

SLD MODBUS MAPING
V1.02

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MODIFICATION TIME : 2017/11/26



Interface description

Physical interface : RS485
Comm. protocol : Modbus-RTU
Baud : 19200
Date bits : 8b
Parity check : Even
Stop bits : 1b
Reg offset address :1

**This modbus maping applies to
all series products**



Web Argentina



Web Uruguay



Web Paraguay

Security coils

Address	Properties	Description	Unit	Normal
0002	read and write	Start/stop totalizers Set coils (1) : Start totalizers Reset coils (0) : Stop totalizers	None	1
0003	write only	Reset totals Set coils (1) : Reset accumulation is performed After Reset accumulation is performed ,this coils will be cleared.	None	0
0005	read and write	Perform flowmeter zeroing Set coils (1) : Perform flowmeter zeroing Reset coils (0) : Cancel flowmeter zeroing Attention : After Perform flowmeter zeroing ,this coils will be cleared. If the coil is cleared during calibration (0),The current operation will be canceled and this operation does not produce	None	0
0012	read and write	start fix frequency output Set coils (1) :The pulse is output according to the set fixed frequency. (fixed frequency address :Floating-point regsiter [0147~0148]) Attention : The fixed frequency output will stop after 40 seconds , and the coil will be clear	None	0
0013	read and write	Density for low-density calibration Warning : If user no calibration conditions , prohibit operation this coils .	None	0
0014	read and write	Density for high-density calibration Warning : If user no calibration conditions , prohibit operation this coils .	None	0
0015	read and write	Temperature for temperature offset calibrations Warning : If user no calibration conditions , prohibit operation this coils .	None	0
0016	read and write	Temperature for temperature slope calibrations Warning : If user no calibration conditions , prohibit operation this coils .	None	0

Floating-point regsiter pairs

Address	Properties	Description	Unit	Normal
0147-0148	read and write	Fixed frequency for frequency/output test (Hertz)	Hz	10000
0151-0152	read and write	temperature coefficient	None	
0155-0156	read and write	Density for low-density calibration	g/cc	
0157-0158	read and write	Density for high-density calibration	g/cc	
0159-0160	read and write	Density for low-density calibration times	usec	
0161-0162	read and write	Density for high-density calibration times	usec	
0163-0164	read and write	Density temperature coefficient	None	
0195-0196	read and write	Mass flow cutoff When the mass flow is lower than the cutoff value, mass flow rate is 0 and quality will not accumulate	Kg/min	
0197-0198	read and write	Volume flow cutoff for frequency/pulse output and totalizers	L/min	
0245-0246	read only	Sensor error status	None	
0247-0248	read only	Real-time mass flow rate	Kg/min	
0249-0250	read only	Real-time density	Kg/m^3	
0251-0252	read only	Real-time temperature	C°	
0253-0254	read only	Real-time volume flow rate	L/min	
0259-0260	read only	Real-time mass total	Kg	
0261-0262	read only	Real-time volume total	L	
0279-0280	read and write	Mass flow rate meter factor	None	
0281-0282	read and write	Volume flow rate meter facto	None	
0285-0286	read only	Raw tube frequency	Hz	
0293-0294	read only	Mass flow live zero flow	Kg/min	
6101-6102	read and write	Volume calculation method (0) Volume = Mass/Real-time density Attention: Real-time volume affected by the temperature greatly. (1) Volume = Mass/Fix density Attention : Only for the standard density of the media is known	None	
6501-6502	read and write	Fixe density Attention : Only used Fixed density calculation	Kg/m^3	

Holding registers

Address	Properties	Description	Unit	Normal
0017	read and write	flow direction 0 Forward flow only 1 Reverse flow only 2 Bidirectional flow 3 Absolute forward/reverse	None	2
0021	read and write	Temperature for temperature offset calibrations Warning : If user no calibration conditions , prohibit operation this coils .	None	
0031	read and write	Temperature for temperature slope calibrations Warning : If user no calibration conditions , prohibit operation this coils .	None	
0039	read and write	Mass flow unit codes	None	74
0040	read and write	Density unit codes	None	92
0041	read and write	Temperature unit codes	None	32
0042	read and write	Volume flow unit codes	None	17
0045	read and write	Mass totalizer unit codes	None	61
0046	read and write	Volume totalizer unit codes	None	41
0313	read and write	Modbus slaver address	None	1
0419	read only	Flowmeter states Bit3 : Sensor error Bit4 : Temperature sensor out of limit Bit5 : Calibration failure Bit7 : Transmitter power on initialization Attention : When the flowmeter is powered up ,the bit7 is set , About one minute later it will be reset.When the status is set do not start the meter. Bit15 : Calibration failure		
1133	read and write	RS-485 digital communication baud rate 0 : 1200 baud 1 : 2400 baud 2 : 4800 baud 3 : 9600 baud 4 : 19,200 baud 5 : 38,400 baud	None	4
1134	read and write	RS-485 digital communication parity setting 0 : None 1 : Odd parity 2 : Even parity	None	2
1135	read and write	RS-485 digital communication stop bits setting 1 : One Bit 2 : Two bits	None	1

ASCII character strings

Address	Properties	Description	Unit	Normal
6801-6812	read only	Software version number	None	

Unit code description

Mass flow unit codes (holding register 0039)

code	Description	Unit
70	Grams/second	g/s
71	Grams/minute	g/min
72	Grams/hour	g/h
73	Kilograms/second	kg/s
74	Kilograms/minute	kg/min
75	Kilograms/hour	kg/h
76	Kilograms/day	kg/day
77	Metric tons/minute	t/min
78	Metric tons/hour	t/h
79	Metric tons/day	t/day
80	Pounds/second	lb/s
81	Pounds/minute	lb/min
82	Pounds/hour	lb/h
83	Pounds/day	lb/day
84	Short tons (2000 pounds)/minute	st/min
85	Short tons (2000 pounds)/hour	st/h
86	Short tons (2000 pounds)/day	st/day
87	Long tons (2240 pounds)/hour	lt/h
88	Long tons (2240 pounds)/day	lt/d

Density unit codes (holding register 0040)

code	Description	Unit
91	Grams/cubic centimeter	g/cm ³
92	Kilograms/cubic meter	kg/m ³
93	Pounds/gallon	lb/gal
94	Pounds/cubic foot	lb/ft
95	Grams/milliliter	g/mL
96	Kilograms/liter	kg/L
97	Grams/liter	g/L
98	Pounds/cubic inch	lb/in
99	Short tons (2000 pounds)/cubic yard	st/yd

Temperature unit codes (holding register 0041)

code	Description	Unit
32	Degrees Celsius	°C
33	Degrees Fahrenheit	°F
34	Degrees Rankine	°R
35	Kelvin	K

Volume flow unit codes (holding register 0042)

code		Description	Unit
15	unit code	Cubic feet/minute	ft ³ /min
16	unit code	Gallons/minute	gal/min
17	unit code	Liters/minute	L/min
18	unit code	Imperial gallons/minute	uk gal/min
19	unit code	Cubic meters/hour	m ³ /h
22	unit code	Gallons/second	gal/s
23	unit code	Million U.S. gallons/day	Mus gal/day
24	unit code	Liters/second	L/s
25	unit code	Million liters/day	ML/day

26	unit code	Cubic feet/second	ft ³ /s
27	unit code	Cubic feet/day	ft ³ /day
28	unit code	Cubic meters/second	m ³ /s
29	unit code	Cubic meters/day	m ³ /day
30	unit code	Imperial gallons/hour	uk gal/h
31	unit code	Imperial gallons/day	uk gal/day
130	unit code	Cubic feet/hour	ft ³ /h
131	unit code	Cubic meters/minute	m ³ /min
132	unit code	Barrels/second	Barrels/s
133	unit code	Barrels/minute	Barrels/min
134	unit code	Barrels/hour	Barrels/h
135	unit code	Barrels/day	Barrels/day
136	unit code	U.S. gallons/hour	us gal/h
137	unit code	Imperial gallons/second	uk gal/s
138	unit code	Liters/hour	L/h
235	unit code	U.S. gallons/day	us gal/day

Mass totalizer unit codes (holding register 0045)

code		Description	Unit
60	unit code	Grams	g
61	unit code	Kilograms	kg
62	unit code	Metric tons	t
63	unit code	Pounds	lb
64	unit code	Short tons(2000 pounds)	st
65	unit code	Long tons(2240 pounds)	lt

Volume totalizer unit codes (holding register 0046)

code		Description	Unit
40	unit code	U.S. gallons	us gal
41	unit code	Liters	L
42	unit code	Imperial gallons	uk gal
43	unit code	Cubic meters	m ³
46	unit code	Barrels (42 U.S. gallons)	Barrels
112	unit code	Cubic feet	ft ³

THE END