	Int16	R/W	03/06	Alarm Low – 0:disable , 1: Absolute, 2 Track
40111	2	Int16	R/W	03/06	Alarm Low – value Conductivity
40112	2	Int16	R/W	03/06	Alarm High – 0:disable , 1: Absolute, 2 Track
40113	2	Int16	R/W	03/06	Alarm High – value Conductivity
Setpoint – pH					
40115	2	Int16	R/W	03/06	Digital Setpoint – 0:disable , 1: ON/OFF, 2 PWM
40116	2	Int16	R/W	03/06	Digital Setpoint – ValueON pH in ON/OFF mode
40117	2	Int16	R/W	03/06	Digital Setpoint – ValueOFF pH in ON/OFF mode
40118	2	Int16	R/W	03/06	Digital Setpoint – Value1 pH in PWM mode
40119	2	Int16	R/W	03/06	Digital Setpoint – PWM Time1
40120	2	Int16	R/W	03/06	Digital Setpoint – Value2 pH in PWM mode
40121	2	Int16	R/W	03/06	Digital Setpoint – PWM Time 2
40122	2	Int16	R/W	03/06	Proportional Setpoint – 0:disable , 1: Enable
40123	2	Int16	R/W	03/06	Proportional Setpoint – Value1 ph
40124	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40125	2	Int16	R/W	03/06	Proportional Setpoint – Value2 ph
40126	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40127	2	Int16	R/W	03/06	Alarm Low – 0:disable , 1: Absolute, 2 Track
40128	2	Int16	R/W	03/06	Alarm Low – value pH
40129	2	Int16	R/W	03/06	Alarm High – 0:disable , 1: Absolute, 2 Track
40130	2	Int16	R/W	03/06	Alarm High – value pH
Setpoint – Chlorine					
40131	2	Int16	R/W	03/06	Digital Setpoint – 0:disable , 1: ON/OFF, 2 PWM
40132	2	Int16	R/W	03/06	Digital Setpoint – ValueON Cl in ON/OFF mode
40133	2	Int16	R/W	03/06	Digital Setpoint – ValueOFF Cl in ON/OFF mode
40134	2	Int16	R/W	03/06	Digital Setpoint – Value1 Cl in PWM mode
40135	2	Int16	R/W	03/06	Digital Setpoint – PWM Time1
40136	2	Int16	R/W	03/06	Digital Setpoint – Value2 Cl in PWM mode
40137	2	Int16	R/W	03/06	Digital Setpoint – PWM Time 2
40138	2	Int16	R/W	03/06	Proportional Setpoint – 0:disable , 1: Enable
40139	2	Int16	R/W	03/06	Proportional Setpoint – Value1 Cl

40140	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40141	2	Int16	R/W	03/06	Proportional Setpoint – Value2 CI
40142	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40143	2	Int16	R/W	03/06	Alarm Low – 0:disable , 1: Absolute, 2 Track
40144	2	Int16	R/W	03/06	Alarm Low – value CI
40145	2	Int16	R/W	03/06	Alarm High – 0:disable , 1: Absolute, 2 Track
40146	2	Int16	R/W	03/06	Alarm High – value CI
Setpoint – Redox					
40150	2	Int16	R/W	03/06	Digital Setpoint – 0:disable , 1: ON/OFF, 2 PWM
40151	2	Int16	R/W	03/06	Digital Setpoint – ValueON mV in ON/OFF mode
40152	2	Int16	R/W	03/06	Digital Setpoint – ValueOFF mV in ON/OFF mode
40153	2	Int16	R/W	03/06	Digital Setpoint – Value1 mV in PWM mode
40154	2	Int16	R/W	03/06	Digital Setpoint – PWM Time1
40155	2	Int16	R/W	03/06	Digital Setpoint – Value2 mV in PWM mode
40156	2	Int16	R/W	03/06	Digital Setpoint – PWM Time 2
40157	2	Int16	R/W	03/06	Proportional Setpoint – 0:disable , 1: Enable
40158	2	Int16	R/W	03/06	Proportional Setpoint – Value1 mV
40159	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40160	2	Int16	R/W	03/06	Proportional Setpoint – Value2 mV
40161	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40162	2	Int16	R/W	03/06	Alarm Low – 0:disable , 1: Absolute, 2 Track
40163	2	Int16	R/W	03/06	Alarm Low – value mV
40164	2	Int16	R/W	03/06	Alarm High – 0:disable , 1: Absolute, 2 Track
40165	2	Int16	R/W	03/06	Alarm High – value mV
Setpoint – Tracer					
40170	2	Int16	R/W	03/06	Digital Setpoint – 0:disable , 1: ON/OFF, 2 PWM
40171	2	Int16	R/W	03/06	Digital Setpoint – ValueON mV in ON/OFF mode
40172	2	Int16	R/W	03/06	Digital Setpoint – ValueOFF mV in ON/OFF mode
40173	2	Int16	R/W	03/06	Digital Setpoint – Value1 TRC in PWM mode
40174	2	Int16	R/W	03/06	Digital Setpoint – PWM Time1
40175	2	Int16	R/W	03/06	Digital Setpoint – Value2 TRC in PWM mode
40176	2	Int16	R/W	03/06	Digital Setpoint – PWM Time 2
40177	2	Int16	R/W	03/06	Digital Time Limit TRC in Water Meter mode
40178	2	Int16	R/W	03/06	Concentration
40179	2	Int16	R/W	03/06	Litre/Ora
40180	2	Int16	R/W	03/06	PPM
40181	2	Int16	R/W	03/06	Proportional Setpoint – 0:disable , 1: Enable
40182	2	Int16	R/W	03/06	Proportional Setpoint – Value1 TRC
40183	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40184	2	Int16	R/W	03/06	Proportional Setpoint – Value2 TRC
40185	2	Int16	R/W	03/06	Proportional Setpoint – Pulse/Minute
40186	2	Int16	R/W	03/06	Proportional Time Limit TRC in Water Meter

					mode
40187	2	Int16	R/W	03/06	Concentration
40188	2	Int16	R/W	03/06	CC/ST
40189	2	Int16	R/W	03/06	PPM
40190	2	Int16	R/W	03/06	Alarm Low – 0:disable , 1: Absolute, 2 Track
40191	2	Int16	R/W	03/06	Alarm Low – value TRC
40192	2	Int16	R/W	03/06	Alarm High – 0:disable , 1: Absolute, 2 Track
40193	2	Int16	R/W	03/06	Alarm High – value TRC
Log setup					
40200	2	Int16	R/W	03/06	Log Setup – 0:disable , 1: Enable
40201	2	Int16	R/W	03/06	Schedule Time Hour
40202	2	Int16	R/W	03/06	Schedule Time Minutes
Water Meters					
40205	2	Int16	R/W	03/06	Water Meter1 K Factor
40206	2	Int16	R/W	03/06	Water Meter1 0: Impulsi/Litro 1:Litri/Impulso
40207	2	Int16	R/W	03/06	Water Meter2 K Factor
40208	2	Int16	R/W	03/06	Water Meter2 0: Impulsi/Litro 1:Litri/Impulso
40209	2	Int16	R/W	03/06	Water Meter1 Alarm 0:Disable 1:Enable
40210	2	Int16	R/W	03/06	Water Meter1 Alarm: Time Hour
40211	2	Int16	R/W	03/06	Water Meter1 Alarm: Time Minutes
40212	2	Int16	R/W	03/06	Water Meter2 Alarm 0:Disable 1:Enable
40213	2	Int16	R/W	03/06	Water Meter2 Alarm: Time Hour
40214	2	Int16	R/W	03/06	Water Meter2 Alarm: Time Minutes
40215	2	Int16	R/W	03/06	Proportional1 WM Setpoint – 0:disable , 1: Enable
40216	2	Int16	R/W	03/06	Concentration
40217	2	Int16	R/W	03/06	PPM
40218	2	Int16	R/W	03/06	CC/ST
40219	2	Int16	R/W	03/06	Proportional2 WM Setpoint – 0:disable , 1: Enable
40220	2	Int16	R/W	03/06	Concentration
40221	2	Int16	R/W	03/06	PPM
40222	2	Int16	R/W	03/06	CC/ST
40223	2	Int16	R/W	03/06	Proportional3 WM Setpoint – 0:disable , 1: Enable
40224	2	Int16	R/W	03/06	Concentration
40225	2	Int16	R/W	03/06	PPM
40226	2	Int16	R/W	03/06	CC/ST
Flow Sensor					
40230	2	Int16	R/W	03/06	Flow Sensor 0:direct, 1:reverse,2 disable
40231	2	Int16	R/W	03/06	Flow Sensor delay minutes



*When dismantling this instrument please separate material types and send them according to local recycling disposal requirements.
We appreciate your efforts in supporting your local Recycle Environmental Program.
Working together we'll form an active union to assure the world's invaluable resources are conserved.*