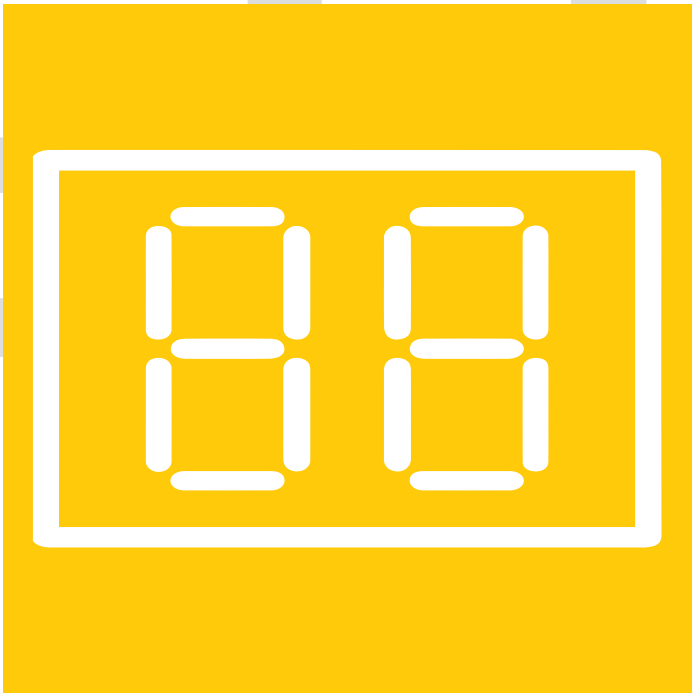
100% Made & Designed in Italy

S-LINE

HIGH BRIGHTNESS AND ACCURACY DIGITAL LED INDICATORS



SENECA

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S-Line

High Brightness and Accuracy Digital Led Indicators

S-Line Series is a high performance compact/modular indicators / totalizers family. This series offers display choice with 4, 6, 8, 4+7 digits in multiple visualization mode (real-time, integrated, totalized measured values). S-Line indicators support universal input (analog, digital, by sensor) and re-transmitted output mA, V standard. Concerning power supply they ensure an extended range of options: 80-265 Vac; 10-40 Vdc / 19-28 Vac; loop powered. Accuracy class reach 0,1% with 14-16 bit A/D conversion. Optionally S-Line indicators can provide ModBUS interface alarm relay (hysteresys and threshold control) and IP66 case. Besides front key buttons, settings are made by PC software EASY SETUP.

UNIVERSAL INPUT



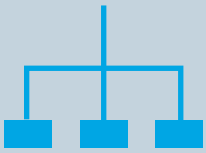
Analog, Digital, Temperature (RTD, TC)

RE-TRANSMITTED OUTPUT



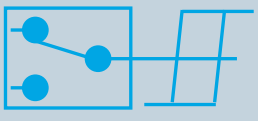
Analog or Digital

OPTIONAL BOARD



RS485 ModBUS interface, SPDT relay output, reset input

ALARM (RELAY) ENABLING



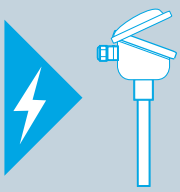
Threshold or hysteresis management

WIDE RANGE POWER SUPPLY



80..265 Vac; 10..40 Vdc / 19..28 Vac; loop powered (S315)

POWER TRANSDUCERS



High brightness scalable display (4, 6, 8, 4+7 digit)



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SPECIAL FUNCTIONS

TOTALIZER

S311A
S311D

Integrated values (S311A) and increased / decreased totalized values (S311D)

SIGNAL GENERATOR

S311G

mA/V signal generator, auto/man operating mode, bumpless filter

BATCH COUNTER

S311D

Batch counting related to threshold (alarm / action on totalizer)



Alarm LED

Settings and navigation front key buttons

PPO self-extinguish panel enclosure compliant to DIN 43700

ACCURACY

Class: 0,1%
A/D conversion 14-16 bi

ISOLATION

Output
Input

1.500 Vac

SETTINGS

EASY SETUP

Software PC Windows – EASY SETUP accessible by serial converter (i.e. S107USB)

IP66 VERSIONS

S311AK
S315

PROTECTED ACCESS

FREQUENCY FILTER

S311D

HIGH BRIGHTNESS AND ACCURACY DIGITAL LED INDICATORS

	MODULAR INDICATORS / TOTALIZERS WITH UNIVERSAL ANALOG INPUT				INDICATORS / SIGNAL GENERATORS WITH ANALOG INPUT
	S311A-4	**S311A-6**	**S311A-8**	**S311A-11**	**S311G**
					
	4-digit display indicator - totalizer with universal analog input	**6-digit display indicator - totalizer with universal analog input**	**8-digit display indicator - totalizer with universal analog input**	**11-digit display indicator - totalizer with universal analog input**	**4-digit display indicator - signal generator wth analog input**
GENERAL DATA					
Power Supply	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)
Power transducers (active input)	Max 18 V, 25 mA	Max 18 V, 25 mA	Max 18 V, 25 mA	Max 18 V, 25 mA	Max 18 V, 25 mA
Power consumption (max)	3 W	3 W	3 W	3 W	3 W
Isolation	1.500 Vac	1.500 Vac	1.500 Vac	1.500 Vac	1.500 Vac
Communication interface	ModBUS RTU slave (optional board)	ModBUS RTU slave (optional board)	ModBUS RTU slave (optional board)	ModBUS RTU slave (optional board)	-
Operating temperature	-10..+60 °C	-10..+60 °C	-10..+60 °C	-10..+60 °C	-10..+60 °C
Front protection degree	IP65	IP65	IP65	IP65	IP65
Terminals	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm
Dimension	96x48x98 mm	96x48x98 mm	96x48x98 mm	96x48x98 mm	96x48x98 mm
Weight	200 g	200 g	200 g	200 g	200 g
Display	4 digit LED	6 digit LED	8 digit LED	4+7 digit LED	4 digit LED
LED status indicators	2 alarm LEDS (threshold enabling)	2 alarm LEDS (threshold enabling)	2 alarm LEDS (threshold enabling)	2 alarm LEDS (threshold enabling)	2 Automatic / Manual LEDS
Front keys	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button
Accuracy	0,1%	0,1%	0,1%	0,1%	0,1%
Settings	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons
Special functions	Integrator	Integrator	Integrator	Integrator	Signal generatore, bumpless filter
Approvals	CE	CE	CE	CE	CE
INPUT DATA					
Channels	1	1	1	1	1
Type and range	Voltage: 0-10 V Active / Passive Current: 0-20 mA Potentiometer: 1..100 kΩ Pt100 2,3,4 fili (IEC 751 / EN 60751 – ITS90) Thermocouple J,K,R,S,T,B,E,N	Voltage: 0-10 V Active / Passive Current: 0-20 mA Potentiometer: 1..100 kΩ Pt100 2,3,4 fili (IEC 751 / EN 60751 – ITS90) Thermocouple J,K,R,S,T,B,E,N	Voltage: 0-10 V Active / Passive Current: 0-20 mA Potentiometer: 1..100 kΩ Pt100 2,3,4 fili (IEC 751 / EN 60751 – ITS90) Thermocouple J,K,R,S,T,B,E,N	Voltage: 0-10 V Active / Passive Current: 0-20 mA Potentiometer: 1..100 kΩ Pt100 2,3,4 fili (IEC 751 / EN 60751 – ITS90) Thermocouple J,K,R,S,T,B,E,N	Voltage: 0-10 V Active / Passive Current: 0-20 mA Potentiometer: 1..100 kΩ
Frequency	-	-	-	-	-
Reset	Yes: by digital input and front key buttons	Yes: by digital input and front key buttons	Yes: by digital input and front key buttons	Yes: by digital input and front key buttons	-
OUTPUT DATA					
Channels	1	1	1	1	1
Type and range	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)
Relay output	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	-

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COMPACT INDICATORS / TOTALIZERS WITH ANALOG INPUT

MODULAR INDICATORS / TOTALIZER / BATCH COUNTERS WITH DIGITAL INPUT

S311AK	S312A	S315	S311D-4	S311D-6	S311D-8	S311D-11
						
4-digit display indicator with mA/V analog input analogico I/V	**4-digit display indicator with universal analog input, nr.4 relay output, Modbus interface**	**4-digit display loop powered indicator, 4-20 mA input**	**4-digit display indicator - totalizer with digital / frequency input**	**6-digit display indicator - totalizer with digital / frequency input**	**8-digit display indicator - totalizer with digital / frequency input**	**11-digit display indicator - totalizer with digital / frequency input**
10-40 Vdc, 19-28 Vac	10-40 Vdc, 19-28 Vac (S312A-4-L-4R); 85-265 Vac (S312A-4-H-4R)	Loop powered (max 30V)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)	80-265 Vac (H version) 10-40 Vdc / 19-28 Vac (L version)
Max 16 V, 25 mA	Max 16 V, 25 mA		Max 18 V, 25 mA	Max 18 V, 25 mA	Max 18 V, 25 mA	Max 18 V, 25 mA
0,9 W	3 W		3 W	3 W	3 W	3 W
1.500 Vac	1.500 Vac		1.500 Vac	1.500 Vac	1.500 Vac	1.500 Vac
			ModBUS RTU slave (optional board)	ModBUS RTU slave (optional board)	ModBUS RTU slave (optional board)	ModBUS RTU slave (optional board)
-10..+65°C	-10..+65°C	-10..+65°C	-10..+60 °C	-10..+60 °C	-10..+60 °C	-10..+60 °C
IP65	IP65	IP65	IP65	IP65	IP65	IP65
Screw, pitch 5,08 mm	Screw, pitch 5,08 mm	Screw, pitch 5,08 mm	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm	Removable, pitch 3,5 – 5,08 mm
96 x 48 x 40 mm	96x 48x 96 mm	96 x 48 x 40 mm	96x48x98 mm	96x48x98 mm	96x48x98 mm	96x48x98 mm
100 g	200 g	100 g	200 g	200 g	200 g	200 g
4 digit LED	4 digit LED	4 digit LED	4 digit LED	6 digit LED	8 digit LED	4+7 digit LED
-	Alarm	-	2 alarm LEDS (threshold enabling)	2 alarm LEDS (threshold enabling)	2 alarm LEDS (threshold enabling)	2 alarm LEDS (threshold enabling)
3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button	3 front panel key navigation button
0,05%	0,05%	0,05%	0,1%	0,1%	0,1%	0,1%
Front key buttons	Front key buttons	Front key buttons	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons	EASY SETUP software, front key buttons
			Totalizer, threshold alarm (batch)	Totalizer, threshold alarm (batch)	Totalizer, threshold alarm (batch)	Totalizer, threshold alarm (batch)
CE	CE	CE	CE	CE	CE	CE
1	1	1	1	1	1	1
Voltage: 0-10 V Current: 0-20 mA	Voltage: 0..10 V Current: 0..20 mA Potentiometer: 1..100 kΩ TC: J,K,R,S,T,B,E,N, RTD: Pt100 (2,3,4 fili), -150..+650°C	Current: 4..20 mA	Free contact, Reed, Npn 2/3 wires, Pnp 3 wires @24 Vdc, Namur, Photoelectric Variale reluctance, 24V pulse, TTL	Free contact, Reed, Npn 2/3 wires, Pnp 3 wires @24 Vdc, Namur, Photoelectric Variale reluctance, 24V pulse, TTL	Free contact, Reed, Npn 2/3 wires, Pnp 3 wires @24 Vdc, Namur, Photoelectric Variale reluctance, 24V pulse, TTL	Free contact, Reed, Npn 2/3 wires, Pnp 3 wires @24 Vdc, Namur, Photoelectric Variale reluctance, 24V pulse, TTL
-	-	-	0.00015 Hz .. 10 kHz	0.00015 Hz .. 10 kHz	0.00015 Hz .. 10 kHz	0.00015 Hz .. 10 kHz
-	-	-	Yes: by digital input and front key buttons	Yes: by digital input and front key buttons	Yes: by digital input and front key buttons	Yes: by digital input and front key buttons
	1 analog, 4 relay	-	1	1	1	1
-	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm	-	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)	0-10 V (min 1KΩ) 0-20 / 4-20 mA (max 500 ohm)
-	Relay 5 A, 250 Vac	-	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board	Nr 2 SPDT 220 Vac 5A (resistive), 2A (inductive) - optional board

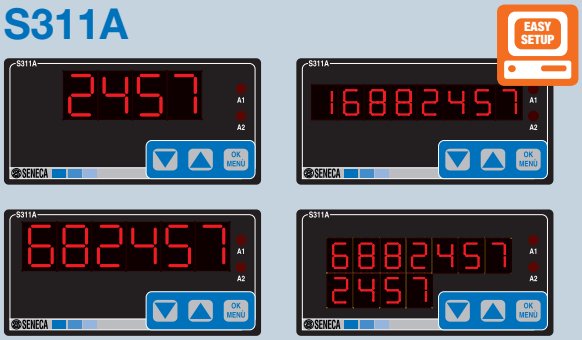
S-Line

A complete range

- Reliability
- High brightness
- Universal input
- Front panel installation
- Easy settings

MODULAR INDICATORS / TOTALIZERS WITH UNIVERSAL ANALOG INPUT

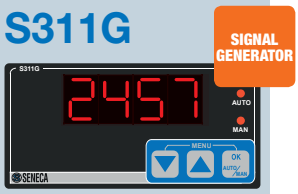
S311A



- Power supply 80-265 Vac; 10-40 Vdc / 19-28 Vac
- Power transducers
- 4, 6, 8, 11 digit LED display
- Input: mA, V, Ohm, Pt100, TC
- Re-transmitted output
- Modbus interface, reset, alarms (optional board)
- Values totalization
- Accuracy class 0,1%

4-DIGIT LED DISPLAY INDICATORS WITH ANALOG INPUT

S311G



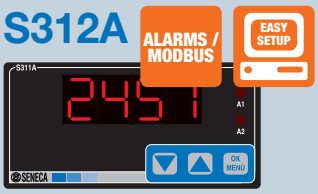
- Power supply 80-265 Vac; 10-40 Vdc / 19-28 Vac
- Power transducers
- 4 digit LED display
- Input: mA, V, Ohm
- Output: mA, V
- ModBUS interface (optional)
- Accuracy class 0,1%
- Signal generator function
- AUT / MAN Operating mode

S311AK



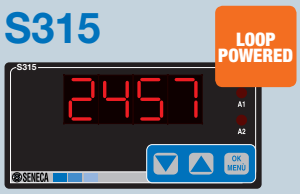
- Power Supply 10-40 Vdc / 19-28 Vac
- Power transducers
- 4 digit LED display
- Input: mA, V
- Accuracy class 0,05%
- IP66 enclosure (optional

S312A



- Power Supply 80-265 Vac; 10-40 Vdc / 19-28 Vac
- Power transducers
- 4 digit LED display
- Input: mA, V, Ohm, Pt100, TC
- Output: mA, V
- RS485 ModBUS /Alarms built-in interface
- Accuracy class 0,05%

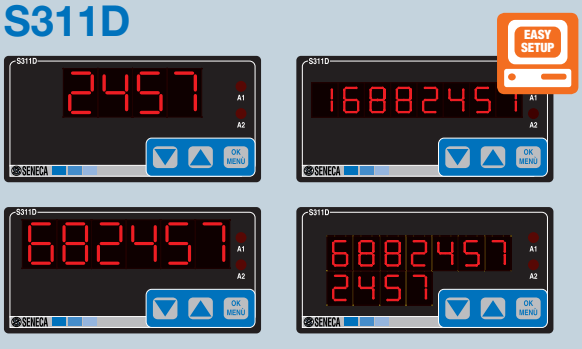
S315



- Powered by loop
- 4-digit Display LED 4 cifre
- Input: mA
- Accuracy class 0,05%
- IP66 optional enclosure

MODULAR INDICATORS / TOTALIZERS / BATCH COUNTERS WITH DIGITAL INPUT

S311D

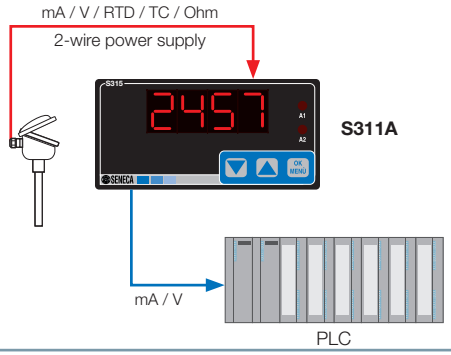


- Power supply 80-265 Vac o 10-40 Vdc / 19-28 Vac
- Power transducers
- 4, 6, 8, 11 digit LED display
- Input: Reed, Npn, Pnp, namur, photoelectric, variable reluctance, 24 V pulse, TTL, max freq. 10kHz
- Re-transmitted output
- Modbus interface, reset, alarms (optional board)
- Values totalizing
- Batch counter
- Accuracy class 0,1%

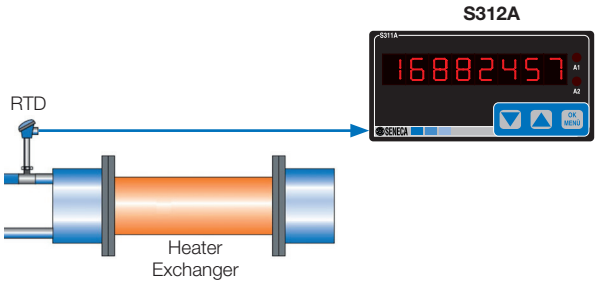
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APPLICATION EXAMPLES

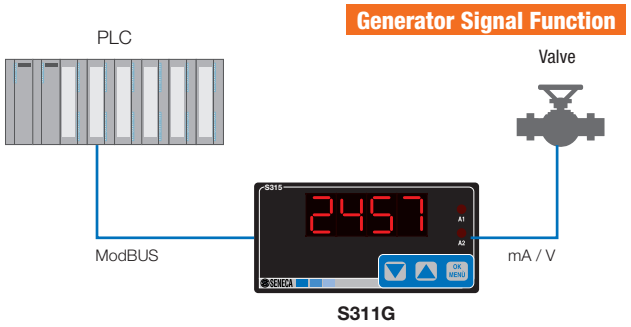
ANALOG SIGNAL VISUALIZATION AND PLC RE-TRANSMISSION



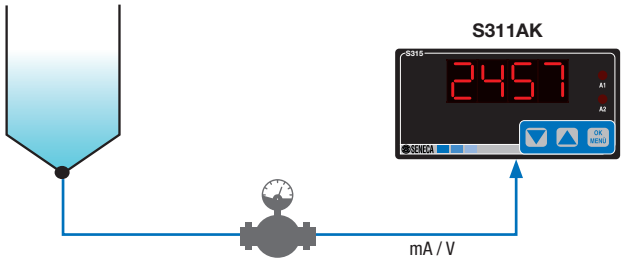
CONSUMPTION METERING



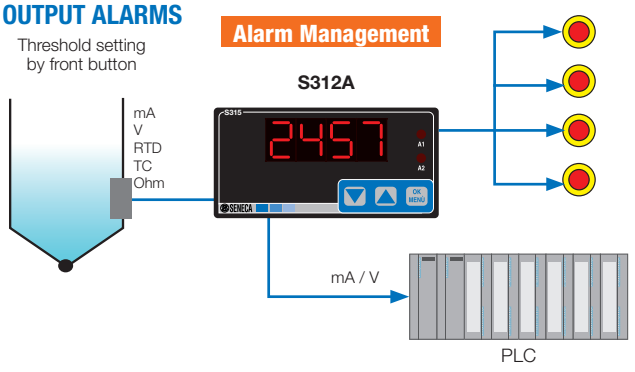
SIGNAL GENERATION /AUTO/MANUAL MODE AND BUMPLESS FUNCTION



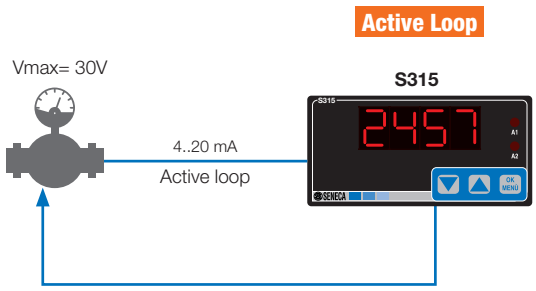
SENSOR ANALOG SIGNAL REAL-TIME VISUALIZATION



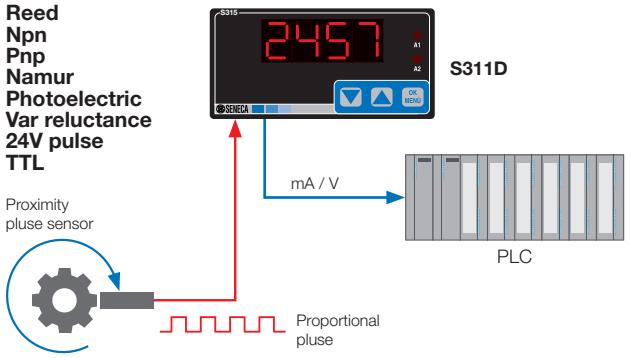
SIGNAL VISUALIZATION AND RE-TRANSMISSION WITH OUTPUT ALARMS



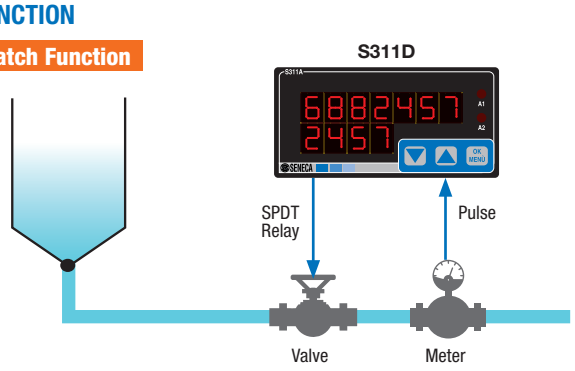
ANALOG SIGNAL VISUALIZATION BY ACTIVE LOOP TRANSDUCER



PULSE SIGNAL VISUALIZATION AND TOTALIZATION



OUTPUT ENABLING WITH TOTALIZING / BATCH COUNTING FUNCTION



Other front panel instrumentation

Please take a look at our documentation or product sheets regarding visualization and control devices and by connecting to our website **www.seneca.it**

High brightness digital indicators

S200 - S201 - S301
S301B - S320A



Batch controllers with pulse input, LED display and ModBUS interface

S20N1 - S21N1



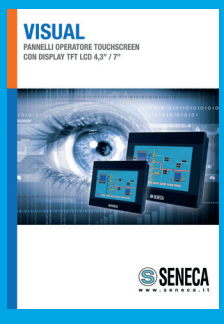
OLED display with ModBUS interface

S401



Touchscreen operator panels with LCD TFT display

VISUAL Series



Order Code

MODULAR INDICATORS / TOTALIZERS WITH UNIVERSAL ANALOG INPUT

Code		Description
Model	S311A	Indicator / totalizer with universal analog input
Display	-4	4-digit LED
	-6	6-digit LED
	-8	8-digit LED
	-11	4+7-digit LED
Power Supply	-H	80-265 Vac
	-L	10-40 Vdc / 19..28 Vac
Optional board	-0	Nr.2 SPDT relay SPDT, ModBUS RTU interface, reset input

INDICATORS / SIGNAL GENERATORS WITH ANALOG INPUT

Code		Description
Model	S311G	Indicator / signal generator with analog input
Display	-4	4-digit LED
Power Supply	-H	80-265 Vac
	-L	10-40 Vdc / 19..28 Vac
Scheda opzionale	-0	ModBUS RTU

COMPACT INDICATORS / TOTALIZERS WITH ANALOG INPUT

Code	Description
S311AK-4-L	4-digit display indicator with mA/V analog input, 10-40 Vdc, 19-28 Vac
S311AK-4-L-IP66	4-digit display indicator with mA/V analog input, 10-40 Vdc, 19-28 Vac, IP66 case (130x80x60 mm)
S311AK-4-L-IP66D	4-digit display indicator with mA/V analog input, 10-40 Vdc, 19-28 Vac, IP66 case (x2)
S312A-4-H-4R	4-digit display indicator with universal analog input, 4 relay output, 85-265 Vac
S312A-4-L-4R	4-digit display indicator with universal analog input, 4 relay output, 10-40 Vdc, 19-28 Vac
S315	4-digit display, loop powered indicator with 4-20 mA input
S315-IP66	4-digit display, loop powered indicator with 4-20 mA input, IP66 case (130x80x60 mm)
S315-IP66D	4-digit display, loop powered indicator with 4-20 mA input, IP66 case (x2)

MODULAR INDICATORS / TOTALIZER / BATCH COUNTERS WITH DIGITAL INPUT

Code		Description
Model	S311D	Indicator / totalizer / batch counter with digital / frequency input
Display	-4	4-digit LED
	-6	6-digit LED
	-8	8-digit LED
	-11	4+7-digit LED
Power Supply	-H	80-265 Vac
	-L	10-40 Vdc / 19..28 Vac
Optional board	-0	Nr.2 SPDT relay SPDT, ModBUS RTU interface, reset input

SOFTWARE & ACCESSORIES

Code	Description
EASY SETUP	Configuration software for S311A, S311D, S312A models
S3110PZ	Optional board including Nr.2 SPDT relay SPDT, ModBUS RTU interface, reset input for S311A / S11D indicators
S311-T	Calibration service for S311 Series indicators / totalizers

18C0136 - Pubblication SSLINE_1902EN

SENECA
Via Austria, 26 • 35127 Padova - (I) - Tel. +39 049 87.05.359
Fax +39 049 87.06.287 • www.seneca.it • info@seneca.it

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