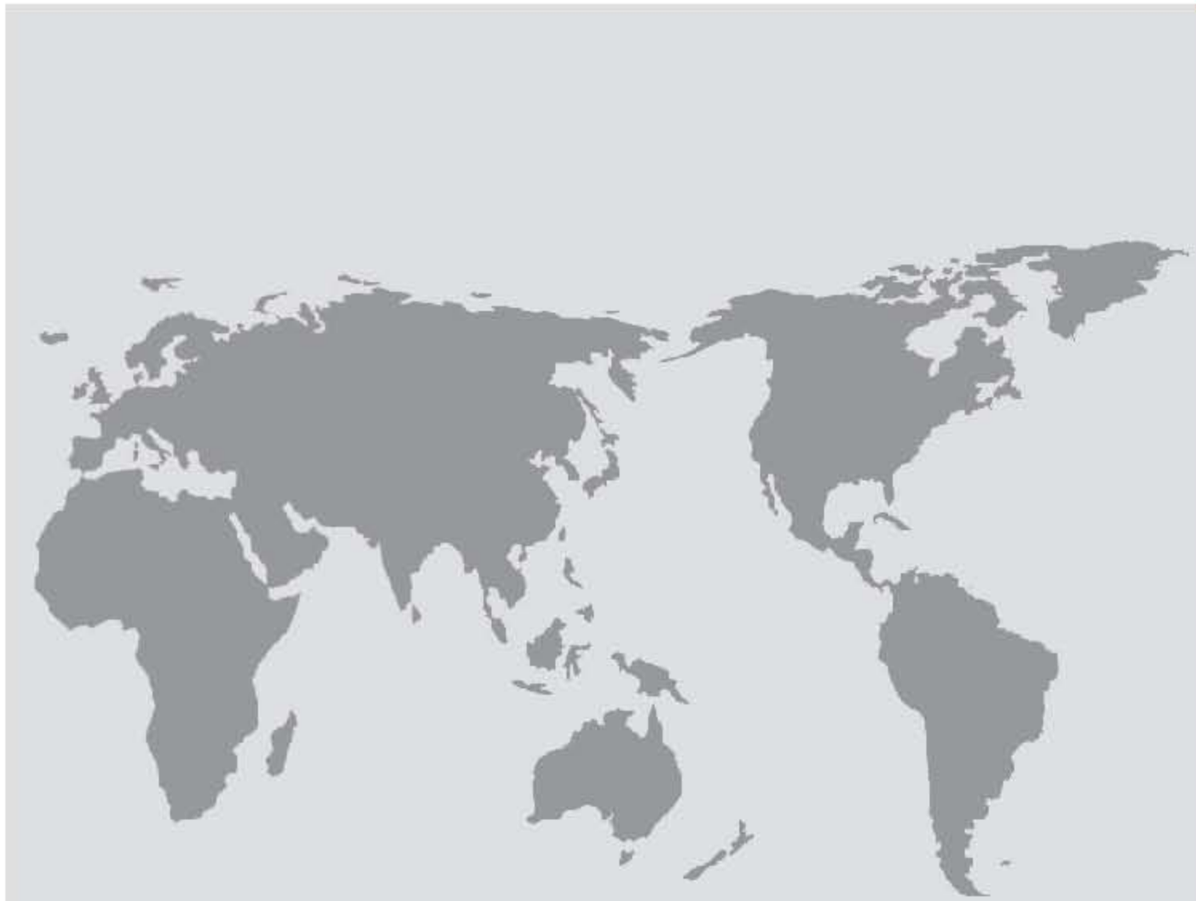
Supmea®



Supmea®

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Supmea®

Committed to process automation solutions

Supmea is commited to in industrial process automation sensors and instrument since its establishment for decades. The main products are flowmeter, water analysis instrument, level transmitter, recorder, pressure transmitter and other field instruments.

By offering a super qualified products and one-stop-service, Supmea has been worked in industries as wide-spread as oil & gas, water & wastewater, chemical & petrochemical in more than 80 countries, and will take further efforts to become closer to its customers to respond quickly and effectively to their demands.

By 2021, Supmea has a wide quantities of R&D researchers and engineers, more than 300 employees in the total company structures. In China, there are more than 14 branch offices of Supmea,which are located in Beijing, Shanghai ,Guangzhou, etc,in order to offer better service to customers.

With diverse market needs and global customers ,Supmea has established and in preparation its office in Singapore,Malaysia, India, Germany etc. Supmea is making constant efforts to establish strong partnerships with distributors world widely, integrating itself into the local innovation system and meanwhile contribute to global technological innovations.

Customer focused, Supmea will continuously be committed to process automation sensors and instrument, playing an indispensable role in supporting world industries more intelligent and efficient.

Director of the China Instrument and Control Society

ISO9001:2015

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Contents

Recorders Series

Introduction

The SUP-R9600 paperless recorder, using high-speed,high-performance 32-digit cortex-M4 microprocessor, and picture response time should be less than 0.1 seconds; meanwhile the inspection, record, display and alarm of 18 signals are realized, and internal circuit board should be coated by anticorrosion, moisture protection and dust prevention.

High-performance power technology and strong immunity from interference can effectively control external harmonic disturbance, and highly improve power and stability of whole machine.

Recorder Parameters

Parameters	 Paperless recorder	 Paperless recorder	 Chart recorder
Model	SUP-R9600	SUP-R6000C	SUP-R1200
Display	3.5-inch LCD	7.0-inch LED	OLED
Display resolution	320*240	800*480	128*64
Input channel	1~18	1~48	1~8
Input signal	(4~20)mA,(0~20)mA,(0~10)mA, RTD:PT100,Cu50,(1~5)V,(0~10)V, (0~5)V,TC:K,B,E,J,S,T,R,N,(0~20)mV, (-20~20)mV,(0~100)mV, RS485	(4~20)mA,(0~20)mA,(0~10)mA, RTD:PT100,Cu50,(1~5)V,(0~10)V, (0~5)V,TC: K,B,S,E,J,T,R,N,F2(0~20) mV,(-20~20)mV,(0~100)mV	(4~20)mA,(0~10)mA,RTD:PT100,Cu50, (1~5)V,(0~10)V,(0~5)V,TC: K,B,E,J,S,T, R,N,(0~20)mV,(0~100)mV
Sampling interval	1s	1s	0.6s
Record Interval (chart speed)	1s~60min	1s~4min	10~2000mm/h
Accuracy	0.2%F.S	0.2%F.S	0.2%F.S
Relay output	4	18	8
Analog output	4	18	2
Power distribution	1	1	1
Totalizer	Yes	Yes	-
Data transfer	USB	USB	Print
Communication	RS485	RS232/RS485	RS232/RS485
Panel cutout size	92*1mm×92*1mm	138*1mm×138*1mm	138*1mm×138*1mm
Power supply	176VAC~264VAC,47-63Hz,24V	AC 85~264V,DC12~36V	100~240VAC 24VDC

SUP-R9600 Paperless recorder

Main display

Features

- 96x96 international standard size
- 3.5-inch TFT LCD
- 18 multi-function analog signals input
- 6 kinds of parameter display modes

Parameters

	SUP-R9600 Paperless recorder		
Display screens	3.5-inch LCD	Internal memory capacity	48M
Input signal	(4~20)mA,(0~20)mA,(0~10)mA, RTD: PT100,Cu50,(1~5)V,(0~10)V, (0~5)V,TC: K,B,E,J,S,T,R,N,(0~20)mV, (-20~20)mV,(0~100)mV,	Memory time	10 days - 89 years (time is determined based on record gap)
		Sampling interval	1s
		Communication	Modbus RS485
Output	4 relay output and 1 Power distribution (optional)	Power supply	(176-264)VAC,47~63Hz,24V
Accuracy	0.2%F.S	Operating conditions	Environmental temperature:(0~50)℃ Environmental humidity:(10-85) %RH
Record Interval	1s-60min optional	Dimension	Overall dimension: 96''mm×96''mm×100''mm Panel cutout size: 92''mm×92''mm

Introduction

SUP-R6000C Paperless recorder processes the data by high-performance microprocessor from various monitoring signals, which are necessary in industrial field, such as pressure, level , flow , temperature.

The data will be processed and displayed in various forms on the crystal display screen .

Meanwhile, the data is stored in inner memory chip inside the instrument so that the data can be directly queried, browsed and printed.

SUP-R6000C Paperless recorder

Main display

Features

- Up to 48 channels universal inputs
- Up to 18 channels relay output
- Using high-speed,high-performance 32-bit ARM processor
- 24channels data display on the same screen

  Multiple screen switching display

Parameters

SUP-R6000C Paperless recorder			
Dimension	184*154*156	Communication	RS485/RS232
Power supply	AC 85～264V,DC12～36V	Working temperature	(-10~50)℃
Power consumption	≤20W	Operating humidity	10～90% (No condensation)
Internal memory capacity	64M	Accuracy	±0.2%FS
Response time	≤0.3S	Frequency	50/60Hz

SUP-R1200 Chart recorder

Features

- Rich information is presented simultaneously
- Two types of display: set-channel and circular
- Maximum 8 universal channels
- Allowable Panel Thickness: 2 to 26 mm
- With zero consumption of pens or ink
- No errors caused by the pen's position

Parameters

DC current	0~10mA, 4~20mA, 4~20mAsq	Record Points	Maximum 8 Channels
DC voltage	0~20mV, 0~50mV, 0~100mV, 0~5V,1~5V, 1~5Vsq,0~10V	Paper Feed Speed	10~2000mm/h
		Power Frequency	220VAC/24VDC
Thermocouple	S, B, K, T, E, J, R, N	Environmental Temperature	50Hz
RTC	PT100, Cu100, Cu50	Humidity	0~85%RH (non-condensation)
Accuracy	±0.2% of input scale	Accuracy	0.2%FS
Sampling Cycle	1 second	Warm-up Time	30 mins after power connection
Chart Paper	Folding, valid chart format 104mm	Installation location	Indoors

Process Calibrator Series

Introduction

SUP-703S signal generators have measurement and output functions of many signals, including voltage, current, and TC; adopt LCD and silicone keypad with clear functions, operation is easy, stand-by time is long, Accuracy is high, and there is programmable output function.

Calibrator parameters

Parameters	 Signal generator	 Mult-function Calibrator
Model	SUP-C703S	SUP-825-J
Measure		
MA (maximum accuracy)	±2%F.S	±0.02%F.S
DC voltage	0~30V	0~20V/0~30V
DC voltage	0~24mV, 0~100mV	0~100mV
AC voltage	-	-
DC current	0~24mA, 4/8/12/16/20mA	0~24mA
AC current	-	-
Electric current loop	-	0~24mA
Pulse-counting	-	0~99999
Frequency	-	1~10kHz
Resistance	0~t400Ω	0~3200Ω
TC	8types	8types
RTD	PT100	PT100,Cu50
Source		
DC voltage	0~15V	0~10V
DC voltage	0~20mV/0~100mV	0~100mV
DC voltage	0~24mA	0~24mA
Analog transmitter	0~24mA	0~24mA
Frequency	-	1~5KHz
Resistance	15~400Ω	15~3200Ω
TC	8types	8types
RTD	-	PT100,Cu50
Output of 24V	Yes	Yes
Number of digits	4	5
Power supply	4 AAA batteries or 5V/1A power adapter	Rechargeable batteries

SUP-C703S Signal generator

Features

- With 8 TC input and output functions, as well as range transformation and programming output functions
- Adding 4 function switch button on the side, and it can set up the system function freely according to the field demand
- If in display mode, the measurement signal and the output signal can be displayed at the same time, and the data viewing is more convenient

Parameters

I、Measure

Signal	Signal type	Scope	Accuracy	Resolution ratio	Notes
DC voltage	20mV	0.00~24.00mV	±0.2 %	0.01mV	
	100mV	0.0~100.00mV	±0.2 %	0.1mV	
	V	0.00~15.00V	±0.2 %	0.01V	Maximum power output 30mA
DC voltage	mA	0.00~24.00mA	±0.2 %	0.01A	There is Active current
	4~20mA	4/8/12/16/20mA	±0.2 %	0.01mA	
Passive current	mA	0.00~24.00mA	±0.2 %	0.01mA	External Power Output 16 - 30V
Power distribution	24VLOOP	24V/16V	10%	-	Drive current 24mA
TC	K	0~1372℃	±1 %	1℃	Output range start from 0 ℃ without negative humidity
	E	0~1000℃	±1 %	1℃	
	J	0~1200℃	±1 %	1℃	
	T	0~400℃	±1 %	1℃	
	R	0~1768℃	±1 %	1℃	
	B	250~1820℃	±1 %	1℃	
	S	0~1768℃	±1 %	1℃	
	N	0~1300℃	±1 %	1℃	
RTD	Pt100	-199~650℃	±0.2 %	0.1℃	
Ω	Ω	0~400Ω	±0.2 %	0.1℃	

II、Source

Signal	Signal type	Scope	Accuracy	Resolution ratio	Notes
DC voltage	20mV	0.00~24.00mV	±0.2 %	0.01mV	
	100mV	0.0~100.00mV	±0.2 %	0.1mV	
	V	0.00~30.00V	±0.2 %	0.01V	Measured input impedance 1.2 MΩ
DC voltage	mA	0.00~24.00mA	±0.2 %	0.01A	There is Active current
	4~20mA	4/8/12/16/20mA	±0.2 %	0.01mA	
Passive current	mA	0.00~24.00mA	±0.2 %	0.01mA	
TC	K	0~1372℃	±1 %	1℃	Cold junction compensation errors are not included in the accuracy
	E	0~1000℃	±1 %	1℃	
	J	0~1200℃	±1 %	1℃	
	T	0~400 ℃	±1 %	1℃	
	R	0~1768℃	±1 %	1℃	
	B	250~1820℃	±1 %	1℃	
	S	0~1768℃	±1 %	1℃	
	N	0~1300℃	±1 %	1℃	
RTC	Pt100	-199~650℃	±0.2 %	0.1℃	
Ω	Ω	15~400Ω	±0.2 %	0.1℃	

Signal Isolator Series

Introduction

SUP-602S current / voltage signal isolator process the input current signal and output the isolated single or dual current/voltage signals , the input, output, and power terminals are isolated.

It is with fast response, low power consumption and low temperature characteristics, which can be used together with various instruments like DCS, PLC etc ,supporting the use of major projects in the petroleum, chemical, manufacturing, power, metallurgical and other industries application.

Isolator Parameters

Parameters		
Model	SUP-602S	SUP-603S
Input signal	0（4）~20mA、0~10mA	RTD,TC、mV
Output signal	0（4）~20mA、0~10mA、 0（1）~5V、0~10V	4~20mA、0~10mA、 0~20mA、1~5V、0~10V
Power supply	18~32VDC	18~32VDC
Installation	35mm DIN-rail mounting	35mm DIN-rail mounting
Linearity	-	0.10%
Resolution ratio	-	0.1%FN
Accuracy	±0.1%F·S（25℃±2℃）	±0.2%F·S（25℃±2℃）
Insulation and voltage resistance	-	3kV/50Hz，1Min
Unbalanced voltage	-	<10mV
Output temperature	≤40PPM/℃	<40PPM/℃
Frequency bandwidth	20~5kHz	20~5kHz
Current consumption	<5mA+output current	<5mA+output current
Loading capacity	Voltage：≥2MΩ	30 times nominal input
Response time	≤0.5s	≤0.5s
Operating temperature	-20℃~+60℃	-20℃~+60℃
Storage temperature	-40℃~+80℃	-40℃~+80℃
Working principle	Electromagnetic isolation	Electromagnetic isolation

Features

- 0.1% high Accuracy measuring device
- Quick response in milliseconds
- Three-terminal isolation; Linear correction
- Strong isolation; High turnover
- Low temperature drift

SUP-602S Distribution isolator

Parameters

Power supply	18-32VDC	Insulation resistance	≥100MΩ(among input/output/power supply)
Power consumption	24VDC ,single-channel input, single-channel output 0.6W; 24VDC ,single-channel input, double-channel output 1.5W	Input signal	0(4)~20mA; 0~10mA; 0(1)~5V; 0~10V;
Output signal	0(4)~20mA; 0~10mA; 0(1)~5V; 0~10V	Output load capacity	0(4)~20mA: ≤550Ω; 0~10mA: ≤1kΩ 0(1)~5V: ≥1MΩ; 0~10V: ≥2MΩ;
Power distribution voltage	Open circuit voltage ≤26V, full load 20mA output voltage≥23V	Operation temperature	-20℃~+60℃
Output ripple	≤20mVrms（Load250Ω）	Temperature drift	≤40ppm/℃
Input impedance	About 100Ω	Accuracy of isolated transmission	±0.1%F·S（25℃±2℃）

Pressure Transmitters Series

Pressure Transmitter Parameters

Parameters	 Pressure transmitter	 Digital display pressure transmitter	 High temperature pressure transmitter
Model	SUP-P300	SUP-PX300	SUP-P300G
Power supply	8~32VDC	12~36VDC	24VDC
Output signal	4~20mA, 1~5V,0~10V 0~20mA, 0~5V, RS485, etc.	4~20mA	4~20mA
Pressure range	-0.1~60MPa	-0.1~60MPa	-0.1~60MPa
Temperature compensation	-10~70℃	-10~70℃	-10~70℃
Storage temperature	-40~85℃	-40~125℃	-40~85℃
Medium temperature	-20~85℃	-20~85℃	0~200℃
Ingress protection	IP65	IP65	IP65
Pressure type	Gauge pressure, absolute pressure, sealed pressure	Gauge pressure, absolute pressure, sealed pressure	Gauge pressure, absolute pressure, sealed pressure
Accuracy	0.25%, 0.3%, 0.5% optional	0.3%, 0.5% optional	0.3%, 0.5% optional
Zero temperature drift	±0.03%F.S/℃	±0.03%F.S/℃	±0.03%F.S/℃
Sensitivity temperature drift	±0.03%F.S/℃	±0.03%F.S/℃	±0.03%F.S/℃
Overloading pressure	150%F.S	200%F.S	200%F.S
Long-term stability	±0.2%F.S/y	±0.2%F.S/y	±0.5%F.S/y
Frequency	5kHz~650kHz	5kHz~650kHz	5kHz~650kHz
Electrical connections	Direct lead/ aerial linker/Din connector (Customizable)	Direct lead/ aerial linker/Din connector (Customizable)	Direct lead/ aerial linker/Din connector (Customizable)
Measuring medium	Oil, water, gas, etc.	Oil, water, gas, etc.	Oil, water, gas, etc.
Process connections	Threaded / sanitary / flange	Threaded / sanitary / flange	Threaded / sanitary / flange

 Digital pressure gauge	 Pressure transmitter	 Monocrystalline silicon pressure transmitter	 Monocrystalline silicon differential pressure transmitter
SUP-Y290	SUP-P400	SUP-P3000	SUP-2051
3Vbattery powered	9~32V	24VDC	24VDC
-	4~20mA, 1~5V, 0~10V 0~20mA, 0~5V, RS485,etc.	4~20mA, 1~5V, 0~20mA, 0~5V, etc.	4~20mA, 1~5V, 0~20mA, 0~5V, etc.
-0.1~60MPa	-0.1~60MPa	-0.1~60MPa	-100KPa~3MPa
-10~70℃	-10~70℃	-10~70℃	-10~70℃
-40~125℃	-40~85℃	-50~85℃	-50~85℃
-20~85℃	-20~85℃	-40~100℃	-40~100℃
IP65	IP65	IP67	IP67
Gauge pressure, absolute pressure, sealed pressure	Gauge pressure, absolute pressure, sealed pressure	Gauge pressure, absolute pressure,	Differential pressure
±0.5%	0.2%/0.25%/0.5% optional	0.075%F.S,±0.1%FS	0.075%F.S
±0.03%F.S/℃	±0.03%F.S/℃	±0.03%F.S/℃	±0.03%F.S/℃
±0.03%V/℃	±0.03%F.S/℃	±0.004%F.S/℃	±0.004%F.S/℃
<40MPa 150%FS ≥40MPa 120%FS	0.035~10MPa 150%FS 10~60MPa 125%FS	200%F.S	200%F.S
±0.2%F.S/y	±0.2%F.S/y	±0.1%F.S/3y	±0.1%F.S/3y
5KHZ~650kHz	5kHz~650kHz	5kHz~650kHz	5kHz~650kHz
-	M20*1.5	M20*1.5	M20*1.5
Oil, water, gas，etc.	Oil, water, gas,etc.	Oil, water, gas，etc.	Oil, water, gas, etc.
Threaded	Threaded / sanitary / flange	Threaded	Threaded

Introduction

The SUP-P300 adopts diffused silicon pressure sensor as the sensitive element, and the built-in processing circuit converts the millivolt signal of the sensor into standard voltage, current and frequency signal output, which can be directly connected with the computer, controller, and display instruments, etc. Remote signal transmission can be carried out. Product installation is convenient, with extremely high seismic and impact resistance.

SUP-P300 Pressure transmitter

Features

- Over-voltage and over-current protection circuit
- Strong anti-overload and anti-shock resistance and anti-interference ability
- Wide practicability, high stability and long service life
- High protection level to meet a wide range of needs
- The laser trimming resistance to give a temperature compensation, and make it be used in a wide range of temperature
- Surge voltage prevention, reverse polarity protection
- Small and exquisite , and can be installed easily
- Imported diffusion silicon chip, suitable for measuring under different pressure conditions

Parameters

Pressure range	-0.1~60MPa
Output signal	4~20mA,1~5V,0~10mA,0~20mA,0~5V,RS485
Accuracy	0.25%，0.3%，0.5%
Pressure type	Gauge pressure，Absolute pressure，Seal pressure
Power supply	8-32VDC
Compensation temperature	-10~70℃
Media temperature	-20~85℃
Storage temperature	-40~85℃
Overloading pressure	150%F.S
Frequency	5kHz~650kHz
Ingress protection	IP65

Introduction

SUP -Y290 digital display pressure gauge is a high accuracy intelligent digital pressure gauge. It has high accuracy pressure sensor, which can display the pressure accurately and real-time, and has the characteristics of high accuracy and good long-term stability.

The digital pressure gauge is equipped with a large size LCD , with reset, backlight, can be easily operated and installed, unit switching, low voltage alarm and other functions, can easily operate and install.

SUP-Y290 Digital pressure gauge

Features

- One click to reset in convenient use
- High quality 304 stainless steel gauge with resistance and durability
- With a variety of measuring units, one key switch for more economical use
- With temperature compensation, small temperature coefficient for more accurate measurement.
- With maximum 1.5 times range overload and more peak recording function for more reliable use.
- With four-digit LCD display for accurate and intuitive reading
- Graphic pressure percentage and battery power display
- With white backlight for easy checking at night

Parameters

Pressure range	-0.1~60MPa	Sampling frequency	3 times/s
Pressure type	Gauge pressure, negative gauge pressure	Display screen	Four digits LCD display screen
Overload Capacity	<40MPa 150%;≥40MPa 120%	Backlight Color	White
Accuracy	±0.5 %	Measuring medium	Air, water, oil etc.
Long-term stability	±0.2%F.S/year	Electromagnetism compatibility	EMI resistant design, in line with EN61326
Battery type	3V (2 cells of AAA battery)	Data memory	Permanent EEPROM
Battery life	≥12 months (subject to the specific use condition)	Peak record	Yes (partial specification products)

Flowmeter Series

Flowmeter Parameters

Parameters	 Electromagnetic flowmeter	 Remote type electromagnetic flowmeter	 Electromagnetic flowmeter
Model	LDG-SUP	LDG-SUP	LDG-SUP
Applicable medium	Conductive liquid	Any conductive liquid	Conductive liquid
Nominal diameter	DN15-DN1000	DN10~DN2000 Optional	DN8-DN1000
Nominal pressure	0.6~1.6MPa	0.6-1.6MPa (Ultra high pressure can be customized)	0.25~4MPa
Accuracy	±0.5%	±0.5%、±1%	±0.3%
Range ratio	1:20	Customizable	1:20
Body Material	304Stainless steel, Carbon steel	304Stainless steel, Carbon steel	304Stainless steel, Carbon steel
Operation Condition	Medium temperature -10℃~+120℃ Ambient temperature -10℃~+85℃ Relative humidity 5%~95%RH Atmospheric pressure 86KPa~106KPa	Medium humidity: -20℃~+160℃ Ambient tenperature: -25℃~+60℃ Relative humidity 5%~95%RH Atmospheric pressure 86KPa~106KPa	Medium humidity: -35℃~+140℃ Ambient tenperature: -20℃~+70℃
Signal output	4~20mA/Pulse/frequency	4~20mA/Pulse/frequency	4~20mA/Pulse
Communication	RS485、HART	RS485、HART	RS485、HART
Power supply	100~240VAC/24VDC	100~240VAC/24VDC	100~240VAC/24VDC
Electrical connection	M20×1.5 Thread	M20×1.5 Thread	M20×1.5 Thread
Ingress protection	IP65	IP65 or higher	IP65
Installation	Flange/clamp	Flange/clamp/thread	Flange/clamp

 Liquid turbine flowmeter	 Vortex flowmeter	 Wall mounted ultrasonic flowmeter
LWGY-SUP	LUGB-SUP	SUP-1158J
Liquid	Gas, liquid, steam	Water
DN4-DN200	DN15~DN300	Clamp-on:1"~48"(25mm~1200mm)
0.6~4.0MPa	1.0~2.5MPa	-
±0.5%、±1%	±1.5%	±1.0%
1:10,1:15,1:20	81	Customizable
304 Stainless steel, 316(L) stainless steel, etc	304 Stainless steel, 316(L) stainless steel, etc	PC/ABS, IP65
Medium temperature -20℃~+120℃ Ambient temperature -20℃~+60℃ Relative humidity 5%~90%RH Atmospheric pressure 86KPa~106KPa	Medium temperature -40℃~+300℃ Ambient temperature -20℃~+55℃ Relative humidity 5%~95%RH Atmospheric pressure 86KPa~106KPa	Transmitter: 14 °F to 122 °F (–10℃ ~ 50℃) Transducer: 32 °F to 176 °F (0℃ ~ 80℃)
4 20mA/pulse signal	4 20mA / pulse signal	OCT Pulse output: 0-5000Hz. Analog output : 4 ~ 20mA, max load 750Ω.
RS485、HART	RS485、HART	RS485 MODBUS
24VDC/3.6V battery	24VDC/3.6V battery	10~36VDC/1A
M20×1.5 Thread	M20×1.5 Thread	-
IP65	IP65	IP65/IP68
Flange/clamp/thread	Flange / gripping	Wall mounted

Introduction

LDG-SUP Intelligent electromagnetic flow meter bases on the mature Faraday's law of electromagnetic. The main compositions are: Measuring tube, electrode, excitation coil, pipe lining and converter.

It is mainly used for volume measurement of conductive liquid flow in the closed pipeline. Including strong corrosive liquid, such as acid, alkali, salt, etc. The product is widely used in petroleum, chemical, metallurgical, textile, food, pharmaceutical, paper and other industries, as well as environmental protection, municipal administration, water conservancy construction and other fields.

LDG-SUP Electromagnetic flow meter

Features

- Small pressure loss and high Accuracy
- Strong adaptability and compatibility of various pipes
- Stable and reliable, strong anti-interference
- Good linearity of measure, high repeatability
- Wide measuring range, complete series
- No mechanical inertia, sensitive reaction parameters

Parameters

Name	Electromagnetic flowmeter
Accuracy	±0.5%
Nominal pressure	0.6-1.6MPa
Power supply	100~240VAC，50/60Hz，22VDC~26VDC
Electrode type	316L electrode (standard); HB/HC alloy electrode (strong acid and alkali environment) titanium electrode; Tantalum electrode; Tungsten carbide electrode; Platinum electrode
Range ratio	10：1
Work environment	Sensor: -10~120℃ converter: -10~55℃
Medium	>5us/cm
Flow direction	Bi-directional
Output signal	4 20mA (load resistance: 0 750Ω), pulse / frequency
Communication	RS485 modulus-RTU, HART
Installation	Flange connection/Clamp connection

Introduction

LUGB-SUP Vortex FlowMeter has high reliability and small maintenance without the movable mechanical parts. The instrument parameters can be stable for a long time. Vortex Flowmeter adopts the Piezoelectric stress sensor with high reliability and can work within the range of working temperature -20 +250℃. There is a simulated standard signal and a digital signal output. It is easy to match with the computer and other digital systems. It is an advanced and ideal measuring instrument.

LUGB-SUP Vortex flow meter

Features

- Compatible with many medium
- Dual power supply selection
- Display of parameters on the same screen
- Integrated temperature and pressure compensation
- Small-flowcutting
- Intelligent anti-jamming

Parameters

Name	Vortex flowmeter
Nominal diameter	DN15 ~ DN300(compact/remote type), DN300 ~ DN100(insert type)
Nominal pressure	Flange clamping (PN25), flange connection (PN10/PN25)
Accuracy	Compact type: ±1%R, ±1.5%R;
Power supply	24VDC；Battery powered： 3.6V
Range ratio	8：1
Output signal	Square wave pulse (excluding battery powered type): High level ≥6V, low level ≤1V; Electric current: 4~20mA (Load resistance≤300Ω)
Ingress protection	IP65
Environmental conditions	Temperature: -20℃~55℃, relative humidity: 5%-90%RH, atmospheric pressure: 86-106kPa
Signal outputs	4~20mA (load resistance: ≤300Ω), pulse / frequency
Applicable medium	Gas，liquid，steam

Analytic Series

Water analysis controller parameters

Parameters	 pH controller	 pH controller	 pH controller
Model	SUP-PH160S	SUP-PH6.0	SUP-PH8.0
Display	2.8-inch LCD	2.8-inch LCD	4.3inch
Measuring range	pH(0~14pH) ORP(-1000~+1000mV)	pH(0~14pH) ORP(-2000~+2000mV)	-2.00-16.00pH;/-1999-1999mV
Accuracy	pH±0.02pH;ORP±1mV	pH±0.02pH;ORP±1mV	±0.02pH/±0.1%FS
Display resolution	pH0.01pH; ORP±1mV	pH0.01pH; ORP 1mV	0.01pH; 1mV
Stability	≤0.02pH/24h; ORP≤3mV/24h	≤0.02pH/24h; ORP≤3mV/24h	pH:≤0.02pH/24h; ORP: ≤3mV/24h
Input resistance	>10^{12}Ω	>10^{9}Ω	≥10^{12}Ω
Temperature range	0~60℃, Accuracy: ±0.5℃	-10~130℃, Accuracy: ±0.5℃	0~60℃
Temperature compensation	-10 ~ 130℃ manual/automatic (NTC10K)	PT100/-10 ~ 130℃ manual/automatic (NTC10K)	NTC10K/PT1000
Power supply	DC24V, AC220V±10%, AC110V±10%, 50Hz	AC220V±10%, AC110V±10%, 50Hz	100-240VAC,5W,50/60Hz
Relay output	High relay/ low relay, 3A/250VAC	High relay/ low relay, 3A/250VAC	250V, 3A
Communication	RS-485 MODBUS RTU	RS-485 MODBUS RTU	RS-485 MODBUS RTU
Signal output	4-20mA	4-20mA	4-20mAisolation protection output, maximum resistance of loop:750Ω
Overall dimension (mm)	96x96x112mm	100x100x150mm	144x144x115mm
Panel Cutout Size (mm)	92''x92'' mm	92.5''x92.5''mm	138x138mm

 Optical DO meter	 Conductivity meter	 Turbidity meter	 PSS meter
SUP-DY2900	SUP-TDS210	SUP-PTU100	SUP-PSS100
2.8-inch LCD	2.8-inch LCD	2.8-inch LCD	2.8-inch LCD
0~20mg/L, 0~20ppm	0.~2000μS/cm	0.01~4000NTU	0.1~20000mg/L; 0.1~45000mg/L; 0.1~120000mg/L
±3%	±2%F.S	±2%	≤5%
0.01mg/L	0.01μS/cm	0.01NTU	Less than ± 5% of the measured value
±0.3%F.S/y	±2%F.S/y	±2%F.S/y	≤5%
-	-	-	≥10~12Ω
0~60℃	0~60℃	0~45℃	0-45℃
-	10~130℃ manual/automatic (NTC10K)	-	NTC10K/PT1000
AC220V±10% 50Hz	AC220V±10%, AC110V±10%, 50Hz	AC220V±10%, 50Hz	AC220V±10%; 50Hz/60Hz
High relay/ low relay, 3A/250VAC	High relay/ low relay, 3A/250VAC	High relay/ low relay, 3A/250VAC	High relay/low relay,3A/250VAC
RS-485 MODBUS RTU	RS-485 MODBUS RTU	RS-485 MODBUS RTU	RS-485 MODBUS RTU
4-20mA	4-20mA	4-20mA	4-20mA
100x100x150mm	100x100x150mm	100x100x150mm	100x100x150mm
92.5''x92.5''mm	92.5''x92.5''mm	92.5''x92.5''mm	92.5x92.5mm

Introduction

PH controller is an intelligent chemical analysis instrument for on line pH, ORP, temperature value monitoring , which is widely used in thermal power,chemical industry, metallurgy, environmental protection, pharmaceutical, biochemical, food and water supply industries. All monitoring data can be transmitted to further data logger for monitoring and recording, with Modubus RS48 communication , the controller can also be connected to the computer for real time data monitoring and recording.

SUP-pH6.0 pH controller

Features

- The second generation of watchdoganti-lockup is set up to avoid the crash
- Double relay protection provides the safe operation experience
- The quadruple protection design is applicable to multiple conditions
- Strengthened 150% antistatic ability, strong anti-interference
- The automation module encapsulation is seismic-proof, drop-proof and jamming-proof
- Buzzer and LCD backlight function
- Innovative pluggable terminal, pure copper terminal design

Parameters

Measurement range	pH(0~14pH) ORP(-2000~+2000mV)
Accuracy	pH±0.02pH,ORP±1mV
Resolution	0.01pH
Stability	≤0.02pH/24 hours;ORP≤3mV/24h
Display	2.8 inch 128*64 LCD display
Temperature compensation	-10~130℃ manual/automatic(NTC10K，PT1000)
Signal outputs	4-20mA,RS4858
Relay output	High relay/ low relay, 3A/250VAC
Power supply	AC220V±10%, AC110V±10%, 50Hz
Input impedance	$>10^{12}\Omega$
Environmental conditions	Temperature: 0 ~ 60℃; Humidity: ≤85%RH
Panel cutout size	92.5''×92.5''mm

Introduction

SUP-TDS210 Conductivity/Hardness/Resistivity Online analyzer, an intelligent Online chemical analyzer, is widely applied for continuous monitoring and measurement of EC value or TDS value or ER value and temperature in the solution in the industry of thermal power, chemical fertilizer, environmental protection, metallurgy, pharmacy, biochemistry, food and water, etc.

SUP-TDS210 Conductivity meter

Features

- Direct changeover to Conductivity（μS/cm) Resistivity (MΩ x cm) TDS measurement (ppm)
- Automatic temperature compensation
- 4-20mA Isolated Output
- IP54 water resistant and corrosion proof enclosure
- Large LCD display with background lighting
- Using the setup program: use-friendly programming

Parameters

Screen size	2.8 inch	Dimension	Overall dimension: 100mm*100mm*150mm(H*W*D); Cutout dimension: 92.5mm*92.5mm(H*W)
Weight	0.65Kg		
Ingress protection	IP 54	Measure variables	EC/ TDS/ Resistivity
Measure range	0.01electrode: 0.02 ~ 20.00μS/cm; 0.1electrode：0.20 ~ 200.0μS/cm; 1.0electrode：2.00 ~ 2000μS/cm, 10.0electrode: 0.02 ~ 20.00mS/cm. Measure range for extended range controller：0.01electrode：0.20 ~ 200.0μS/cm; 0.1electrode: 2.00 ~ 2000μS/cm, 0.1electrode: 0.02 ~ 20.0mS/cm, 10.0electrode：0.20 ~ 200.0mS/cm. Temperature range:-10 ~130℃		
Temperature compensation	NTC10K/PT1000, Temperature compensation：manual/automatic		
Accuracy	EC/TDS/Resistivity: ±1%FS, NTC10K：(-10~5℃) ±2℃；(5~60℃) ±0.2℃；(60~130℃) ±2℃, PT1000：(-10~5℃) ±2℃；(5~130℃) ±0.2℃		
Output	Isolated 4-20mA output, maximum loop is 750Ω, ±0.2%FS		
Communication protocol	MODBUS-RTU RS485		
Alarm relay	Pickup/Breakaway AC250V/3A	Relative humidity	10 ~ 85%RH(No condensation)
Power supply	220VAC±10% 50Hz/60Hz	Operating temperature	0 ~ 60℃
Storage conditions	Temperature：-15 ~ 65℃, Relative humidity：5 ~ 95%RH(No condensation)		

Electrode Series

Electrode Parameters

Parameters	 Jumo pH sensor	 pH sensor	 pH sensor	 PTFE pH sensor
Model	SUP-pH-5022	SUP-pH-5100	SUP-pH-5019	SUP-pH-5013A
Measurement range	0-14pH	0-14pH	0-14pH	0-14pH
Temperature range	0-130℃	0~1300℃	0-60℃	0-60℃
Temperature compensation	-	NTC10K、PT100、PT1000	NTC 10K; PT100; PT1000	NTC 10K; PT100; PT1000
Pressure resistance	0.6 Mpa	0~0.3 Bar	0.1~0.3MPa	0.4 Mpa
Slope inclination	≥97% (25℃)	≥97% (25℃)	≥97% (25℃)	≥97% (25℃)
Zero potential point	E0=7pH±0.2	E0=7pH±0.2	E0=7pH±0.2	E0=7pH±0.2
Thread	PG13.5mm	PG13.5	3/4NPT	3/4NPT
Body material	glass	PPS	PPS	PTFE
Application	Industrial waste water treatment, Swimming pool, Aquaculture	Environmental protection, water treatment, surface water, agricultural breeding	Industrial wastewater, acid base neutralization, strong acid and strong alkali condition, heavy polluted water quality	Thermal power, chemical industry, pharmaceuticals industry, iron and steel, metallurgy and environmental protection
Cable length	5m,10m(customize)	5m,10m(customize)	5m,10m(customize)	5m,10m(customize)

Parameters	 pH sensor	 Optical DO sensor	 Turbidity sensor
Type	SUP-pH-5018	SUP-DO-7012	SUP-PTU-8011
Measurement range	0-14pH	0-20mg/L; 0-200% Saturation	Turbidity: 0.01-100 NTU, 0.01-4000 NTU
Temperature range	0-100℃	0-45℃	0-45℃
Temperature compensation	NTC 10; KPT100; PT1000	NTC	-
Pressure resistance	0.4Mpa	≤0.3Mpa	≤0.4Mpa
Slope inclination	≥97% (25℃)	-	-
Zero electric potential	E0=7pH±0.2	-	-
Thread	VP; S8M; K2	R1	-
Body material	glass	SUS316L Titanium alloy; PPS+ glass fiber	SUS316L Titanium alloy; PPS+ glass fiber
Application	Mining, smelting, papermaking, Petrochemical, biotechnology	Waterworks, surface water, various water for industrial processes	Waste water treatment, various water for industrial processes
Cables	5m,10m(customize)	10m (customize)	10m (customize)

Electrode series

Electrode Parameters

Parameters	 pH sensor	 pH sensor	 pH sensor
Model	SUP-pH-6001	SUP-pH-7001	SUP-PH-7002
Measurement range	2-12pH	2-12pH	2-12pH
Temperature range	0-80℃	0-60℃	0-80℃
Temperature compensation	NTC10K/PT100/PT1000	NTC10K/PT100/PT1000	NTC10K/PT100/PT1000
Pressure resistance	0.4MPa	0.4MPa	0.4MPa
Slope inclination	≧97%(25℃)	≧97%(25℃)	≧97%(25℃)
Zero potential point	E0=7pH±0.2	E0=7pH±0.2	E0=7pH±0.2
Thread	3/4NPT	3/4NPT	3/4NPT
Body material	-	PPS	PPS
Application	Environmental protection, water treatment, breeding, municipal	Sewage, Adopt aerogel electrode, easy to maintain, Adopt flat glass bulb, good resistance to contamination and impact.	Water,electroplating industry
Cable length	5m (customizable)	5m (customizable)	5m (customizable)

Parameters	 pH sensor	 EC sensor	 EC sensor
Type	SUP-pH-5015	SUP-TDS-7001	SUP-TDS-7002
Measurement range	0-14pH	0.01 electrode: 0.01~20us/cm; 0.1 electrode: 0.1~200us/cm; 1.0 electrode: 1~2000us/cm	10us/cm~500ms/cm
Temperature range	0-130℃	0-100℃	-10-100℃
Temperature compensation	Pt100/Pt1000/NTC10K	NTC10K (PT1000, PT100, NTC2.252K optional)	NTC10K (PT1000,PT100, NTC2.252K optional)
Pressure resistance	0.4MPa	8bar	7bar
Slope inclination	≧97%(25℃)	≧97%(25℃)	≧97%(25℃)
Zero electric potential	E0=7pH±0.2	E0=7pH±0.2	E0=7pH±0.2
Thread	PG13.5	G3/4	NPT3/4
Body material	Glass	316 stainless steel	PBT
Application	Pharmaceuticals,food and beverages, semiconductor electronic, organic matter	in the industry of thermal power, chemical fertilizer,environmental protection, metallurgy, pharmacy, biochemistry,food and water, etc.	in the industry of thermal power, chemical fertilizer, environmental protection, metallurgy,pharmacy, biochemistry, food and water, etc.
Cables	5m (customizable)	5m (customizable)	5m (customizable)

Temperature Sensors Series

Temperature Parameters

Parameters	 Head-Mounted clamp RTD	 Head-Mounted RTD	 Head mounted clamp thermocouple	 Temperature transmitter
Model	SUP-WZPK	SUP-WZPK	SUP-WRN	SUP-ST500
Range	-200℃~450℃	-200℃~450℃	0℃~1100℃	-
Signal type	Resistance signal	Resistance signal	Millivolt signal	4~20mA, HART(optional)
Application	Applicable to a variety of conventional environments	Applicable to a variety of conventional environments	Used in Temperature measurement of boilers dry furnaces, the oven, etc.	RTD:PT100,Cu50 TC: K,B,E,J,S,T,R,N, 0-4500Ω
Matching instrument	Temperature transmitter	Temperature transmitter	Temperature transmitter	Programmable
Type of connections	Terminal box	Terminal box	Terminal box	Wire
Sensor type	Pt100、Pt1000、Cu50、Cu100		B、E、J、K、N、R、S、T	-
Protective accessories	304 stainless steel (other materials can be customized)		High temperature ceramic	-
Ingress protection	IP67	IP67	IP67	(Enhanced) shock resistance
Optional	Insulating type	Insulating type	Insulating type	-
Process connection	Thread, flange, clamp, sleeve	Thread, flange, clamp, sleeve	Thread, flange, clamp, sleeve	-

Level Transmitters Series

Level Transmitter Parameters

Parameters	 Ultrasonic level sensor	 Ultrasonic level sensor	 Submersible level sensor	 2088 submersible level sensor	 Radar level sensor
Model	SUP-MP-A	SUP-ZP	SUP-P260	SUP-P261	SUP-RD902
Range	0-10m	0-15m	0 - 100m	0 - 100m	Cable type 0-30m, rod type 0-6m
Accuracy	±0.5%F.S	0.3%	0.3 / 0.5% (optional)	0.3 /0.5% (optional)	0.1%
Temperature drift	±0.01F.S/℃	≤0.01F.S/℃	≤0.01F.S/℃	≤0.01F.S/℃	≤0.01F.S/℃
Medium temperature	-20~70℃	-20~80℃	-40~60℃	0~100℃	-40~250℃
Overload pressure	200%F.S	200%F.S	200%F.S	200%F.S	-
Power supply	14-28VDC	24VDC, 220VAC±15% 50Hz	12-30V	12-30V	24VDC, 220VAC
Environment temperature	Converter-20~60℃ Probe-20~80℃	Converter -20-60℃ Probe -20-80℃	-20℃~85℃	-20℃~85℃	-40℃~70℃
Ingress protection	IP65	IP65	IP68	IP68	IP67
Output signal	4~20mA RL≤500Ω (standard)	4-wire 4-20mA/510 load 2-wire 4-20mA/250 load	4-20mA, 1-5V 0-5V,	4~20mA,1~5V,0~10mA, 0~20mA,0~5V	4-20mA ,hart
Relay output	2 relays (AC: 5A 250V DC: 10A 24V)	High relay/ Lowrelay, AC250V/8A or DC30V/5A	-	-	-
Communication	RS485(optional)	RS485 (optional)	RS485 (optional)	RS485 (optional)	RS485 (optional)
Material	Engineering plastics	ABS	Diaphragm: SS316L; Body: SS304L; Cable: Polyurethane	Diaphragm: SS316L; Body: SS304L; Cable: Polyurethane	Stainless steel
Process connection	Thread	Thread	-	-	Thread/ flange

Introduction

SUP-MP-A ultrasonic level meter taking the advantages of various many level measuring instruments, is a universal one characterized by total digitalized and humanized design. It has perfect level monitoring, data transmission and man-machine communication. The master chip is imported technical m single chip with relevant application specific ICs such as digital temperature compensation. It is featured by strong anti-interference performance; free setting of upper and lower limits and online output regulation, on-site indication.

SUP-MPA Ultrasonic level transmitter

Features

- Intelligent adjustment response
- Intelligent double-line display
- Intelligent adjustable range
- Processing of special echo
- All physical closed probe
- Multipoint emission circuit

Parameters

Model	SUP-MP-A
Measurements range	0-10m
Accuracy	±0.5%F.S
Temperature drift	±0.01F.S/℃
Media temperature	-20~70℃
Overload pressure	200%F.S
Power supply	14-28VDC
Ambient temperature	Converter-20~60℃ Probe-20~80℃
Protection grade	IP65
Analog output	4～20mA RL>500Ω（standard）
Relay output	2 relays (AC: 5A 250V DC: 10A 24V)
Communication	RS485(optional)
Material	Engineering plastics
Installation	Thread

Introduction

The SUP-P260 input-type liquid level meter is based on the principle that the hydrostatic pressure is directly proportional to the height of the liquid, and uses the piezoresistive effect of diffusion silicon to transform pressure into electrical signal. After temperature compensation and linear correction, it is converted to 4-20mADC standard current signal and output. It is easy to install and measures accurately. It is widely used in liquid level measurement of various medium in petrochemical, metallurgy, power, pharmaceutical, water supply and drainage, environmental protection and other industries.

SUP-P260 submersible level transmitter

Features

- Easy installation, easy to use, strong interchangeability
- Corrosion resistance, power supply is not required
- Good sealing performance, high reliability, safe use
- The high quality sensor with high sensitivity and fast response
- Wide measurement range, free from the limit of height of storage tank
- Strong anti-interference capability
- The anti blocking design can realize the measurement of the level of paste medium
- Various measured medium, not affected by the foaming or deposition of the medium

Parameters

Power supply	12-30V	Zero temperature drift	± 0.3% FS / 10 ℃ (-10-70 ℃)
Signal output	4-20mA,1-5V,0-5V,RS485	Overload pressure	150%F.S
Range	0-100m	Long-term stability	≤0.2%F.S/year
Accuracy	0.3%/0.5% optional	Measurement medium	Liquid
Nonlinearity	≤0.5%F.S	Diaphragm material	316L stainless steel
Medium temperature	-20-60℃	Body Material	SS304 or SS316L
Environment temperature	-10~125℃	Ingress protection	IP68
Temperature compensation	-10~70℃		

Certificates

Supmea Brand & Trademarks


China


China

Germany

The United States

Singapore


Russia

Korea

Malaysia

The Philippines


Thailand


Vietnam


India

CE certificates


pH cotroller


Electromagnetic flowmeter


Paperless recorder


Pressure transmitter


Rader level transmitter

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Pressure transmitter


Signal isolator

Calibration certificates


Electromagnetic flowmeter

pH cotroller

Pressure transmitter

Signal generator

Paperless recorder

Applications

Sewage treatment

Water industry

Ecotechnology

Ecotechnology

pH controller
EC controller

Paperless
recorder

Electromagnetic
flowmeter

Pressure
transmitter

Temperature
Sensor

Digital meter
Paperless recorder

Sewage treatment

Electromagnetic
Flowmeter

Turbidity analyzer
DO meter

Electromagnetic
flowmeter

Water industry

Electromagnetic
flowmeter

Ultrasonic Level
transmitter

Electromagnetic
flowmeter